FIRST THINGS FIRST

Pinal

2018 NEEDS AND ASSETS REPORT

PINAL

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 Pinal Regional Partnership Council

LETTER FROM THE CHAIR

January 17, 2018

Message from the Chair:

Since the inception of First Things First, the Pinal 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 Pinal Regional Council would like to thank our Needs and Assets vendor, The University of Arizona Norton School, for their knowledge, expertise and analysis of the Pinal 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 Pinal 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,

Pinal Regional Partnership Council, Chair

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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 Pinal 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 Pinal 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 Pinal 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, the United Way of Pinal County, the Pinal County Juvenile Court Services 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.

To the current and past members of the Pinal 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

Population Characteristics

According to the U.S. Census, 34,984 children under the age of six reside in the Pinal Region; approximately one of every 10 residents is a young child. Pinal County has experienced a surge in population growth since the turn of the century. This growth is projected to continue through the next several decades, with the population size – both of young children and overall – roughly doubling by 2040.

Thirty-nine percent of young children in the Pinal Region are Hispanic or Latino and 50 percent are White. Within the region, certain sub-regions have a substantially higher proportion of Latino children. For example, in Casa Grande, the Copper Corridor, and Eloy-Arizona City, the majority of young children are Hispanic or Latino.

About 35 percent of children in the Pinal Region live with a single parent; however, in the Casa Grande and Eloy-Arizona City sub-regions, nearly half (49% and 47%, respectively) of children live with a single parent. About 4 percent of children ages 0 to 5 in the Pinal Region are in kinship or other family arrangements, with extended families, friends, and other non-relatives caring for them. Twelve percent of young children in the Pinal Region live in a grandparent's household (including multi-generational households). Twenty percent of children ages 0-17 who live with their grandparents do not have a parent present in the household, whereas 60 percent of these children live in multigenerational homes where the grandparent has assumed responsibility for the child, despite the presence of a parent.

Economic Circumstances

The median income for all families –including those without children – in the Pinal County is $55,513. The median income for families with married parents (husband-wife) and children under age 18 is about $10,000 higher ($66,673), and single-parent families make substantially less. Sixteen percent of the total (all-age) population of the Pinal Region lives in poverty; 24% of children 0-5 live in poverty. Sub-regional data illustrates that there is a great deal of heterogeneity; for example, while children in Maricopa-Ak Chin-Stanfield are much better off (7% in poverty), nearly half of children in the Apache Junction-Gold Canyon (44%) and Eloy-Arizona City (49%) sub-regions live in poverty.

Unemployment rates have been dropping steadily in Pinal County, the state, and most sub-regions since 2010, although rates in Pinal County have always been slightly higher than the state's, even before the Great Recession. In 2015, the unemployment rate in Pinal County was 6.3%. Again, a closer look within Pinal reveals a diversity of experiences. Consistent with the high poverty rates in those areas, Eloy, Mammoth, and Apache Junction have higher rates of unemployment. Kearny, on the other hand, has consistently had substantially lower unemployment rates.

For young children living with both parents in the region, one parent is more likely to be in the labor force (33%) than both parents (29%). Twenty-seven percent of young children in the Pinal Region live with a single parent who is employed. Taken together, this means that over half (56%) of young children in the region live in a home where all the parents participate in the labor force; this has implications for child care demand. About 11 percent of children are in homes where no parent is

participating in the labor force. However, in the Copper Corridor (20%), Apache Junction-Gold Canyon, and Eloy-Arizona City (24%) sub-regions, higher proportions of children live in families with no parents in the labor force.

In Pinal County, 15 percent of the population is estimated to be food insecure, which is lower than across the state as a whole (17%). 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. The Pinal Region contains 173 SNAP retailers and 26 WIC retailers. Although the number of young children participating in SNAP has declined since 2012, this program still supports over 13,000 children in the Pinal Region annually. About two-thirds (62-64%) of students in the Pinal Region have been eligible for free or reduced-price lunch since 2012.

Of the 123,640 housing units in Pinal, 27 percent are occupied by renters and 73 percent are occupied by home-owners. The Pinal Region looks similar to the state as a whole with regard to the cost of housing: 32 percent of Pinal housing units require their residents to contribute more than 30 percent of their household income toward housing, compared to 34 percent statewide.

Educational Indicators

There are 28 schools in the Pinal Region that offer a preschool program, and 20 offer pre-kindergarten. There is at least one school offering pre-kindergarten in every district within the region. There are over 17,000 students enrolled in kindergarten through third grade in the Pinal Region. Of these students, nearly a quarter (212) of the English Language Learners are in the Casa Grande Elementary district. Two smaller districts, Stanfield Elementary District (21%) and Picacho Elementary District (16%), have high proportions of students who are English Language Learners.

There are roughly 500 children enrolled in special education in ADE preschools each year.[i] At the pre-kindergarten level, 60 percent of Pinal Region students are in special education, compared to 46 percent statewide.

In the 2014-2015 school year, only 38 percent of Pinal Region students attained passing scores on the third grade AzMERIT math assessment, which was a slightly lower passing rate than across Arizona as a whole (41%). Performance on the English Language Arts (ELA) test was similar, with 35 percent of Pinal students demonstrating proficiency, compared to 40 percent across the state. Student performance in the Pinal 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.

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. Rates of chronic absences in the Pinal Region have been consistently higher in 2014 (36%) and 2015 (39%) than in the state as a whole (34% and 36%, respectively).

The Pinal Region contains 33 high schools and alternative schools. The high school drop-out rate in Pinal has consistently been slightly higher (i.e., 5-6%) than the state rate of 3 to 4 percent. Casa Grande

[i] *For full information, including the relevant tables, regarding the education of children with special needs, please refer the section within Early Learning entitled Developmental Screenings and Services for Children with Special Developmental and Health Needs*

Union High School District (9%) and Coolidge Unified School District (9%) both had 2015 drop-out rates that were more than double that of the state overall. In addition, four-year graduation rates in the Pinal Region (2014: 72%) are consistently lower than in Arizona as whole (2014: 76%).

Adults aged 25 and older in the Pinal Region are less likely to have a bachelor's or higher degree (18%) than adults across Arizona (27%). However, Pinal Region adults are more likely (37%) to have had some college or professional training than their peers elsewhere across the state (34%). In the Florence-Coolidge, Eloy-Arizona City, and Copper Corridor sub-regions, the majority of adults have no post-secondary education. In the Florence-Coolidge and Eloy-Arizona City sub-regions, about one in every four adults did not complete high school.

Early Learning

In 2015-2016, there were 112 registered child care providers in the Pinal Region, approved to serve up to 5,026 children. With a population of young children of about 35,000, and over 17,000 of whom have all parents in the labor force, there are likely to be between 7 and 12 young children for each available child care slot in the region.

Most of the providers in the Pinal Region are classified as family child care providers and child care centers. Family and group homes are an important part of the child care landscape because they are much more likely to provide late-night, all-night, and weekend care, which may be crucial for working parents. Of the 112 known child care providers, about 30 percent (n=34) are participating in the Quality First program; most of these (n=29) are center-based providers. There are 11 Quality First programs in the Pinal Region that have achieved the 3- or 4-star rating, indicating they are meeting or exceeding quality standards. As of June 2016, there were no 5-star sites in the Pinal Region. There are an additional five sites in Pinal County that are participating in Quality First that are not included in the Pinal Region; these are located on tribal lands of either the Gila River Indian Community, the Tohono O'odham Nation, or the San Carlos Apache Tribe.

United Way of Pinal County also provides support to kith and kin caregivers through the Family, Friend, and Neighbor Program. The number of grandparents participating in this program has been growing steadily since 2009. These kith and kin caregivers play an important role in caring for young children in the region, given the relatively small number registered child care providers.

According to data from the American Community Survey, 29 percent of children in the Pinal Region aged 3 and 4 were enrolled in nursery school, preschool, or kindergarten, meaning that relatively fewer participate compared to children statewide (36%).

Twelve sites in the Pinal Region are Head Start programs, and an additional 14 operate at a public school. The Early Head Start and Head Start programs serve over 1000 children in the Pinal Region annually, and there is a waitlist for nearly all of the programs. Chicanos Por La Causa runs one Migrant Head Start program in Eloy and one in Queen Creek that serves children from both Maricopa and Pinal Counties. The Eloy Migrant Head Start program has a capacity of 40 preschoolers and 16 infants.

Child Health

A key factor in health care is health insurance, and 9 percent of young children in the region were estimated to be uninsured, along with 14 percent of the total population in the Pinal Region.

In 2014, 4,512 babies were born to mothers living the Pinal Region. In keeping with the projected population growth in Pinal, the number of births in the region is expected to increase steadily through 2040. By 2040, Pinal mothers are expected to give birth to 10,029 babies, meaning that birthing facilities will need to accommodate more than twice as many mothers as they currently serve.

Of the mothers who gave birth in the Pinal Region in 2014, the majority (53%) were White, non-Hispanic. One-third (33%) of births were to Hispanic or Latina mothers, 8 percent were to American Indian mothers, 5 percent were to Black or African American mothers, and 2 percent were to mothers who identify as Asian or Pacific Islanders. The population of new mothers in Pinal was very similar to those statewide on other attributes. Nearly half (45%) of mothers were not married and 8 percent were in their teens in both the region and the state. A higher proportion of mothers in the Pinal Region reported smoking (6.4%) than across the state (4.6%). In the Pinal Region, 26 percent of women were overweight, and 33 percent were obese, for a total of 59 percent who had overweight or obesity before becoming pregnant.

In the Pinal Region in 2014, among mothers with known data, 78.4 percent of mothers obtained prenatal care during the first trimester. With regard to preconception health, there is a downward trend in the proportion of Arizona 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. Statewide, this rate has fallen from 47 percent in 2011, to 35 percent in 2014; in Pinal County, the rate in 2014 was the lowest in the state (25%). On a more positive note, most mothers are receiving at least some form of prenatal care; only 4.3 percent of babies in the Pinal Region were born to mothers who had had fewer than 5 prenatal care visits. In this regard, the Pinal Region is doing better than elsewhere in Arizona, where 6.5 percent of births were to mothers who had fewer than 5 prenatal care visits. In both the region and the state in 2014, 7.4 percent of babies were low birth weight and 9.3 percent were premature. The rate of breastfeeding among WIC participants (68.3%) has increased by 10 percentage points over the last three years.

While immunization rates vary by vaccine, over 90 percent of children in child care in the Pinal Region had completed each of the three major (DTAP, polio, and MMR) vaccine series; the regional and county rates were higher than those of the state. The rate of parents filing personal exemptions for kindergarteners (4.5%) was nearly twice that of children in child care (2.3%).

In overall tooth decay experience, 41 percent of kindergarteners in the Pinal Region reported decay experience compared to Arizona's 52 percent; in fact, Pinal children fared the best of children in any region.

Family Support and Literacy

Between April 1 and September 30, 2016, 1,632 reports of abuse and neglect were received for Pinal County. Over the last seven reporting periods, there has been an uptick in the number of substantiated cases, most notably in the reporting period ending in September 2016, when there were 144 substantiated cases – nearly triple the number in the prior period; note this number reflects all children, not just those aged birth to 5. DCS prioritizes placing children with kin, i.e., extended family, whenever possible. During the last reporting period, 46 percent of children in out-of-home care were with family members. In the six-month period between October 1, 2015 and March 31, 2016, there were 204 instances of the court granting termination of parental rights in Pinal.

In fiscal year 2015, two domestic violence shelters in Pinal County, Against Abuse, Inc. and Community Alliance Against Family Abuse, served 546 people, 233 (43%) of whom were children. Additionally, 500 calls were made to hotline and information and referral (I&R) numbers.
In 2015, 436 pregnant or parenting women received publically-funded behavioral health services through Cenpatico Integrated Care in the Pinal Region. This was a 17 percent decline from the 528 women who received services in 2012. Conversely, slightly more children ages 0 to 5 received behavioral health services in the Pinal Region in 2015 (896) than in 2012 (841). This represents roughly 11 percent of young children in poverty in the Pinal Region (compared to about 9 percent of young children in poverty receiving services statewide).

System Coordination Among Early Childhood Programs and Services

Respondents to the First Things First Coordination and Collaboration Survey were asked to provide their perspective on the existing early childhood system and systems building, i.e., 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. A majority (67%, n=16) of survey respondents described the early childhood system in Pinal County as a partially coordinated system, with one quarter of respondents (25%, n=6) describing the system as a well-coordinated system, and 8 percent (2 respondents) viewing the early childhood system as a group of separate, uncoordinated system partners working in isolation. An array of examples of successful partnerships in the region were indicated. The majority of respondents reported that the early childhood system in Pinal County effectively addresses the needs of young children and their families. Nearly all respondents (96%) agreed that young children's health needs are effectively addressed by the system in the region. However, nearly one in three respondents felt that family support and literacy needs were not effectively addressed, and nearly 40 percent felt the professional development system is not effective.

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, 2015 Healthy Smiles Healthy Bodies Survey, and 2016 Coordination and Collaboration Survey are included. Not all data will be available at a First Things First (FTF) regional level because not all data sources analyze their data based on FTF regional boundaries. When regional data are unavailable, this will be noted by N/A.

This report follows the First Things First Data Dissemination and Suppression Guidelines. Throughout this report, suppressed counts will appear as either **<10** or **<25** in data tables, and percentages that could easily be converted to suppressed counts will appear as **DS** (data suppressed). The signifier **N/A** indicates where data is not available for a particular geography. Please also note that some data, such as that from the American Community Survey, are estimates that may be less precise for small areas. For more detailed information on data sources, methodology, suppression guidelines, and limitation, please see Appendix 4.

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. Access to and utilization of **high quality early care and education** by families with young children across the region
2. Families with **special-needs** children
3. **Foster families** and **kinship-care** families

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 (rather than zip codes), creating 28 regions. This report uses the 2015 definition of the regional boundaries.

The First Things First Pinal Region is defined as Pinal County, not including the lands belonging to the Gila River Indian Community, the Tohono O'odham Nation, or the San Carlos Apache Tribe. The region

does include the land belonging to the Ak-Chin Indian Community. Thus, in tables where values for both the region and the county are presented and the two values differ, that difference is attributable to the inclusion of the Gila River Indian Community, the Tohono O'odham Nation, and the San Carlos Apache Tribe communities in the county-level data. The majority of the Tohono O'odham land in Pinal County is part of the Sif Oidak District, which includes the unincorporated places of Chuichu, Vaiva Vo, Kohatk, and Tat Momoli. This is the southwestern corner of the county. There is also a small bit of Tohono O'odham land near Florence. This land is part of the Gu Achi District.

The Eight Sub-Regions

To provide more localized data, this report will include—whenever possible—information about eight sub-regions within the Pinal Region. The sub-regions are illustrated in Figure 2.

The **Apache Junction-Gold Canyon** sub-region includes 14 census tracts (2.01, 3.07, 3.08, 3.09, 3.10, 3.11, 3.12, 3.13, 3.14, 3.15, 3.16, 3.17, 3.18, and 3.19) in the northern part of the county. The majority of the population in the sub-region live in the Pinal County part of the city of Apache Junction (the remainder of Apache Junction is in the Southeast Maricopa First Things First Region). In addition, this sub-region includes the unincorporated places of Gold Canyon, Queen Valley, and part of Top-of-the-World.

The **Casa Grande** sub-region contains 13 census tracts (13.01, 13.03, 13.04, 13.05, 13.06, 14.03, 14.04, 14.05, 14.06, 14.07, 14.08, 15, and 16). This sub-region includes almost all of the city of Casa Grande as well as some of the surrounding unincorporated area.

The eastern part of Pinal County forms the **Copper Corridor** sub-region. There are five census tracts here (4, 7, 22, 23, and 24). The towns of Superior, Kearny, and Mammoth lie in this sub-region, as well as the unincorporated places of San Manuel, Oracle, Dudleyville, Campo Bonito, and part of Top-of-the-World.

The **Eloy-Arizona City** sub-region is defined as six census tracts (19, 20.01, 20.02, 20.03, 21.01, and 21.02), including the city of Eloy, most of Arizona City (which is not a city, but an unincorporated place), and a small part of Picacho.

The sub-region of **Florence-Coolidge** contains eight census tracts (8.01, 8.03, 9.01, 9.02, 10, 11, 12, and 9412) and includes the city of Coolidge and the town of Florence, along with some outlying unincorporated area.

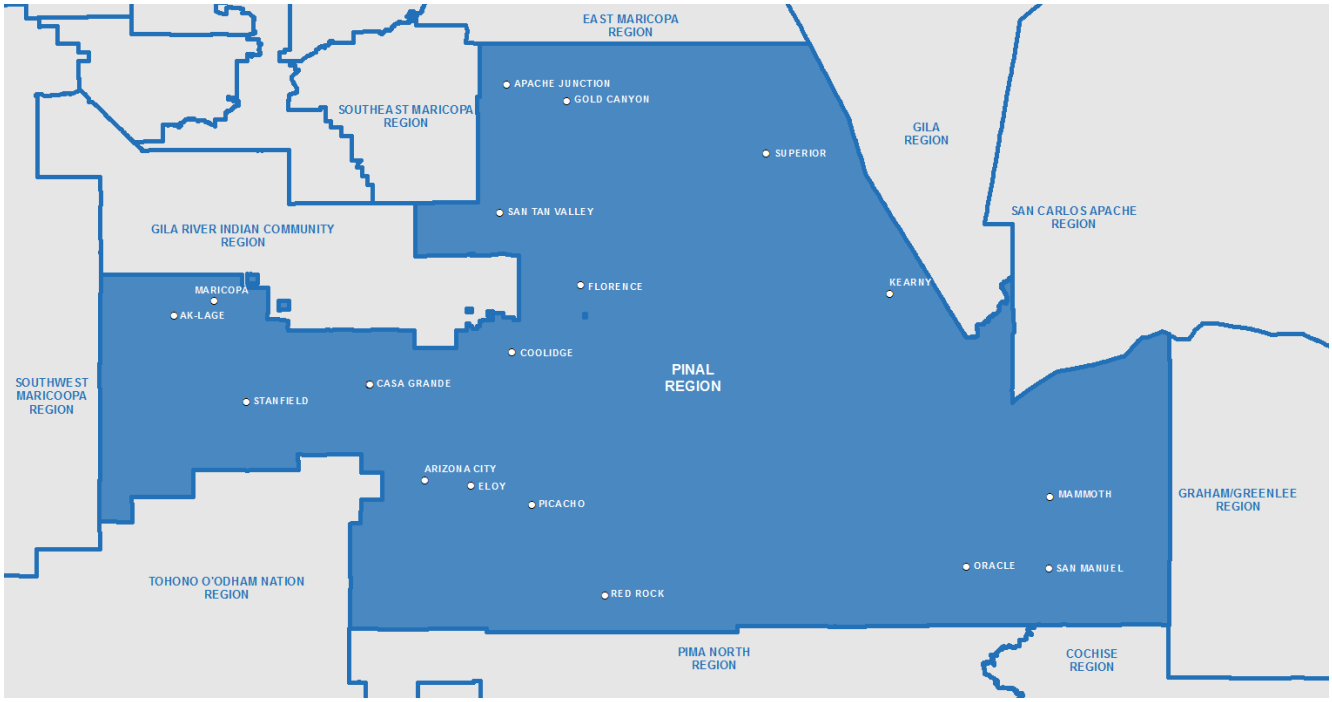
The **Maricopa-Ak Chin-Stanfield** sub-region includes 13 census tracts (17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.07, 17.08, 17.09, 17.10, 17.11, 9413, and 9414). The city of Maricopa, the unincorporated place of Stanfield, and the Ak-Chin Indian Community are found in this sub-region. A portion of Census Tract 9414 is on the Tohono O'odham Nation, and is therefore not included in the Pinal First Things First Region.

In the southern part of the county, the **Red Rock-Saddlebrooke** sub-region is defined by four census tracts (6.03, 6.04, 8.02, and 21.03). This sub-region includes the unincorporated places of Red Rock, Saddlebrooke, and Cactus Forest, as well as parts of Arizona City and Picacho.

By population, the largest of the sub-regions is **San Tan Valley-Queen Creek**. This sub-region is defined by twelve census tracts (2.04, 2.05, 2.06, 2.07, 2.08, 2.09, 2.10, 2.11, 2.12, 2.13, 2.14, and 2.15). It includes San Tan Valley (which is an unincorporated place) and the part of the town of Queen Creek

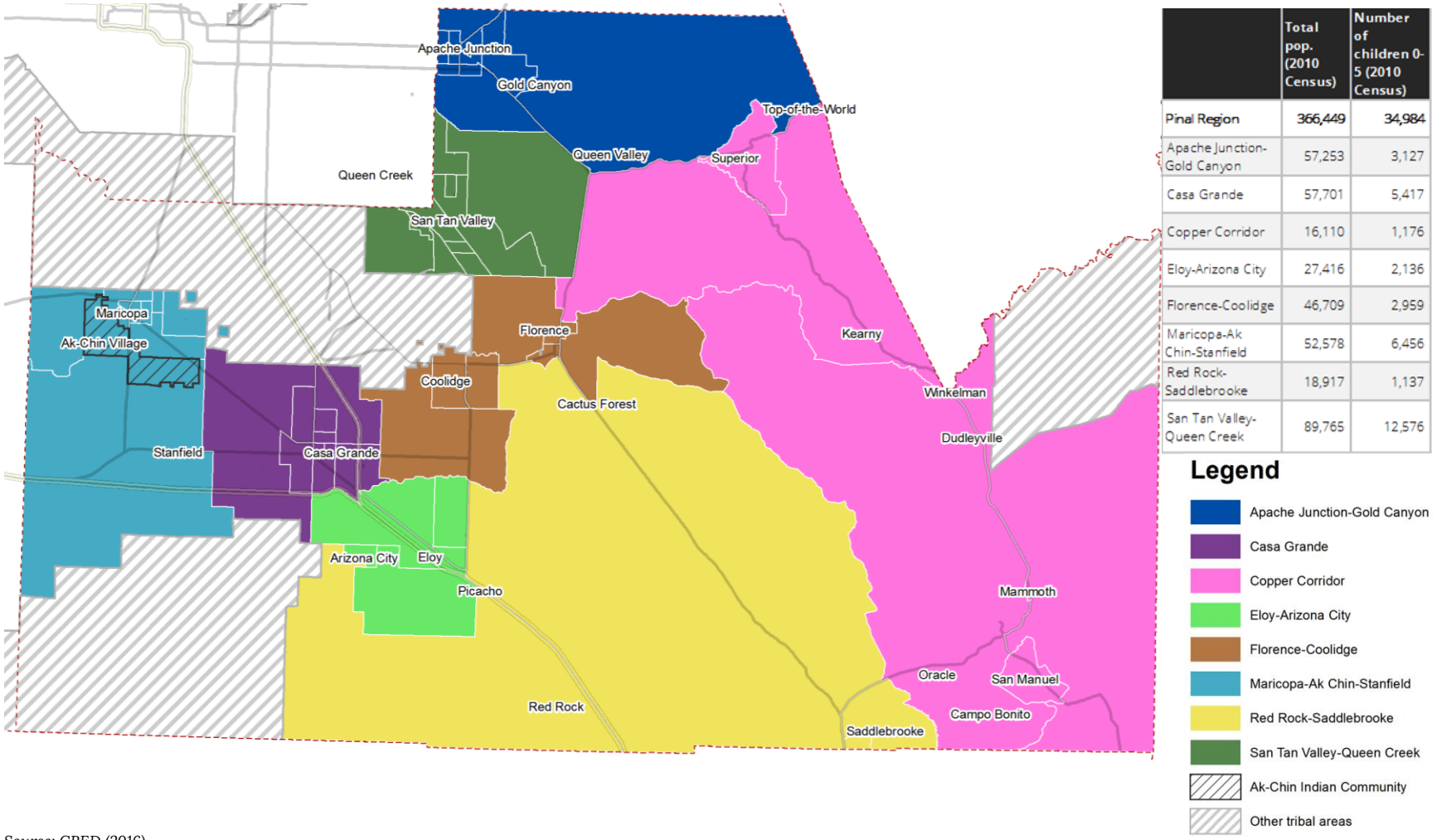
which lies in Pinal County. (The remainder of Queen Creek town is in the Southeast Maricopa First Things First Region.)

Figure 1. The Pinal First Things First Region



Source: First Things First (2016).

Figure 2. Pinal First Things First Sub-Regions



	Total pop. (2010 Census)	Number of children 0-5 (2010 Census)
Pinal Region	366,449	34,984
Apache Junction-Gold Canyon	57,253	3,127
Casa Grande	57,701	5,417
Copper Corridor	16,110	1,176
Eloy-Arizona City	27,416	2,136
Florence-Coolidge	46,709	2,959
Maricopa-Ak Chin-Stanfield	52,578	6,456
Red Rock-Saddlebrooke	18,917	1,137
San Tan Valley-Queen Creek	89,765	12,576

Source: CRED (2016).

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.[1] 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.[2]

An understanding of the supports and resources *within* a family is also key to helping young children achieve the best possible developmental outcomes.[3,4] 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.[7] 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.[9] 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.[12] 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

Population Size

According to the U.S. Census, 34,984 children under the age of six reside in the Pinal Region (see Table 1). Overall, the region's population was 366,449 in 2010, meaning that approximately one of every 10 residents is a young child. This ranged from a low of 5 percent of young children living in Apache Junction, to a high of 14 percent living in the San Tan Valley-Queen Creek area.

Pinal County has experienced a surge in population growth since the turn of the century. Whereas Arizona as a whole saw a 19 percent increase in the number of young children, Pinal County saw a 149 percent increase; that is, the population of young children more than doubled between 2000 and 2010 (see Table 2). This growth is projected to continue through the next several decades, with the population size – both of young children and overall – roughly doubling by 2040 (see Table 4; Table 5). Compared to the rest of the state of Arizona, the pace of growth in Pinal is exceptional. Between 2015 and 2040, the population of young children statewide is projected to increase by about 35 percent (compared to 108% in Pinal). Over this time, young children will consistently make up between 7 and 8 percent of the population (see Figure 3).

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
Pinal Region	**34,984**	**5,425**	**5,850**	**5,983**	**6,155**	**5,776**	**5,795**
Apache Junction-Gold Canyon	3,127	490	523	547	536	506	525
Casa Grande	5,417	811	906	959	920	915	906
Copper Corridor	1,176	171	176	196	187	230	216
Eloy-Arizona City	2,136	338	364	347	378	364	345
Florence-Coolidge	2,959	445	485	554	507	466	502
Maricopa-Ak Chin-Stanfield	6,456	1,045	1,078	1,135	1,149	1,008	1,041
Red Rock-Saddlebrooke	1,137	188	182	171	220	198	178
San Tan Valley-Queen Creek	12,576	1,937	2,136	2,074	2,258	2,089	2,082
Pinal County	36,181	5,627	6,041	6,166	6,366	5,982	5,999
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) (2000)	Percent change in population (ages 0-5), 2000 to 2010
Pinal Region		
Pinal County	14,552	149%
ARIZONA	459,141	19%

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

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

	All ages	Ages 0 to 5	Children (ages 0-5) as a percentage of the total population
Pinal Region	**366,449**	**34,984**	**10%**
Apache Junction-Gold Canyon	57,253	3,127	5%
Casa Grande	57,701	5,417	9%
Copper Corridor	16,110	1,176	7%
Eloy-Arizona City	27,416	2,136	8%
Florence-Coolidge	46,709	2,959	6%
Maricopa-Ak Chin-Stanfield	52,578	6,456	12%
Red Rock-Saddlebrooke	18,917	1,137	6%
San Tan Valley-Queen Creek	89,765	12,576	14%
Pinal County	375,770	36,181	10%
ARIZONA	6,392,017	546,609	9%

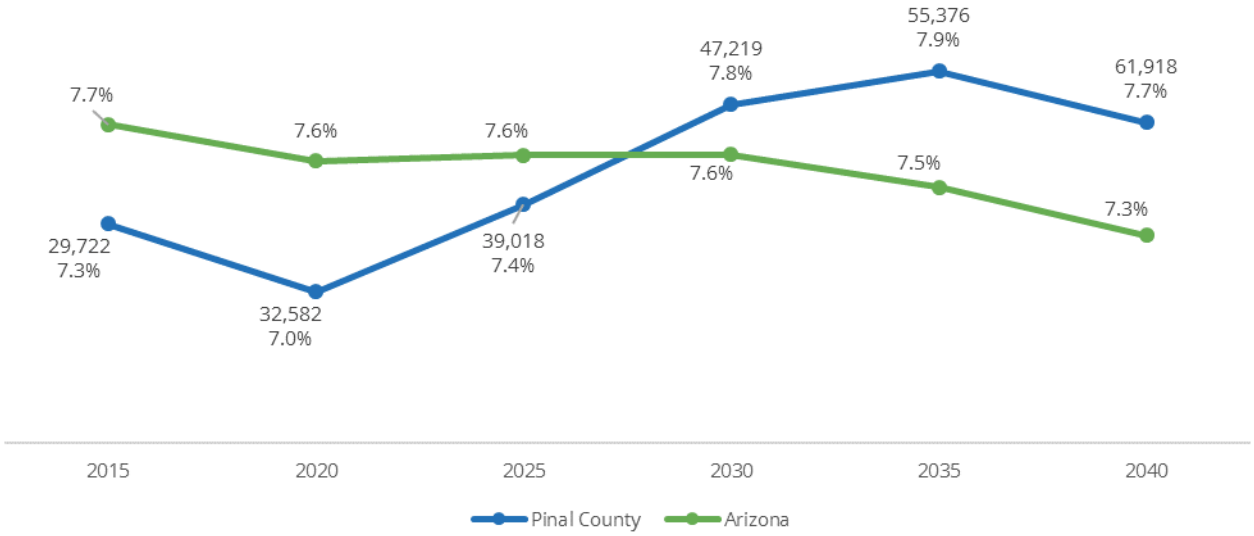
Source: U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P1

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

	2015	2020	2025	2030	2035	2040
Pinal Region						
Pinal County	29,722	32,582	39,018	47,219	55,376	61,918
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).

Figure 3. Population projections (percentage of total population that is ages 0-5)



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

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

	2015	2020	2025	2030	2035	2040
Pinal Region						
Pinal County	406,468	463,463	527,859	604,767	696,739	800,707
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).

Race, Ethnicity, and Nativity

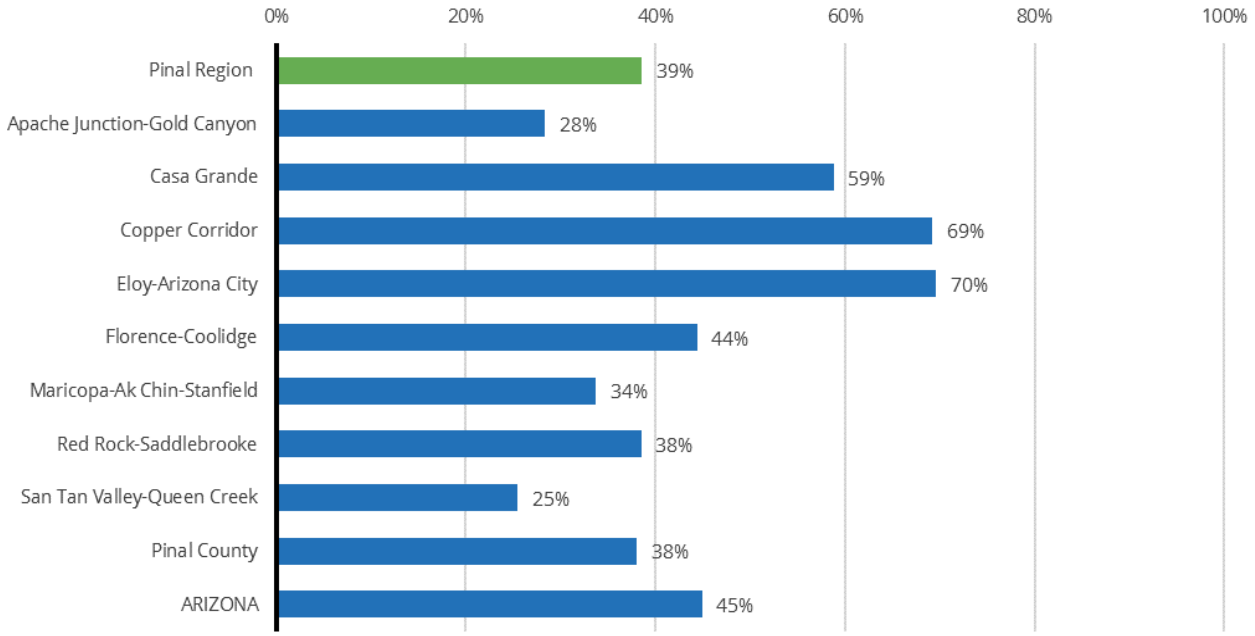
Thirty-nine percent of young children in the Pinal Region are Hispanic or Latino and 50 percent are White (Table 6). This is about the same percentage of Latino children as elsewhere in Pinal County (38%) but slightly lower than across the state of Arizona (45%) (Figure 4). Within the region, certain sub-regions have a substantially higher proportion of Latino children. For example, in Casa Grande, the Copper Corridor, and Eloy-Arizona City, the majority of young children are Hispanic or Latino (Figure 4). Compared to children, a smaller proportion of adults (those aged 18 and older) identify as Hispanic or Latino across both the region and state. About the same proportion of adults (those aged 18 and

older) in the region identify as Hispanic or Latino (25%) as in the state (25%) (Table 7); both geographies have a similar racial/ethnic make-up of adults.

Arizona is also 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.[13] 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, but most refugees in Arizona have resettled to the greater Phoenix and Tucson areas). 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.[14]

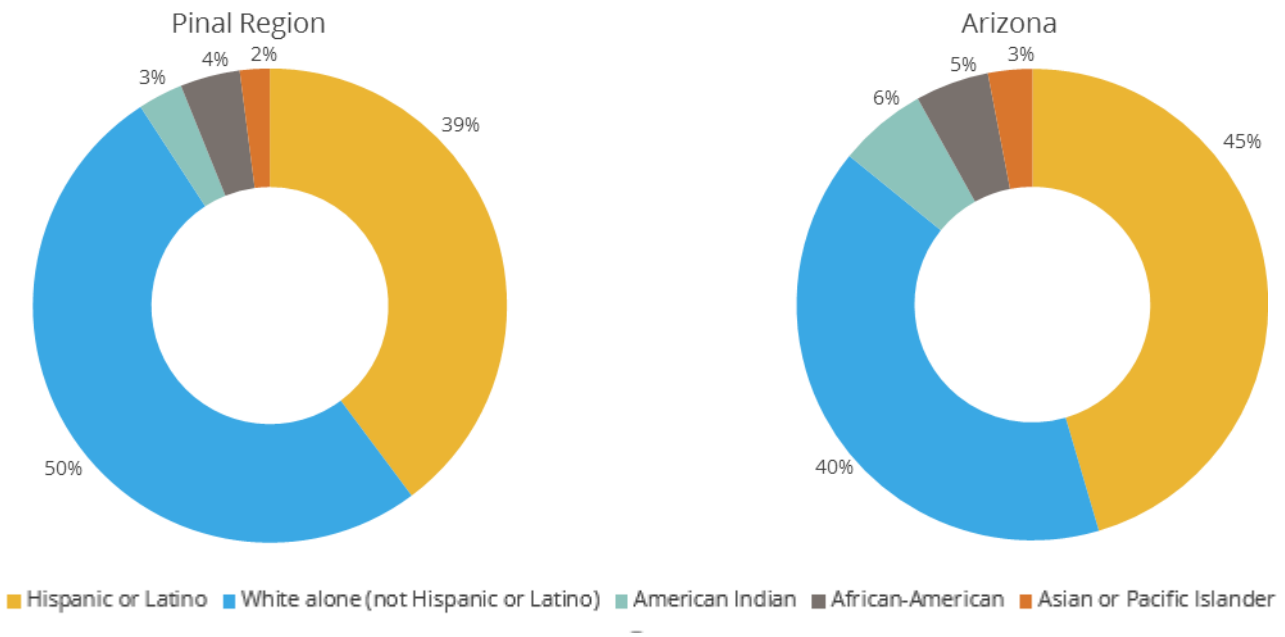
In the Pinal Region, 17 percent of children ages 0 to 5 live with a foreign-born parent. This is considerably lower than the statewide rate (27%), although the Eloy-Arizona City sub-region stands out as having nearly one in three young children living with a foreign-born parent (Table 8).

Figure 4. 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

Figure 5. Race and Ethnicity of the Population of Children (Ages 0 to 4) in Pinal Region and Arizona in the 2010 Census



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

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

	Population of children (ages 0-4)	Hispanic or Latino	White alone (not Hispanic or Latino)	American Indian	African-American	Asian or Pacific Islander
Pinal Region	**29,189**	**39%**	**50%**	**3%**	**4%**	**2%**
Apache Junction-Gold Canyon	2,602	28%	65%	1%	1%	0%
Casa Grande	4,511	59%	29%	7%	4%	1%
Copper Corridor	960	69%	28%	2%	1%	0%
Eloy-Arizona City	1,791	70%	21%	6%	4%	1%
Florence-Coolidge	2,457	44%	41%	5%	7%	1%
Maricopa-Ak Chin-Stanfield	5,415	34%	49%	5%	6%	3%
Red Rock-Saddlebrooke	959	38%	55%	3%	2%	1%
San Tan Valley-Queen Creek	10,494	25%	65%	1%	3%	2%
Pinal County	30,182	38%	49%	6%	4%	2%
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

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

	Number of persons (ages 18 and older)	Hispanic or Latino	White alone (not Hispanic or Latino)	American Indian alone (not Hispanic or Latino)	African-American alone (not Hispanic or Latino)	Asian or Pacific Islander (not Hispanic or Latino)
Pinal Region	**270,080**	**25%**	**65%**	**3%**	**4%**	**2%**
Apache Junction-Gold Canyon	47,494	8%	88%	1%	1%	1%
Casa Grande	41,604	33%	57%	3%	4%	2%
Copper Corridor	12,176	47%	50%	1%	0%	0%
Eloy-Arizona City	21,579	44%	37%	2%	8%	8%
Florence-Coolidge	38,372	31%	50%	10%	6%	1%
Maricopa-Ak Chin-Stanfield	35,687	24%	60%	3%	8%	4%
Red Rock-Saddlebrooke	15,844	12%	85%	1%	1%	1%
San Tan Valley-Queen Creek	57,324	20%	70%	1%	5%	2%
Pinal County	276,070	24%	63%	5%	4%	2%
ARIZONA	4,763,003	25%	63%	4%	4%	3%

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

Table 8. 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
Pinal Region	**30,860**	**17%**
Apache Junction-Gold Canyon	2,890	15%
Casa Grande	4,878	16%
Copper Corridor	960	10%
Eloy-Arizona City	1,772	32%
Florence-Coolidge	2,387	23%
Maricopa-Ak Chin-Stanfield	5,733	19%
Red Rock-Saddlebrooke	837	13%
San Tan Valley-Queen Creek	11,403	15%
Pinal County	31,964	17%
ARIZONA	510,658	27%

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

Language Use

Nearly four out of five (79%) Pinal Region residents age 5 and older speak English at home, with Spanish (18%) being the second most common home language (Figure 6). In three sub-regions, over a quarter of people speak Spanish at home: Florence-Coolidge (28%), Copper Corridor (31%), and Eloy-Arizona City (37%) (Table 9). Despite the high rates of Spanish-speaking in homes in the Copper Corridor sub-region, only 8 percent of residents report that they do not speak English very well (Table 10), which is not much different from the region overall (6%). Rates are higher in the Eloy-Arizona City (14%) and Florence-Coolidge (11%) sub-regions. At a household level, 2 percent of households in the Pinal Region are classified as limited-English-speaking; this is half the proportion of households with that designation (4%) statewide (Table 11). However, in the Eloy-Arizona City area, nearly one in 10 households (8%) may need additional language supports to access resources.

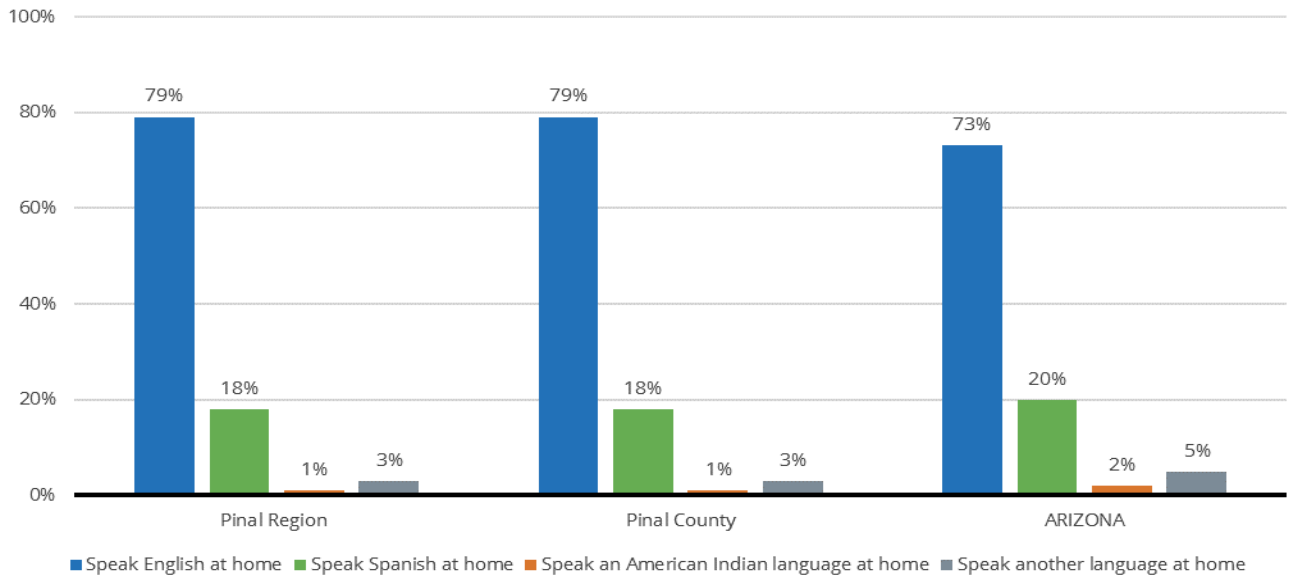
Table 9. Language Spoken at Home (Ages 5 and Older)

	Estimated population (ages 5 and older)	Speak English at home	Speak Spanish at home	Speak a Native American language at home	Speak another language at home
Pinal Region	**352,717**	**79%**	**18%**	**1%**	**3%**
Apache Junction-Gold Canyon	54,436	90%	7%	0%	2%
Casa Grande	55,555	74%	23%	1%	3%
Copper Corridor	16,068	68%	31%	0%	1%
Eloy-Arizona City	25,090	60%	37%	1%	2%
Florence-Coolidge	47,267	69%	28%	1%	2%
Maricopa-Ak Chin-Stanfield	49,337	80%	15%	1%	4%
Red Rock-Saddlebrooke	17,006	91%	7%	0%	2%
San Tan Valley-Queen Creek	87,958	84%	13%	0%	3%
Pinal County	362,838	79%	18%	1%	3%
ARIZONA	6,120,900	73%	20%	2%	5%

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

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

Figure 6. Language Spoken at Home (Ages 5 and Older)



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

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

Table 10. Proficiency in English (Ages 5 and Older)

	Population (ages 5 and older)	Speak English at home	Speak another language at home, and speaks English "very well"	Speak another language at home, and does not speak English "very well"
Pinal Region	**352,717**	**79%**	**15%**	**6%**
Apache Junction-Gold Canyon	54,436	90%	7%	3%
Casa Grande	55,555	74%	19%	7%
Copper Corridor	16,068	68%	24%	8%
Eloy-Arizona City	25,090	60%	26%	14%
Florence-Coolidge	47,267	69%	20%	11%
Maricopa-Ak Chin-Stanfield	49,337	80%	15%	5%
Red Rock-Saddlebrooke	17,006	91%	8%	2%
San Tan Valley-Queen Creek	87,958	84%	12%	4%
Pinal County	362,838	79%	15%	6%
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 11. Limited-English-Speaking Households

	Number of households	Households which speak a language other than English	Limited-English-speaking households (Total)	Limited-English-speaking households (Spanish)
Pinal Region	**123,640**	**22%**	**2%**	**2%**
Apache Junction-Gold Canyon	24,953	11%	2%	1%
Casa Grande	20,741	29%	3%	3%
Copper Corridor	6,069	41%	5%	5%
Eloy-Arizona City	6,917	40%	8%	7%
Florence-Coolidge	12,145	24%	4%	4%
Maricopa-Ak Chin-Stanfield	17,211	24%	2%	2%
Red Rock-Saddlebrooke	7,594	12%	1%	1%
San Tan Valley-Queen Creek	28,010	19%	1%	1%
Pinal County	126,128	22%	2%	2%
ARIZONA	2,387,246	27%	5%	4%

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

Living Arrangements

Based on data from the 2010 U.S. Census, in the Pinal Region, one out of every five households (20%) has at least one child under 6 years old (Table 12). The largest concentration of these families are in the San Tan Valley-Queen Creek area, where 31 percent of households have a young child. The Red Rock-Saddlebrooke and Apache Junction-Gold Canyon areas have relatively fewer households with young children (9% in each).

According to the American Community Survey, 35 percent of children in the Pinal Region live with a single parent, which is slightly lower than the proportion statewide (38%) (Figure 7). However, in the Casa Grande and Eloy-Arizona City sub-regions, nearly half (49% and 47%, respectively) of children live with a single parent (Table 12). Children in the Maricopa-Ak Chin-Stanfield and San Tan Valley-Queen Creek sub-regions are the most likely to come from a two-parent home (72% and 71%, respectively) (Figure 8). 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. According to the 2010 U.S. Census, there were 320 same-sex partner households with children in Pinal County.[15]

About 4 percent of children ages 0 to 5 in the Pinal Region are in kinship or other family arrangements, with extended families, friends, and other non-relatives caring for them. This practice is especially

common in the Copper Corridor sub-region, where 7 percent of children live with relatives and an additional 6 percent of children live with non-relatives (Figure 9). The Red Rock-Saddlebrooke sub-region also has 7 percent of children living with non-relatives, and a higher proportion of children in the Eloy-Arizona City sub-region are living with relatives instead of their parents.

The proportion of young children living in a grandparent's household is slightly lower in the region (12%) than the county (13%) or the state (14%) (Figure 10). It is important to note that these households may be multigenerational – i.e., the grandparent is considered the head-of-house, but the child's parent may also live there. Figure 11 illustrates where there are high numbers of children ages 0 to 5 living with grandparents, by census tract. Table 13 provides more information about the estimated 7,257 children ages 0 to 17 living with grandparents in the Pinal Region.[ii] Twenty percent of these children who live with their grandparents do not have a parent present in the household, whereas 60 percent of these children live in multigenerational homes where the grandparent has assumed responsibility for the child, despite the presence of a parent. This indicates that, where children are living with their grandparents, a higher proportion of those grandparents are directly involved in raising their grandchildren in Pinal than grandparents across the state, particularly in the Copper Corridor and Eloy-Arizona City areas.

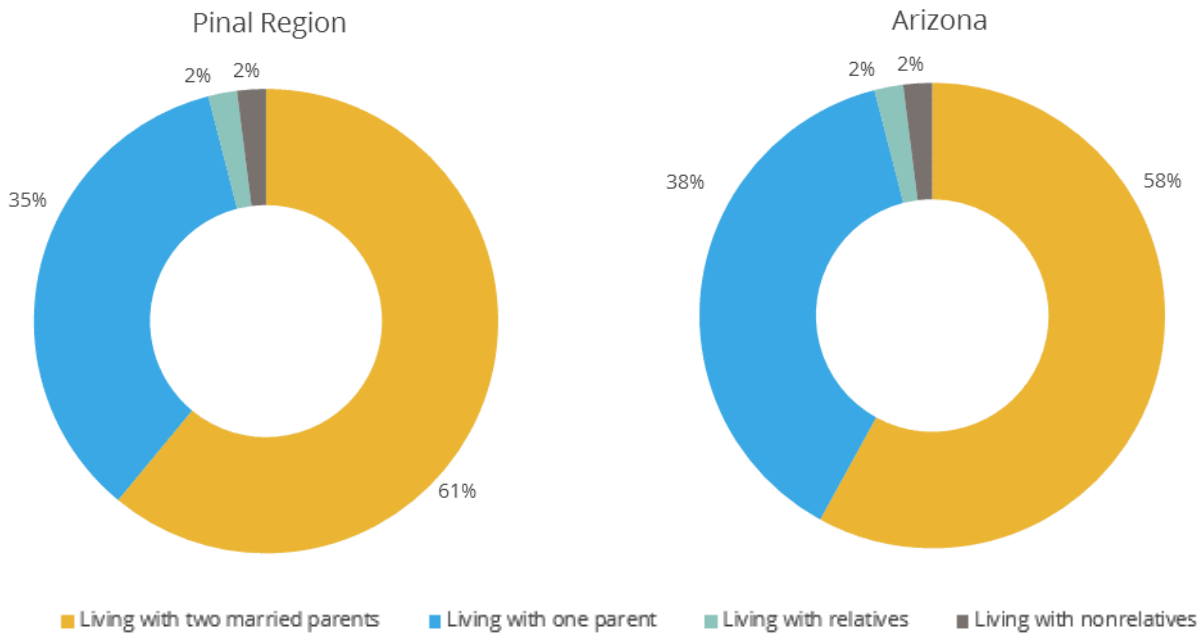
[ii] *Please note that Table 12 and Table 11 draw from two different data sources and are not directly comparable.*

Table 12. Composition of Households in the 2010 Census

	Total number of households	Number of households with child(ren) under 6 years old	Percent of households with child(ren) under 6 years old	Households with child(ren) under 6 years old, husband-wife householders	Households with child(ren) under 6 years old, single male householder	Households with child(ren) under 6 years old, single female householder
Pinal Region	**123,199**	**24,027**	**20%**	**70%**	**11%**	**19%**
Apache Junction-Gold Canyon	25,512	2,252	9%	62%	14%	24%
Casa Grande	20,755	3,780	18%	58%	14%	28%
Copper Corridor	6,262	839	13%	59%	15%	26%
Eloy-Arizona City	6,898	1,433	21%	53%	15%	33%
Florence-Coolidge	10,435	1,970	19%	62%	14%	23%
Maricopa-Ak Chin-Stanfield	17,282	4,456	26%	75%	10%	15%
Red Rock-Saddlebrooke	8,400	790	9%	73%	9%	17%
San Tan Valley-Queen Creek	27,655	8,507	31%	79%	8%	13%
Pinal County	125,590	24,750	20%	68%	11%	20%
ARIZONA	2,380,990	384,441	16%	65%	11%	24%

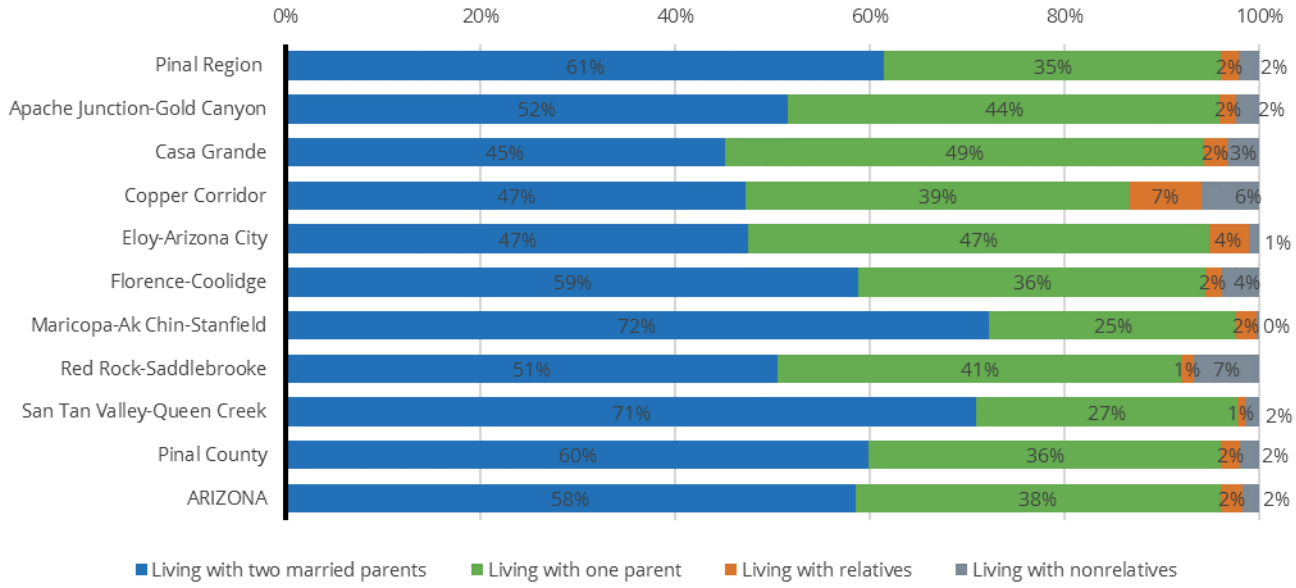
Source: U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P20

Figure 7. Living Arrangements for Young Children (Ages 0 to 5) in the Pinal Region and Arizona



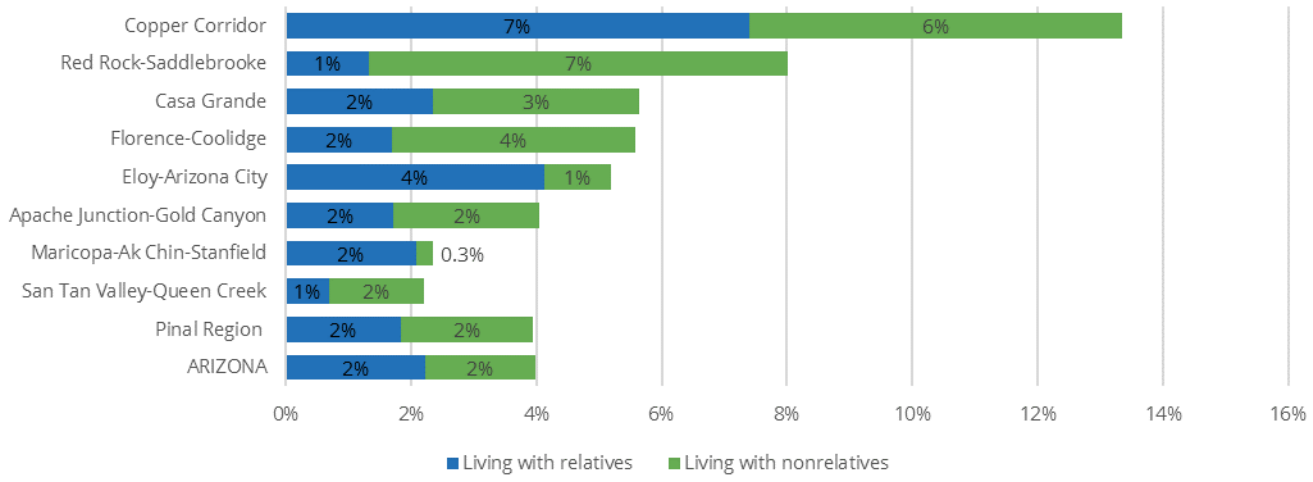
Source: U.S. Census Bureau (2016). *American Community Survey, 5-year estimates (2010-2014), Tables* B05009, B09001, B17006

Figure 8. Living Arrangements for Young Children (Ages 0 to 5)



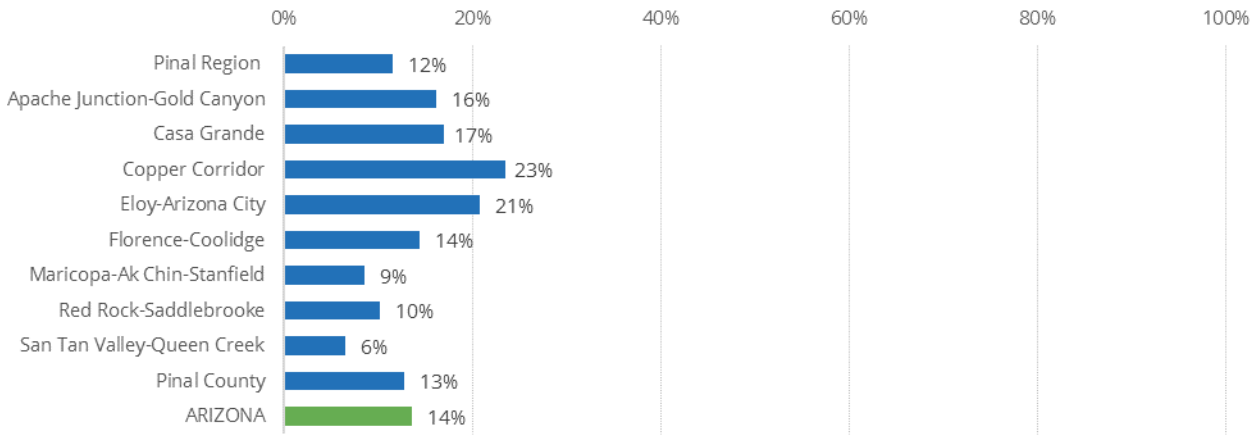
Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Tables B05009, B09001, B17006

Figure 9. Young Children Living with Kith and Kin (Ages 0 to 5)



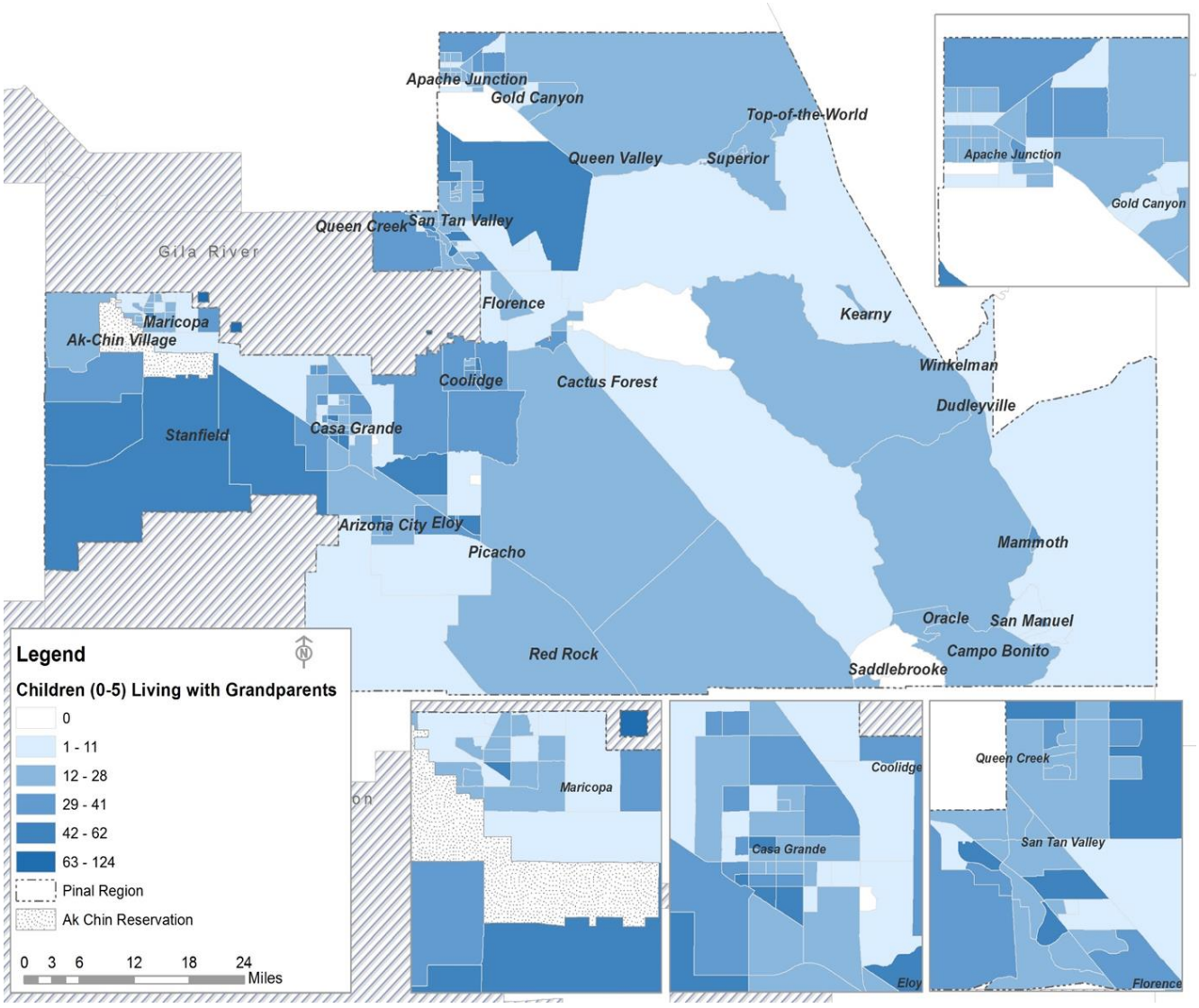
Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Tables B05009, B09001, B17006

Figure 10. 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

Figure 11. Children (Ages 0 to 5) Living with Grandparents in the Pinal Region, by Census Tract



Source: University of Arizona CRED; data from U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B10002

Table 13. Children (Ages 0 to 17) Living in a Grandparent's Household

	Number of children (0-17) living in a grandparent's household	Percent of children (0-17) living in a grandparent's household and the grandparent is responsible for the child	Percent of children (0-17) living in a grandparent's household and the grandparent is responsible for the child (with no parent present)
Pinal Region	**7,257**	**60%**	**20%**
Apache Junction-Gold Canyon	832	70%	16%
Casa Grande	1,540	62%	21%
Copper Corridor	574	76%	39%
Eloy-Arizona City	729	80%	43%
Florence-Coolidge	484	77%	23%
Maricopa-Ak Chin-Stanfield	1,551	37%	16%
Red Rock-Saddlebrooke	282	85%	18%
San Tan Valley-Queen Creek	1,265	50%	4%
Pinal County	8,258	62%	19%
ARIZONA	140,038	53%	14%

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

Economic Circumstances

Why Economic Circumstances Matters

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, compromised IQ, lower school achievement, and poor health.[16,17,18,19,20] They are also more likely to remain poor later in life.[21] More than a quarter (26%) of Arizona's children lived in poverty in 2014, compared to just over a fifth (21%) six years earlier.[22]

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.[23] 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.[24] Unemployment can also put families at greater risk for stress, family conflict, and homelessness. [25]

Housing instability and homelessness can have deleterious effects on the physical, social-emotional, and cognitive development of young children.[26] 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.[27] High housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition and homelessness.[28] 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.[29]

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.[30] Food insecurity is also associated with overweight and obesity.[31] 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.[32] 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.[33]

In addition to SNAP, food banks and school-based programs such as the National School Lunch Program[34] and Summer Food Service Program[35] 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[36] provides free and reduced-price meals at school for students whose families' 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.[37] There is a growing body of research that suggests CACFP has positive impacts for young children's health and wellbeing. Children who attend care facilities that participate in CACFP have been found to have healthier diets[38,39,40] and decreased risk of under and overweight.[41]

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.[42] In Arizona in 2015, half of all children aged birth through four were enrolled in WIC.[43] Participation in WIC has been shown to be associated with healthier births, lower infant mortality, improved nutrition, decreased food insecurity, improved access to health care, and improved cognitive development and academic achievement for children.[44]

What the Data Tell Us

Income

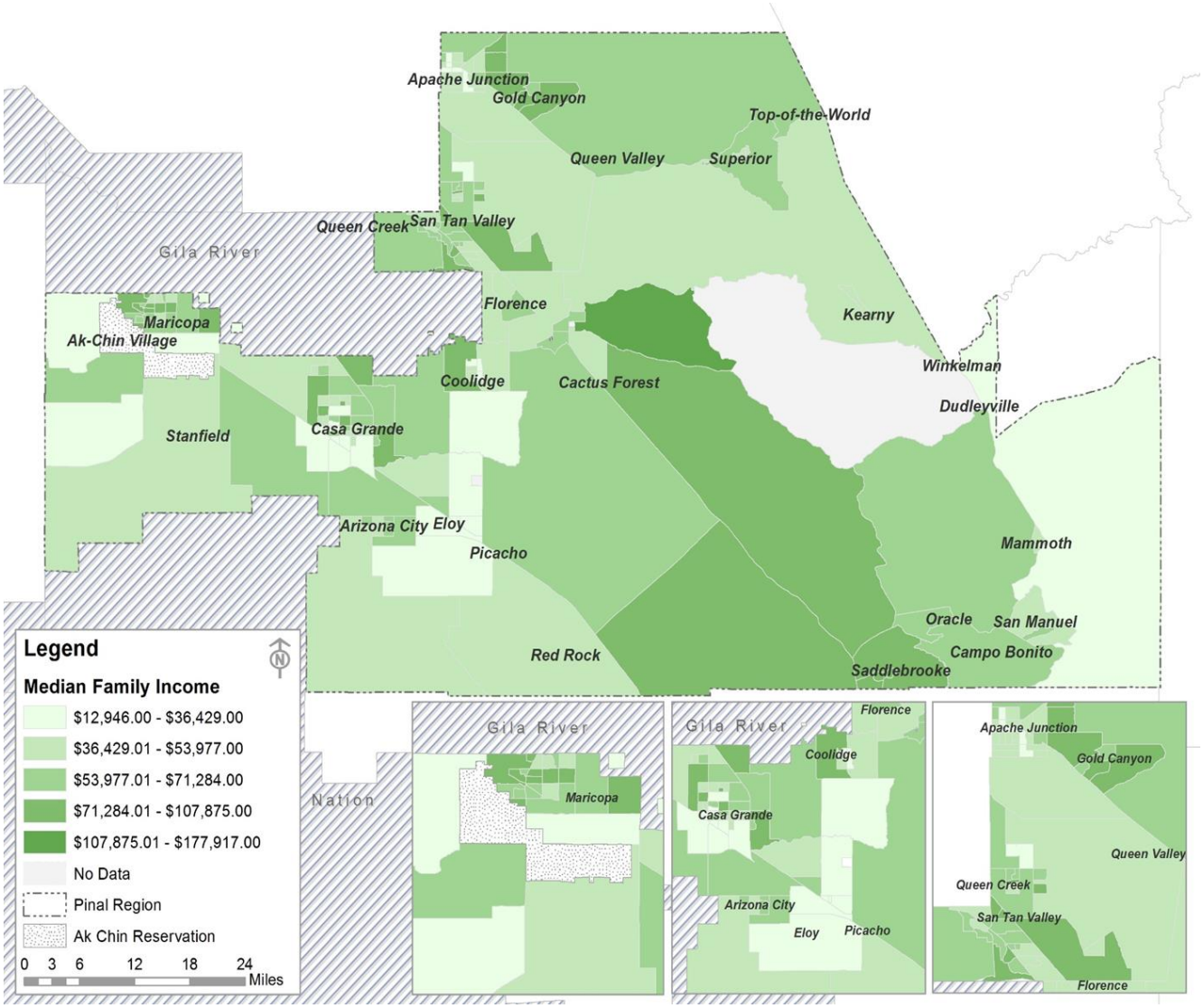
The median income for all families –including those without children – in the Pinal County is $55,513. The median income for families with married parents (husband-wife) and children under age 18 is about $10,000 higher ($66,673), and single-parent families make substantially less. The median income for households run by a single female in the Pinal County is $24,502; households led by single males make about 54% more ($37,711) (Table 14). Figure 12 illustrates the distribution of median incomes throughout the region, by census tract.

Table 14. Median Annual Family Income

	Median family income for all families	Median family income for husband-wife families with child(ren) under 18	Median family income for single-male-householder families with child(ren) under 18	Median family income for single-female-householder families with child(ren) under 18
Pinal Region	**N/A**	**N/A**	**N/A**	**N/A**
Pinal County	$55,513	$66,673	$37,711	$24,502
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 12. Median Annual Family Income in the Pinal Region, by Census Tract



Source: University of Arizona CRED; data from U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B19126

Poverty

Sixteen percent of the total (all-age) population of the Pinal Region lives in poverty, which is slightly lower than elsewhere in Pinal County (17% in poverty) and the state (18%) (Table 15). The percentage of the population aged 0-5 in poverty in the Pinal Region (24%) is higher than the total population in the region in poverty (16%), but lower than the population of children aged 0-5 living in poverty across the county (26%) or state (29%) (Figure 13). Sub-regional data illustrates that there is a great deal of heterogeneity across the region. While young children in some areas, such as Maricopa-Ak Chin-Stanfield are much better off (7% in poverty), nearly half of children in the Apache Junction-Gold

Canyon (44%) and Eloy-Arizona City (49%) sub-regions live in poverty (Table 15). Participants in the data interpretation session expressed surprise that poverty rates were as high as they are in the Apache Junction-Gold Canyon area, since these are considered to be relatively well-off places. Indeed, the data show that adults in this sub-region have a poverty rate on par with the region and state as a whole, but children in this area are doing significantly worse. Figure 12 highlights an area within Apache Junction that has low median family income; it may be that families in this area have many young children.

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)). Almost half of families (46%) 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 similar to the 47 percent in the county and 49 percent across the state (Table 16). As noted above, families with children in the Maricopa-Ak Chin-Stanfield sub-region are faring better (34%), whereas 77 percent of families in the Eloy-Arizona City sub-region are low-income or in poverty. Figure 14 illustrates the census blocks in the region with the highest numbers of children in poverty.

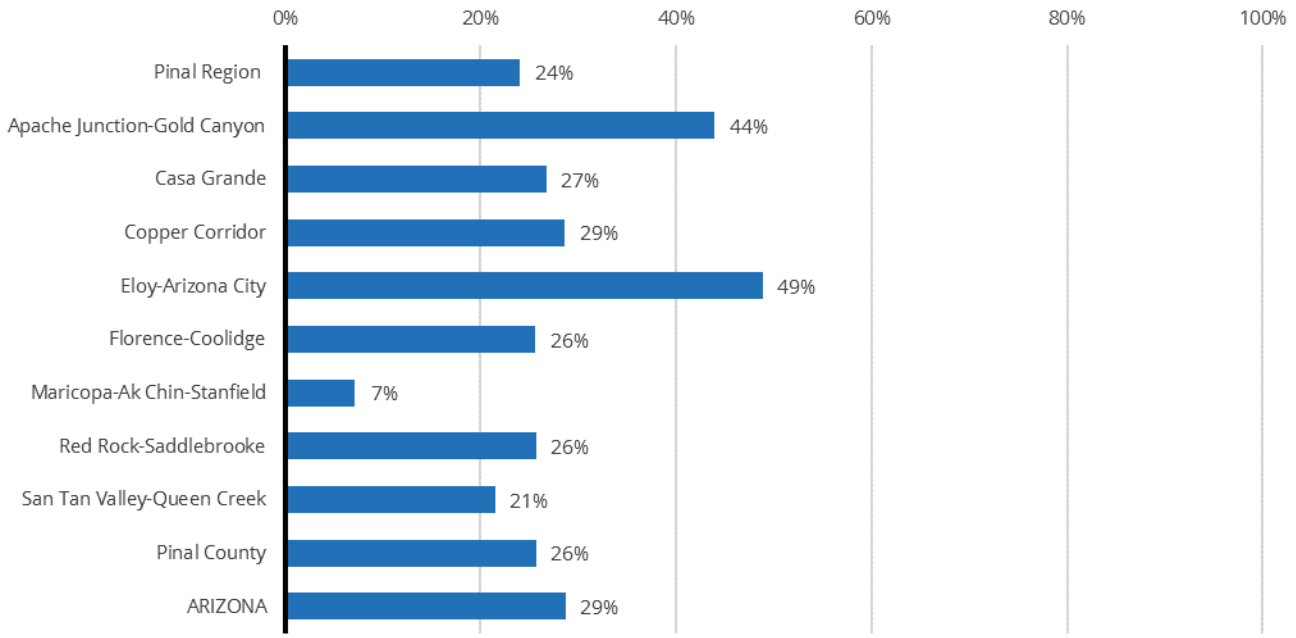
The TANF/Cash Assistance program can be an important short-term support to families in dire financial need. The number of young children supported by this program has steadily declined in recent years, both in the Pinal Region and statewide (Table 17). Between 1996 and 2015, Arizona reduced TANF benefits more than any other state in the nation, and now ranks 42nd in the level of assistance to those participating in TANF.[45] 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. [46] 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.[47]

Table 15. Persons Living in Poverty

	Number of persons (all ages) for whom poverty status is known	Persons (all ages) below poverty level	Number of young children (ages 0-5) for whom poverty status is known	Young children (ages 0-5) below poverty level
Pinal Region	**354,262**	**16%**	**31,452**	**24%**
Apache Junction-Gold Canyon	56,614	18%	2,942	44%
Casa Grande	59,448	19%	5,000	27%
Copper Corridor	16,846	20%	1,042	29%
Eloy-Arizona City	19,679	26%	1,849	49%
Florence-Coolidge	33,364	22%	2,430	26%
Maricopa-Ak Chin-Stanfield	54,108	9%	5,856	7%
Red Rock-Saddlebrooke	17,290	8%	849	26%
San Tan Valley-Queen Creek	96,913	13%	11,484	21%
Pinal County	364,937	17%	32,592	26%
ARIZONA	6,411,354	18%	522,513	29%

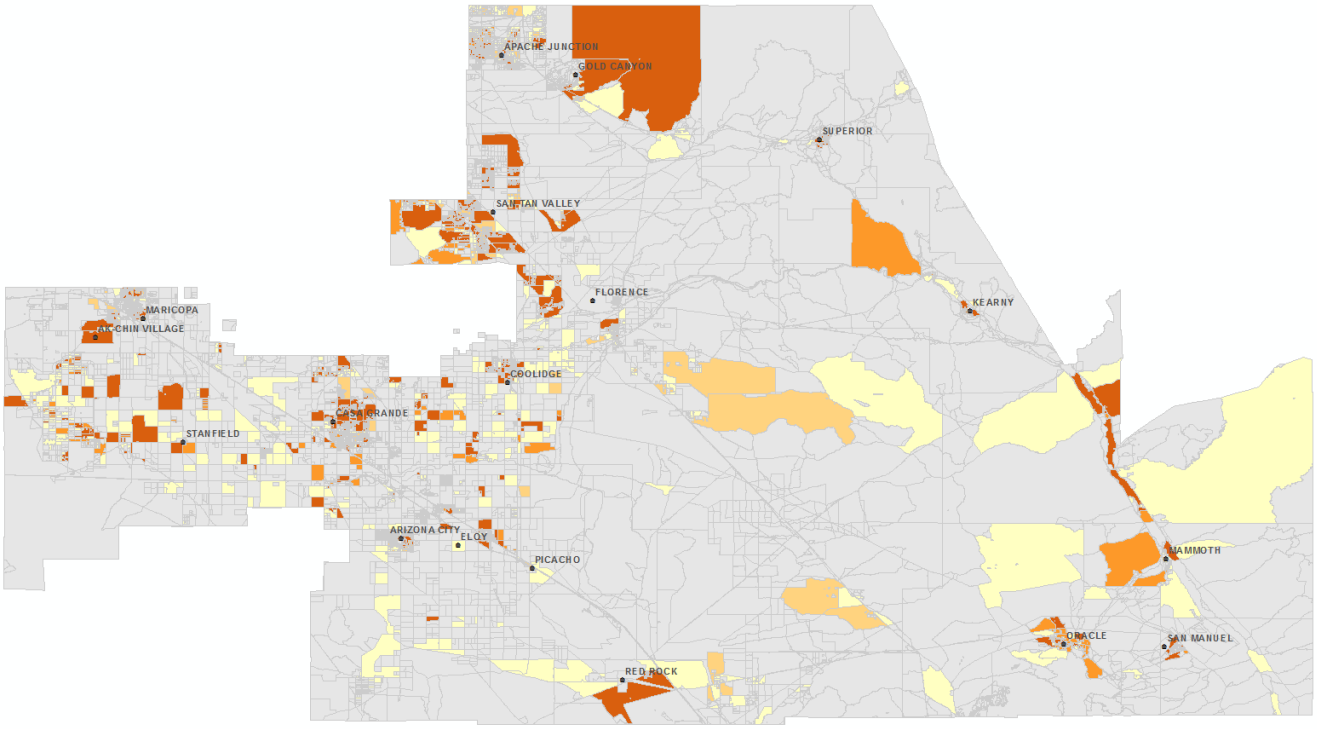
Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B17001

Figure 13. Proportion of Young Children (Ages 0 to 5) Who Are Living in Poverty



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

Figure 14. Population of Young Children and Poverty



Legend	# of Census Blocks	Poverty 0-5	Population 0-5	% Poverty
High Poverty-High Population	1,652	6,201	22,233	28%
High Poverty-Low Population	538	686	1,328	52%
Low Poverty-High Population	530	171	5,076	3%
Low Poverty-Low Population	1,661	491	2,691	18%
No Poverty	13,664	0	3,656	0%
Total	**18,045**	**7,548**	**34,984**	**22%**

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

Table 16. Ratio of Income to Federal Poverty Level (FPL) for Families with Young Children (Ages 0 to 4)

	Estimated number of families with children (ages 0-4)	Families with children (ages 0-4) below 100% FPL*	Families with children (ages 0-4) below 130% FPL*	Families with children (ages 0-4) below 150% FPL*	Families with children (ages 0-4) below 185% FPL*
Pinal Region	**18,123**	**20%**	**28%**	**34%**	**46%**
Apache Junction-Gold Canyon	1,926	41%	45%	48%	58%
Casa Grande	2,835	26%	35%	46%	56%
Copper Corridor	563	29%	34%	41%	55%
Eloy-Arizona City	1,003	39%	59%	63%	77%
Florence-Coolidge	1,282	31%	42%	47%	62%
Maricopa-Ak Chin-Stanfield	3,642	6%	12%	15%	34%
Red Rock-Saddlebrooke	465	20%	43%	44%	44%
San Tan Valley-Queen Creek	6,407	14%	19%	26%	35%
Pinal County	18,730	22%	30%	35%	47%
ARIZONA	301,165	27%	35%	41%	49%

**Please note that the columns in Table 19 are cumulative. In other words, the 20% of families that are below 100% of the FPL are also counted in the 46% of families that are below 185% of the FPL in the Region.*

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

Table 17. Number of Children (Ages 0 to 5) Receiving Temporary Assistance to Needy Families (TANF)

	2012	2013	2014	2015	Change from 2012 to 2015
Pinal Region	**1,029**	**1,086**	**945**	**793**	**-23%**
Pinal County	1,218	1,285	1,124	944	-22%
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 Pinal County, the state, and most sub-regions since 2010, although rates in Pinal County have always been slightly higher than the state's, even before the recession (Table 18). In 2015, the unemployment rate in Pinal County was 6.3%. Again, a closer look within Pinal reveals a diversity of experiences. Consistent with the high poverty rates in those areas, Eloy, Mammoth, and Apache Junction have higher rates of unemployment than other locales within Pinal (Figure 15).[iii] Kearny, on the other hand, has consistently had substantially lower unemployment rates than any other of the areas shown. Kearny has been, and still is, a mining community that draws in several sources of employment for the local community. A key informant noted that while the mining industry has reduced its workforce and presence over the years, it remains an important industry that continues to be based in Kearny and attracts employees, subcontractors, and small businesses.

For young children living with both parents in the region, one parent is more likely to be in the labor force (33%) than both parents (29%) are (Table 19).[iv] This pattern is the same for the county, but opposite of the state where young children living with two parents are slightly more likely to have both their parents in the labor force (31%) compared to just one parent (29%). Twenty-seven percent of young children in the Pinal Region live with a single parent who is employed. Taken together, this means that over half (56%) of young children in the region live in a home where all the parents participate in the labor force. This rate is substantially higher in the Red Rock-Saddlebrooke area (77%). 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.[48] About 11 percent of children are in homes where no parent is participating in the labor force, which is the same as the statewide rate. However, rates are about twice as high in the Copper Corridor (20%), Apache Junction-Gold Canyon, and Eloy-Arizona City (24%) sub-regions.

[iii] *Note that the areas listed are those for which the Arizona Local Area Unemployment Statistics have calculated unemployment rates. The definitions of these places follow Census definitions of cities and towns. Geographic definitions were revised by the Bureau of Labor Statistics in 2016 and recalculated for the periods of 1976-2016. Tribal unemployment statistics as well as estimates for small towns and places are no longer available.*

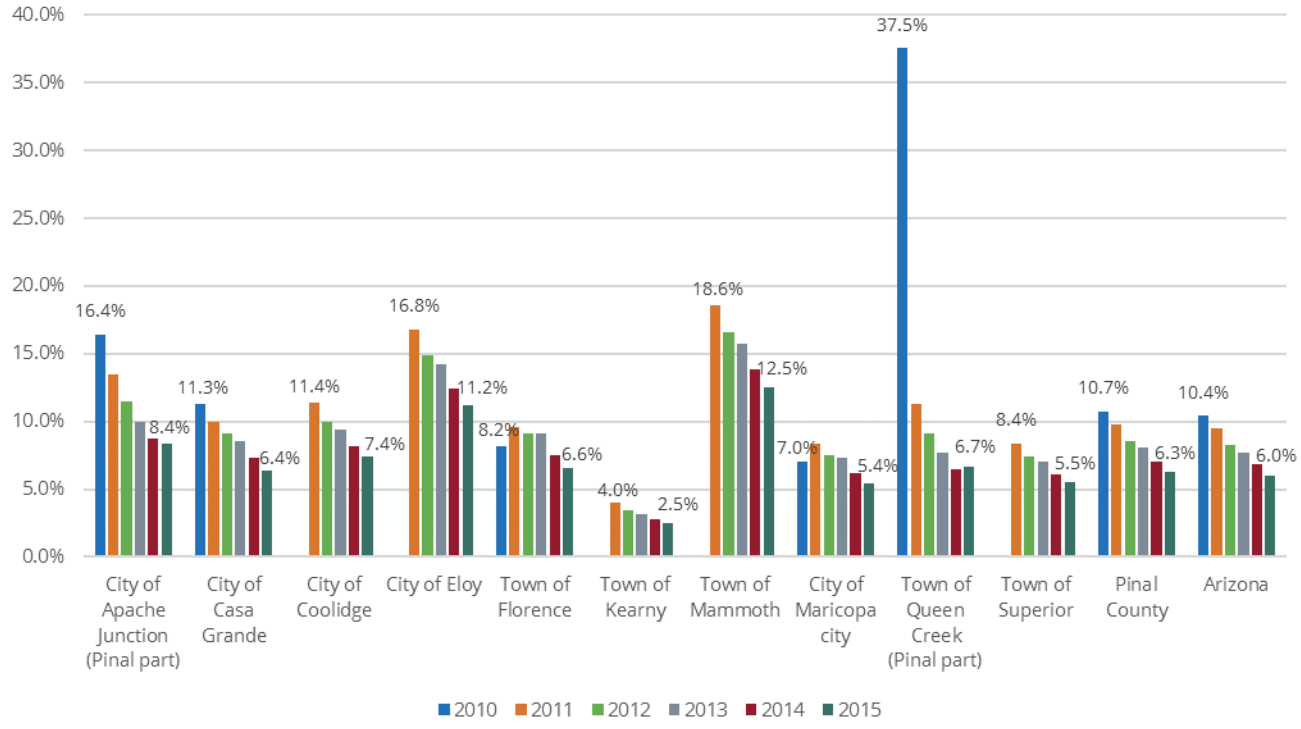
[iv] *Note: "In the labor force" includes persons who are employed and persons who are unemployed but looking for work. Persons who are "not in the labor force" include stay-at-home parents, students, retirees, and others who are not working or looking for work.*

Table 18. Annual Unemployment Rates, 2009 to 2015

	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015
Pinal Region	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pinal County	12.3%	10.7%	9.8%	8.6%	8.1%	7.1%	6.3%
ARIZONA	9.9%	10.4%	9.5%	8.3%	7.7%	6.8%	6.1%

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.

Figure 15. Annual Unemployment Rates, 2010 to 2015



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.

Table 19. Parents of Young Children (Ages 0 to 5) Who Are or Are Not in the Labor Force

	Estimated number of children (ages 0-5) living with one or two parents	Children (0-5) living with two parents who are both in the labor force	Children (0-5) living with two parents, one in the labor force, and one not	Children (0-5) living with two parents, neither in the labor force	Children (0-5) living with a single parent who is in the labor force	Children (0-5) living with a single parent who is not in the labor force
Pinal Region	**30,860**	**29%**	**33%**	**2%**	**27%**	**9%**
Apache Junction-Gold Canyon	2,890	30%	18%	6%	31%	16%
Casa Grande	4,878	23%	25%	0%	37%	15%
Copper Corridor	960	19%	36%	0%	25%	20%
Eloy-Arizona City	1,772	15%	33%	2%	28%	22%
Florence-Coolidge	2,387	25%	36%	1%	31%	7%
Maricopa-Ak Chin-Stanfield	5,733	35%	39%	0%	22%	4%
Red Rock-Saddlebrooke	837	35%	19%	1%	42%	3%
San Tan Valley-Queen Creek	11,403	33%	38%	2%	22%	5%
Pinal County	31,964	29%	32%	2%	27%	10%
ARIZONA	510,658	31%	29%	1%	29%	10%

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

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

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

Food Insecurity

Feeding America's "Map the Meal Gap" project gathers information regarding food insecure households, types of households, unemployment rates, and other information to provide a picture of the nation's food insecurity.[49] Food insecurity is defined by the USDA as a "household-level economic and social condition of limited or uncertain access to adequate food."[50] In Pinal County, 15 percent of the population is estimated to be food insecure, which is lower than across the state as a whole (17%). Twenty six percent of children (those under 18 years old) are food insecure, similar to the state's 27 percent. An estimated 75 percent of food insecure children in the county are likely to be income-eligible for federal nutrition assistance (Table 20).[51,52]

Families' abilities to promote the health of their children is influenced by the built environment of their communities. In the Pinal Region in 2012 (the most recent data available), there were 5 times as many fast-food restaurants as there are grocery stores (Table 21).[v] In all of Pinal County, there were 10 fitness and recreation facilities in 2012,[vi] meaning that many families cannot reasonably access one of these facilities. Approximately one-quarter (24%) of adults over age 18 in Pinal County reported getting no physical activity during their leisure time in the prior month.[vii]

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. The Pinal Region contains 173 SNAP retailers and 26 WIC retailers (Table 22). Although the number of young children participating in SNAP has declined since 2012, this program still supports over 13,000 children in the Pinal Region annually (Table 23; Figure 16; Table 24). WIC participation has also declined slightly (Table 25) but still serves a substantial portion of the population of women and children (45% in 2015). Table 26 provides a single month snapshot of participation in the program; 81 percent of the infants and 71 percent of the children who were enrolled in WIC claimed their benefits that month (January 2015). About two-thirds (62-64%) of students in the Pinal Region have been eligible for free or reduced-price lunch since 2012 (Figure 17). At the same time, the percent across the state has hovered around 57-58 percent. In some districts, eligibility rates often surpass 90 percent (e.g., Eloy Elementary District, Superior Unified School District) (Table 27).

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-

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[v] *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

[vi] *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

[vii] *Estimated prevalence of adults aged ≥18 years who reported no leisure time physical activity* during the preceding month, by county — Behavioral Risk Factor Surveillance System, United States, 2010*
https://www.cdc.gov/mmwr/preview/mmwrhtml/ss6201a1.htm?s_cid=ss6201a1_w#tab49

price lunch can receive funding through the Summer Food Service Program (SFSP)[viii] to provide summer meals to children of all ages.[53] In Pinal County in 2015, 141 sites provided summer meals to children, although the number of meals served in the county declined 20 percent between 2012 and 2015 (Table 28; Figure 18).

As of January 2015, there were 26 sites in Pinal County participating in the Child and Adult Care Food Program (CACFP), not counting adult care centers or emergency shelters. More than half (15) of these sites in the county were Head Start centers, in contrast to the state where most CACFP sites are child care centers and preschools (Table 29). The number of sites participating in CACFP remained fairly constant between 2012 and 2015, whereas the number of meals increased dramatically between 2014 and 2015 (Table 30; Figure 19). While participation among Head Start centers in Pinal County is high, there are many child care centers in the county 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 20. Food Insecurity and Eligibility for Federal Nutrition Assistance

	Total population	Food insecurity rate (all ages)	Likely eligible for Federal Nutrition Assistance (all ages)	Population of children (ages 0-17)	Food insecurity rate (ages 0-17)	Likely eligible for Federal Nutrition Assistance (ages 0-17)
Pinal Region	N/A	N/A	N/A	N/A	N/A	N/A
Pinal County	390,158	15%	68%	99,706	26%	75%
ARIZONA	6,731,489	17%	67%	1,622,076	27%	68%

Source: Feeding America (2016). Hunger in America. Retrieved from map.feedingamerica.org/county/2014/overall

[viii] *For more information on the Summer Food Service Program in Arizona, visit http://www.azsummerfood.gov/*

Table 21. Food Environment

	Grocery stores, 2012	Grocery stores per thousand residents, 2012	Fast-food restaurants, 2012	Fast-food restaurants per thousand residents, 2012	Recreation & fitness facilities, 2012	Recreation and fitness facilities per thousand residents, 2012
Pinal Region	N/A	N/A	N/A	N/A	N/A	N/A
Pinal County	26	0.07	134	0.35	10	0.03
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 22. Retailers Participating in the SNAP or WIC Programs

	Number of SNAP retailers	SNAP retailers per 100,000 residents	Number of WIC retailers	WIC retailers per 100,000 residents
Pinal Region	173	47.21	26	7.10
Pinal County	177	47.10	28	7.45
ARIZONA	4,038	63.17	644	10.08

Source: United Arizona Department of Health Services (2016). Arizona WIC Vendor List. Retrieved from http://azdhs.gov/documents/prevention/azwic/az-wic-vendor-list.pdf; Inter-Tribal Council of Arizona (2016). Special Supplemental Nutrition Program for Women, Infants, and Children: Find a Store. Retrieved from http://itcaonline.com/?page_id=1064; United States Department of Agriculture (2016). SNAP Retailer Locator. Retrieved from https://www.fns.usda.gov/snap/retailerlocator.

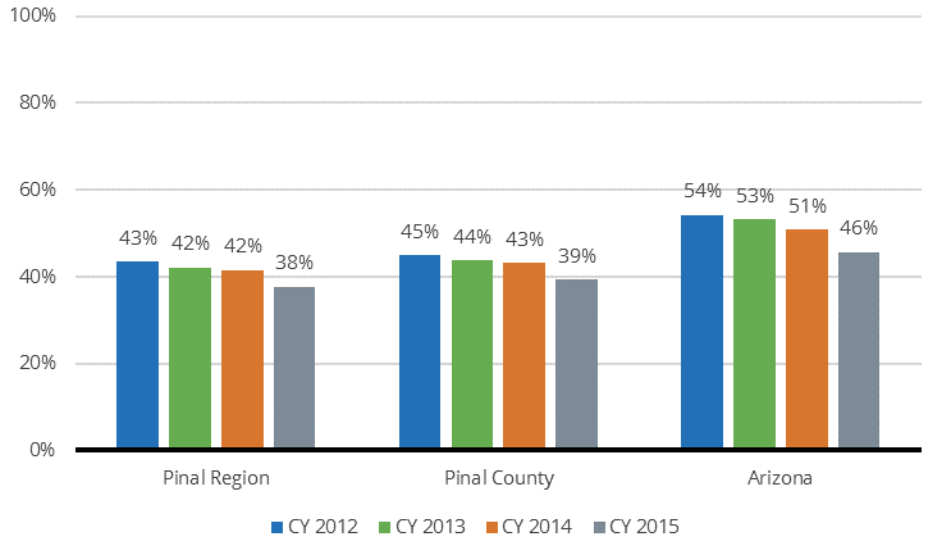
Notes: Per capita figures were calculated using the 2010 Census total population for each geography. SNAP and WIC retailers by geography account for the retailers falling within the geographic boundaries of a given area. WIC retailers account for retailers authorized through both the Arizona Department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

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

	2012	2013	2014	2015	Change from 2012 to 2015
Pinal Region	**15,195**	**14,742**	**14,527**	**13,188**	**-13%**
Pinal County	16,259	15,834	15,661	14,249	-12%
ARIZONA	296,686	290,513	277,345	249,712	-16%

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

Figure 16. Estimated Percent of Young Children (Ages 0 to 5) Enrolled in SNAP, 2012 to 2015



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

Table 24. Number of Women, Infants, and Children Enrolled in the WIC Program During 2015

	Total	Women	Infants (Age 0)	Children (Ages 1 to 4)
Pinal Region	**17,537**	**4,458**	**4,952**	**8,127**
Pinal County	17,654	4,479	4,983	8,192
ARIZONA	310,181	82,860	87,836	139,485

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

Table 25. 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	Change from 2012 to 2015
Pinal Region	**29,189**	**14,964**	**51%**	**14,268**	**49%**	**13,417**	**46%**	**13,079**	**45%**	**-13%**
Pinal County	30,182	15,058	50%	14,374	48%	13,535	45%	13,175	44%	-13%
ARIZONA	455,715	255,332	56%	243,050	53%	233,012	51%	227,321	50%	-11%

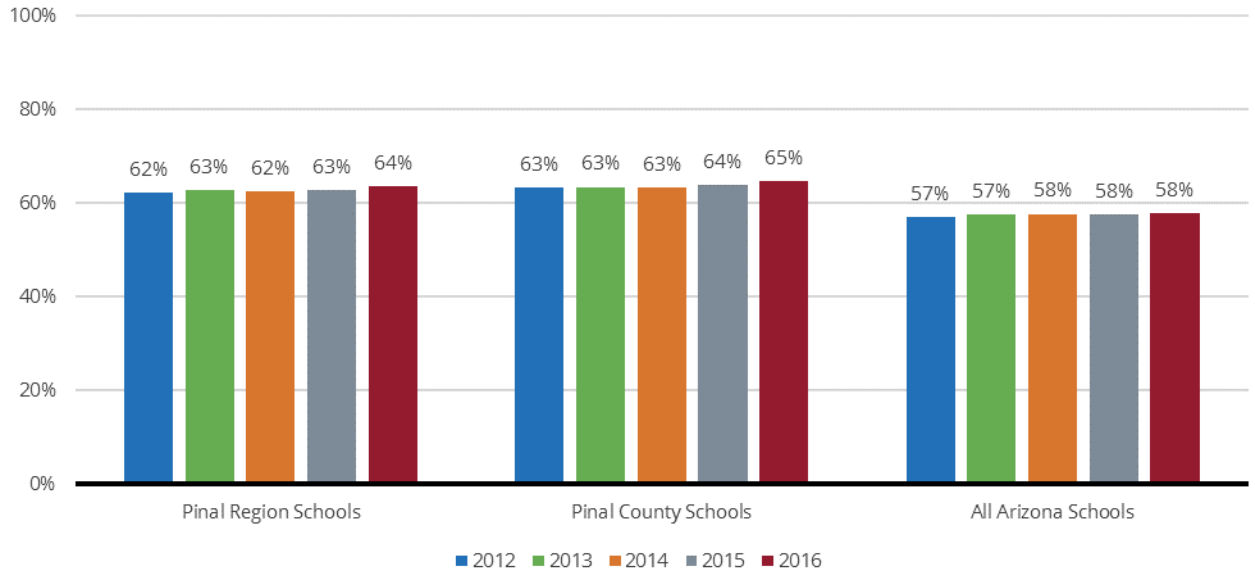
Source: Arizona Department of Health Services (2016). [WIC datasets]. Unpublished data.

Table 26. WIC Participation Rates, January 2015

	Total	Women	Infants	Children
Pinal Region	**74%**	**73%**	**81%**	**71%**
Pinal County	74%	73%	81%	71%
ARIZONA	79%	78%	84%	77%

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

Figure 17. 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 27. Proportion of Students (Pre-kindergarten Through Twelfth Grade) Eligible for Free or Reduced-Price Lunch, 2012 to 2016

	2012	2013	2014	2015	2016
Pinal Region Schools	**62%**	**63%**	**62%**	**63%**	**64%**
Apache Junction Unified District	56%	61%	60%	63%	65%
Casa Grande Elementary District	74%	72%	74%	75%	79%
Casa Grande Union High School District	62%	62%	60%	62%	59%
Coolidge Unified District	77%	77%	67%	72%	73%
Eloy Elementary District	90%	93%	93%	92%	87%
Florence Unified School District	56%	57%	58%	58%	59%
J O Combs Unified School District	41%	43%	42%	43%	45%
Mammoth-San Manuel Unified District	72%	74%	77%	81%	81%
Maricopa Unified School District	54%	53%	55%	55%	56%
Mary C O'Brien Accommodation District	67%	67%	67%	67%	67%
Oracle Elementary District	59%	62%	64%	63%	63%
Picacho Elementary District	85%	85%	86%	86%	86%
Ray Unified District	63%	55%	56%	56%	63%
Red Rock Elementary District	54%	53%	58%	52%	56%
Santa Cruz Valley Union High School District	79%	85%	87%	86%	87%
Stanfield Elementary District	85%	85%	85%	85%	85%
Superior Unified School District	87%	91%	91%	91%	91%
Toltec School District	83%	84%	82%	71%	77%
Pinal Region Charter Schools	58%	61%	59%	57%	58%
Pinal County Schools	63%	63%	63%	64%	65%
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.

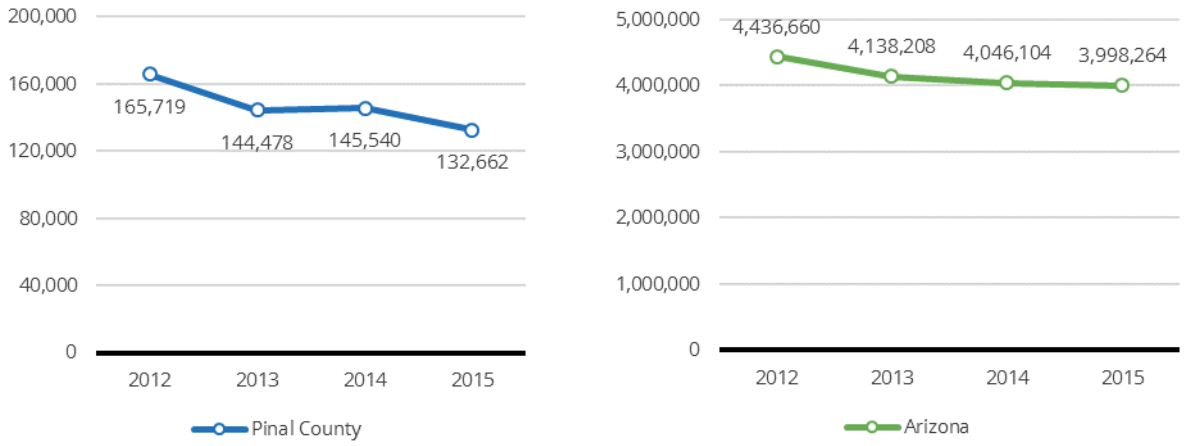
Table 28. Summer Food Service Program (SFSP) Sites and Meals Served

	Number of sites in Summer 2015	Number of free meals in Summer 2015	Change in the number of meals from 2012 to 2015
Pinal Region	N/A	N/A	N/A
Pinal County	141	132,662	-20%
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 18. Trends in Meals Served through the Summer Food Service Program (SFSP)



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

Table 29. Sites participating in Child and Adult Care Food Program (CACFP) by type, January 2015

	At-Risk Meal Service Center	Child Care Center or Preschool	Head Start Center	Outside School Hours Care Center
Pinal Region	**N/A**	**N/A**	**N/A**	**N/A**
Pinal County	0	11	15	0
Arizona	196	401	294	10

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

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

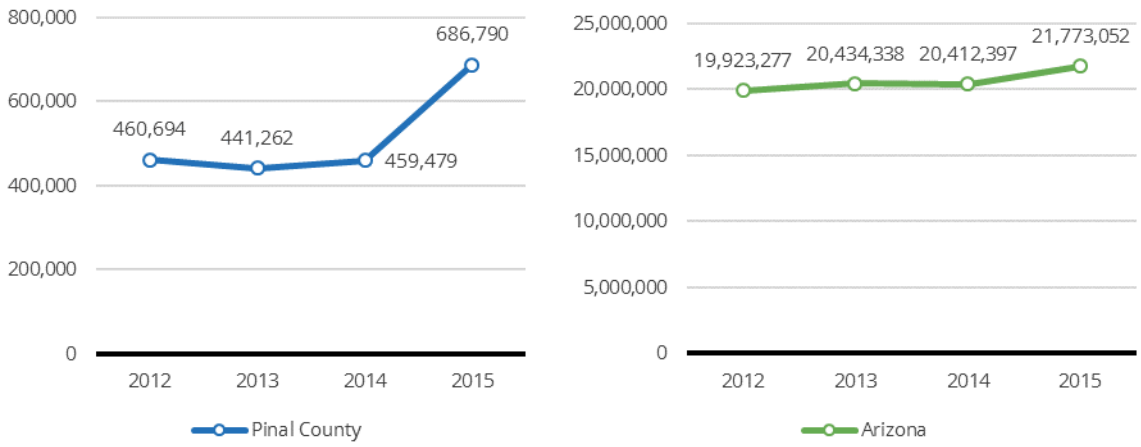
Table 30. Number of sites participating in Child and Adult Care Food Program (CACFP), 2012-2016

	January 2012	January 2013	January 2014	January 2015	Change from 2012 to 2015
Pinal Region	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Pinal County	27	27	24	26	-4%
Arizona	849	868	873	901	+6%

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

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

Figure 19. Trends in Meals Served through the Child and Adult Care Food Program (CACFP), 2012-2015



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

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

Housing and Homelessness

Of the 123,640 housing units in Pinal, 27 percent are occupied by renters and 73 percent are occupied by home-owners (Table 31). Rates are roughly similar across the sub-regions, with the exception of the Red Rock-Saddlebrooke area that has a high rate of home-ownership (90%). Home-ownership across the region and all sub-regions is greater than elsewhere in the state (63%). The Pinal Region looks similar to the state as a whole with regard to the cost of housing: 32 percent of Pinal housing units require their residents to contribute more than 30 percent of their household income toward housing, compared to 34 percent statewide (Table 32). In the Copper Corridor sub-region, housing is relatively more affordable, with only 24 percent of units crossing the 30 percent cost threshold, whereas in Eloy-Arizona City, 38 percent do.

Table 31. Owner- and Renter-Occupied Housing Units

	Number of occupied housing units	Owner-occupied units	Renter-occupied units
Pinal Region	**123,640**	**73%**	**27%**
Apache Junction-Gold Canyon	24,953	78%	22%
Casa Grande	20,741	68%	32%
Copper Corridor	6,069	73%	27%
Eloy-Arizona City	6,917	64%	36%
Florence-Coolidge	12,145	69%	31%
Maricopa-Ak Chin-Stanfield	17,211	74%	26%
Red Rock-Saddlebrooke	7,594	90%	10%
San Tan Valley-Queen Creek	28,010	73%	27%
Pinal County	126,128	73%	27%
ARIZONA	2,387,246	63%	37%

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

Table 32. The Cost of Housing, Relative to Household Income

	Number of occupied housing units	Occupied housing units which cost 30% of household income, or more
Pinal Region	**123,640**	**32%**
Apache Junction-Gold Canyon	24,953	32%
Casa Grande	20,741	34%
Copper Corridor	6,069	24%
Eloy-Arizona City	6,917	38%
Florence-Coolidge	12,145	29%
Maricopa-Ak Chin-Stanfield	17,211	32%
Red Rock-Saddlebrooke	7,594	31%
San Tan Valley-Queen Creek	28,010	32%
Pinal County	126,128	32%
ARIZONA	2,387,246	34%

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

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.[54,55,56,57] Starting in kindergarten, poor school attendance can cause children to fall behind, leading to lowered proficiency in reading and math, and increased grade-retention.[58]

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.[59] 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.[60]

In recognition of the importance of assuring that children are reading by the third grade, the Arizona Revised Statute §15-701 (also known as the *Move on When Reading* law) was enacted, which states that a student shall not be promoted from the third grade if the student obtains a score that falls far below the third-grade level.[61] Exceptions exist for students identified with or being evaluated for learning disabilities, English language learners, and those with reading impairments. From 2000-2014, the primary in-school performance measure of students in public elementary schools in the state used to meet the *Move on When Reading* requirement was the Arizona's Instrument to Measure Standards (AIMS).[62] In 2014, the statewide assessment tool for English language arts (ELA) and mathematics changed from AIMS to AzMERIT (Arizona's Measurement of Educational Readiness to Inform Teaching), and the first AzMERIT testing began in the 2015 school year.[63] New proficiency cut points were determined by grade level,[64] and earning a score of "proficient" or "highly proficient" indicates that a student is prepared for the next grade without requiring additional support.[65] Students who score as either "minimally" or "partially proficient" are likely to need support to be ready to move on to the next grade.[66] 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.[67]

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.[68] 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.[69,70]

What the Data Tell Us

Enrollment

District boundaries are shown in Figure 20. There are 28 schools in the Pinal Region that offer preschool programs (Table 33). Twenty schools in the Pinal Region offer pre-kindergarten programs; these schools enroll 793 children (Table 34). There is at least one school offering pre-kindergarten in every district within the region; the highest number is three schools in the J.O. Combs Unified School District.

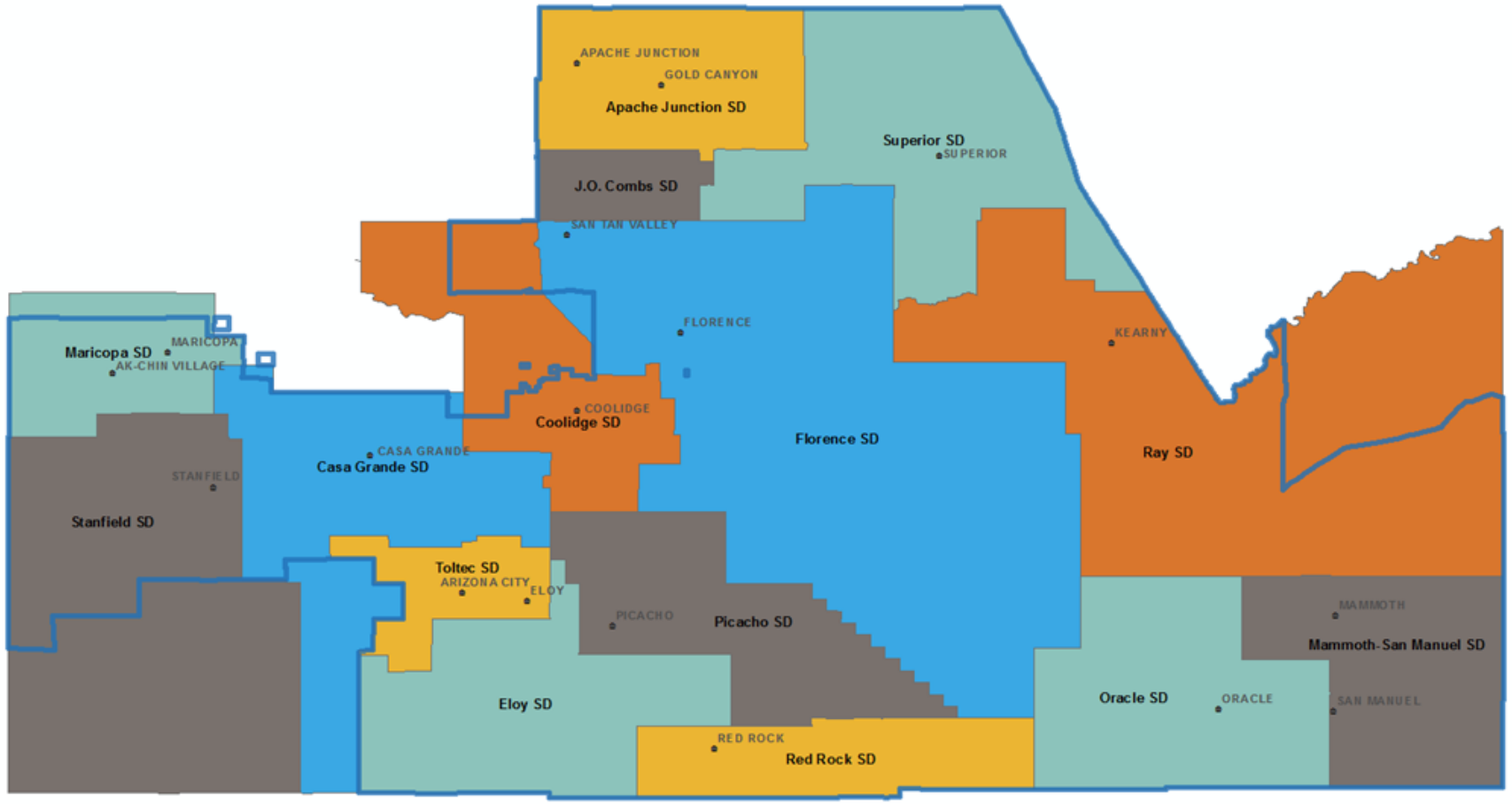
There are over 17,000 students enrolled in kindergarten through third grade in the Pinal Region. Of these, 878 (5%) are classified as English Language Learners across the region as a whole, however the distribution of these students across the sub-regions is uneven (Table 35). Nearly a quarter (212) of the English Language Learners are in the Casa Grande Elementary district, but since this is the largest district, they only make up 7 percent of the population in that district. Two smaller districts, Stanfield Elementary District (21%) and Picacho Elementary District (16%) have high proportions of students who are English Language Learners.

There are roughly 500 children enrolled in special education in ADE preschools each year.[ix] At the pre-kindergarten level, 60 percent of Pinal Region students are in special education, compared to 46 percent statewide.

At the elementary school level, 11 percent of Pinal Region students are considered to have special needs, compared to 10 percent statewide. Rates vary dramatically across districts; over one in every five students in the Oracle Elementary District has special needs, whereas only 3 percent of students in Picacho Elementary District are identified as students with special needs.

[ix] *For full information, including the relevant tables, regarding the education of children with special needs, please refer the section within Early Learning entitled Developmental Screenings and Services for Children with Special Developmental and Health Needs*

Figure 20. The School Districts of the Pinal Region



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

Table 33. Number of Preschoolers in Special Education, 2012 to 2015

	Total number of ADE preschools and elementary schools	Number of preschoolers in special education, 2012	Number of preschoolers in special education, 2013	Number of preschoolers in special education, 2014	Number of preschoolers in special education, 2015
Pinal Region Schools	28	529	506	509	509
Apache Junction Unified District	1	74	68	75	75
Casa Grande Elementary District	2	82	77	77	77
Coolidge Unified District	2	38	51	41	41
Eloy Elementary District	1	0	<25	<25	<25
Florence Unified School District	4	87	83	85	85
J O Combs Unified School District	4	78	73	96	96
Mammoth-San Manuel Unified District	2	<25	<25	<25	<25
Maricopa Unified School District	6	109	92	78	78
Mary C O'Brien Accommodation District	0	0	0	0	0
Oracle Elementary District	1	<25	<25	<25	<25
Picacho Elementary District	1	<25	0	0	0
Ray Unified District	1	<25	<25	<25	<25
Red Rock Elementary District	1	17	9	10	10
Stanfield Elementary District	1	<25	<25	0	0
Superior Unified School District	1	<25	0	0	0
Toltec School District	2	<25	<25	<25	<25
Pinal Region Charter Schools	15	0	0	0	0
Pinal County Schools	31	577	558	571	520
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 that are partially outside of the region, the data for the complete district is likely to vary from the percentages reported here.

Table 34. Pre-Kindergarten Enrollment

	Number of schools with pre-kindergarten	Number of students enrolled
Pinal Region Schools	**20**	**793**
Apache Junction Unified District	1	80
Casa Grande Elementary District	1	65
Coolidge Unified District	2	49
Eloy Elementary District	1	17
Florence Unified School District	2	77
J O Combs Unified School District	3	163
Mammoth-San Manuel Unified District	2	77
Maricopa Unified School District	1	127
Oracle Elementary District	1	38
Picacho Elementary District	1	<10
Ray Unified District	1	19
Red Rock Elementary District	1	14
Stanfield Elementary District	1	30
Superior Unified School District	1	18
Toltec School District	1	18
Pinal County Schools	20	818
All Arizona Schools	445	19,123

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 that are partially outside of the region, the data for the complete district is likely to vary from the percentages reported here.

Table 35. Kindergarten Through Third-Grade Enrollment

	Number of students enrolled (K to 3)	Number of English Language Learners (ELL)	Percent of students who are ELL
Pinal Region Schools	**17,744**	**878**	**5%**
Apache Junction Unified District	1,156	70	6%
Casa Grande Elementary District	2,898	212	7%
Coolidge Unified District	824	50	6%
Florence Unified School District	2,173	93	4%
J O Combs Unified School District	1,292	40	3%
Mammoth-San Manuel Unified District	199	<10	2%
Maricopa Unified School District	1,943	92	5%
Mary C O'Brien Accommodation District	75	<10	3%
Oracle Elementary District	165	<10	4%
Picacho Elementary District	76	12	16%
Ray Unified District	133	0	0%
Red Rock Elementary District	127	<10	2%
Stanfield Elementary District	225	47	21%
Superior Unified School District	110	0	0%
Toltec School District	503	44	9%
Pinal Region Charter Schools	5,438	153	3%
Pinal County Schools	17,906	791	4%
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.

Standardized Test Scores

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 38 percent of Pinal Region students attained these scores on the third grade math assessment, which was a slightly lower passing rate than across Arizona as a whole (41%) (Figure 21). Performance on the English Language Arts (ELA) test was similar, with 35 percent of Pinal students demonstrating proficiency, compared to 40 percent across the state (Figure 22). A portion of the 49 percent of Pinal 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.[x]

The highest achieving districts in the Region were the Mary C O'Brien Accommodation District (67% passing math, 67% ELA), Red Rock Elementary District (54% math, 45% ELA), and Pinal Region Charter Schools (48% math, 47% ELA) (Table 36, Table 37). A key informant noted that although the Mary C O'Brien Elementary School was designed to serve students with special needs, it is seen as a desirable school by many other Pinal parents as well, thanks to the more resource-rich environment it provides. The districts with the lowest proficiency rates were Superior Unified School District (13% math, 13% ELA) and Coolidge Unified District (14% math, 15% ELA) (Table 36, Table 37). Information on individual schools is available through the Arizona Department of Education's website: http://www.azed.gov/research-evaluation/aims-assessment-results/.

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.[71]

Although data at the regional level is unavailable, the NAEP also demonstrated that strong disparities 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-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. [72]

Student performance in the Pinal 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.

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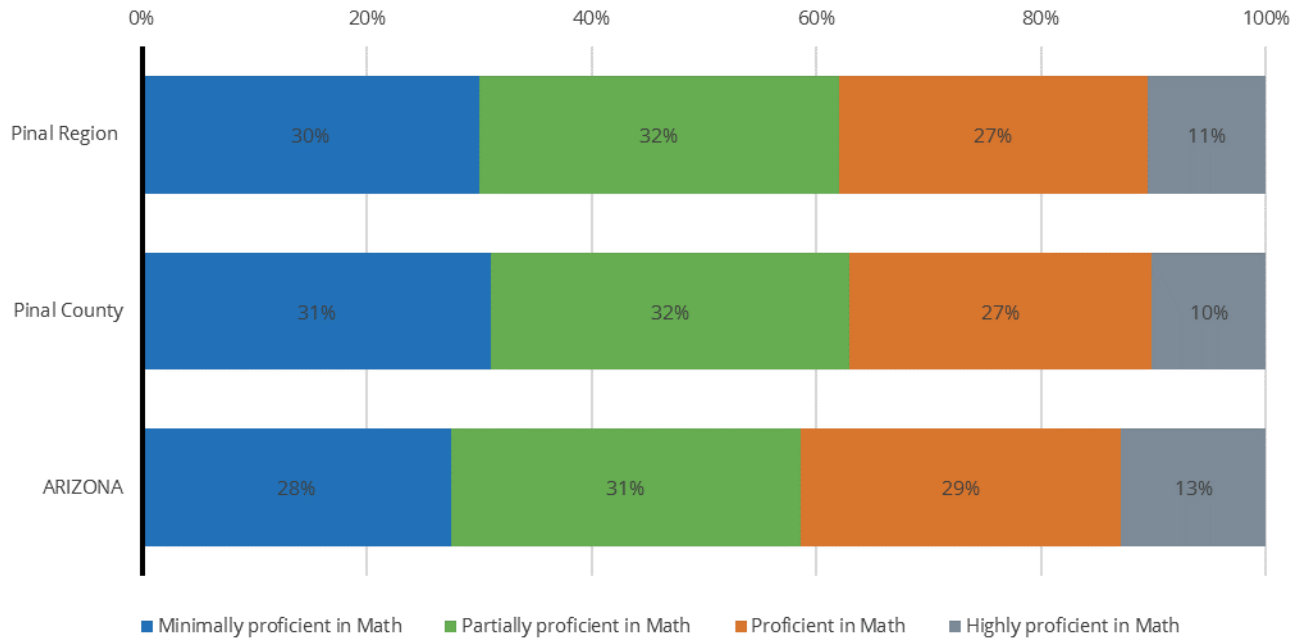
[x] *Note that in the data provided the scores reported are a combined ELA score of reading and writing. Students may have a minimally proficient ELA score and still meet the Move On When Reading requirement.*

Figure 21. AzMERIT Math Test Results for Third-Graders in the 2014-15 School Year



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

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

Table 36. AzMERIT Math Test Results for Third-Graders in 2014-15, by School District

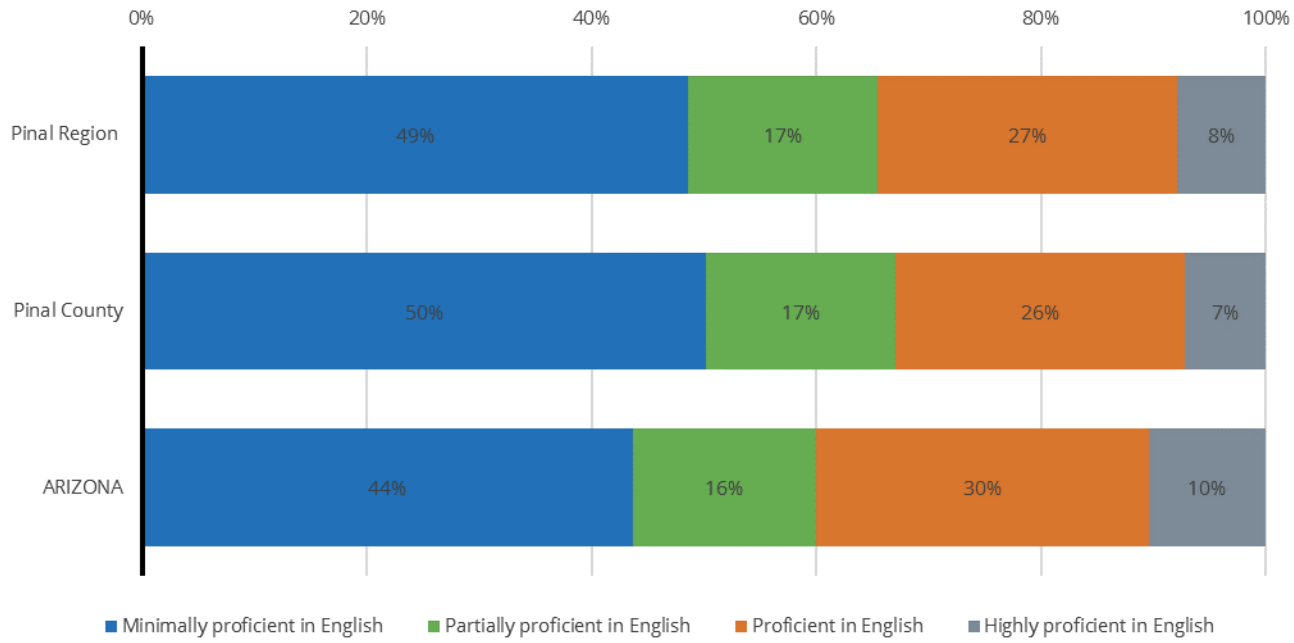
	Minimally proficient in Math	Partially proficient in Math	Proficient in Math	Highly proficient in Math	Passing Math (Proficient or Highly Proficient)
Pinal Region Schools	**30%**	**32%**	**27%**	**11%**	**38%**
Apache Junction Unified District	27%	34%	27%	12%	39%
Casa Grande Elementary District	35%	36%	22%	8%	29%
Coolidge Unified District	50%	36%	12%	2%	14%
Eloy Elementary District	46%	32%	22%	0%	22%
Florence Unified School District	34%	30%	29%	7%	36%
J O Combs Unified School District	28%	30%	30%	13%	43%
Mammoth-San Manuel Unified District	27%	34%	34%	5%	39%
Maricopa Unified School District	21%	34%	33%	13%	45%
Mary C O'Brien Accommodation District	0%	33%	40%	27%	67%
Oracle Elementary District	16%	41%	41%	3%	44%
Picacho Elementary District	37%	42%	16%	5%	21%
Ray Unified District	57%	30%	13%	0%	13%
Red Rock Elementary District	10%	36%	36%	18%	54%
Stanfield Elementary District	40%	36%	18%	5%	24%
Superior Unified School District	38%	50%	13%	0%	13%
Toltec School District	45%	28%	20%	6%	27%
Pinal Region Charter Schools	24%	28%	32%	16%	48%
Pinal County Schools	31%	32%	27%	10%	37%
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 Pinal Region's boundaries. For districts that 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.

Figure 22. AzMERIT English Language Arts Test Results for Third-Graders in the 2014-15 School Year



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

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

Table 37. AzMERIT English Language Arts Test Results for Third-Graders in 2014-15, by School District

	Minimally proficient in English Language Arts	Partially proficient in English Language Arts	Proficient in English Language Arts	Highly proficient in English Language Arts	Passing English Language Arts (Proficient or Highly Proficient)
Pinal Region Schools	**49%**	**17%**	**27%**	**8%**	**35%**
Apache Junction Unified District	44%	19%	29%	8%	37%
Casa Grande Elementary District	60%	16%	20%	4%	24%
Coolidge Unified District	72%	13%	14%	1%	15%
Eloy Elementary District	75%	11%	13%	1%	14%
Florence Unified School District	49%	19%	26%	7%	32%
J O Combs Unified School District	41%	18%	30%	11%	41%
Mammoth-San Manuel Unified District	42%	23%	31%	3%	34%
Maricopa Unified School District	43%	20%	31%	6%	37%
Mary C O'Brien Accommodation District	7%	27%	53%	13%	67%
Oracle Elementary District	56%	19%	22%	3%	25%
Picacho Elementary District	63%	0%	26%	11%	37%
Ray Unified District	69%	14%	17%	0%	17%
Red Rock Elementary District	39%	16%	37%	8%	45%
Stanfield Elementary District	71%	15%	13%	2%	15%
Superior Unified School District	75%	13%	13%	0%	13%
Toltec School District	60%	15%	20%	4%	24%
Pinal Region Charter Schools	37%	16%	33%	14%	47%
Pinal County Schools	50%	17%	26%	7%	33%
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 Pinal Region's boundaries. For districts that 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 38 shows these percentages for elementary school districts in the region. Rates of chronic absences in the Pinal Region have been consistently higher in 2014 (36%) and 2015 (39%) than in the state as a whole (34% and 36%, respectively). Chronically absent students were especially problematic in 2015 in Picacho Elementary District (58%) and Eloy Elementary District (52%), while rates were lowest in Mary C O'Brien Accommodation District (16%). Mary C O'Brien Accommodation District and Ray Unified District are notable in that they substantially reduced chronic absenteeism between 2014 and 2015. Identifying and addressing the reasons behind chronic absenteeism is important to ameliorate later effects on educational achievement and graduation rates.[73]

The Pinal Region contains 33 high schools and alternative schools. The high school drop-out rate in Pinal Region rose slightly to 6 percent in 2015, after remaining at 5 percent in the three years prior (Figure 23). The rate in Pinal has consistently been slightly higher than the state rate of 3 to 4 percent (Table 39). Casa Grande Union High School District (9%) and Coolidge Unified School District (9%) both had 2015 drop-out rates that were more than double that of the state overall. Nearly 1 of every 3 high school students in the Mary C O'Brien Accommodation District, comprised of Villa Oasis Interscholastic Center for Education (V.O.I.C.E, serving youth at risk of not completing school), and the Pinal County Schools Secure Care Program (for incarcerated youth), drops out of school. In addition, four-year graduation rates in the Pinal Region (2014: 72%) are consistently lower than in Arizona as whole (2014: 76%) (Figure 24). Superior Unified School District stands out as a high-performer: 90% of students graduate in 4 years (Table 39).

Adults aged 25 and older in the Pinal Region are less likely to have a bachelor's or higher degree (18%) than adults across Arizona (27%) (Table 40). Pinal Region adults are more likely (37%) to have had some college or professional training than their peers elsewhere across the state (34%) however. In the Florence-Coolidge, Eloy-Arizona City, and Copper Corridor sub-regions, the majority of adults have no post-secondary education. In the Florence-Coolidge and Eloy-Arizona City sub-regions, about one in every four adults did not complete high school. Adults in the Red Rock-Saddlebrooke sub-region have the highest educational attainment; 40 percent have a bachelor's degree or more.

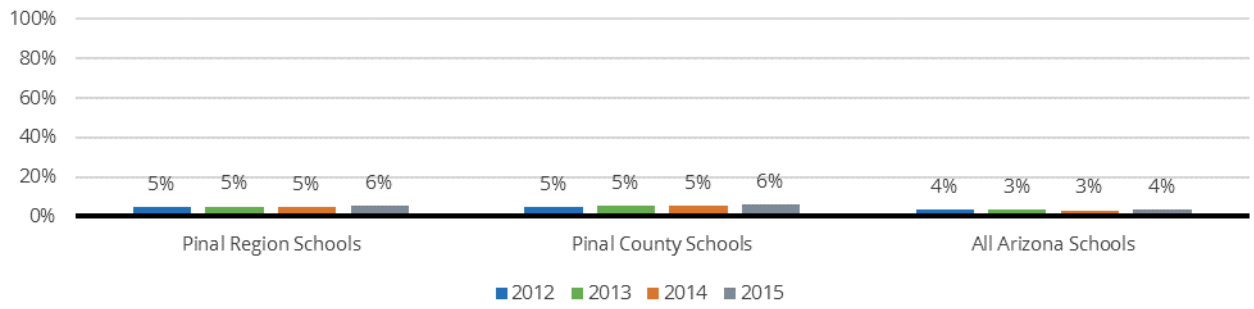
Table 38. Chronic Absences for Students in Grade 1 to 3, 2014 and 2015

	Number of schools	Number of students in 2014	Students with chronic (more than 10) absences in 2014	Percent of students with chronic absences in 2014	Number of students in 2015	Students with chronic (more than 10) absences in 2015	Percent of students with chronic absences in 2015
Pinal Region Schools	**65**	**15,150**	**5,418**	**36%**	**15,460**	**5,996**	**39%**
Apache Junction Unified District	4	1,161	429	37%	1,177	502	43%
Casa Grande Elementary District	9	2,543	876	34%	2,557	980	38%
Coolidge Unified District	3	925	394	43%	865	380	44%
Eloy Elementary District	1	377	186	49%	384	199	52%
Florence Unified School District	8	2,088	770	37%	2,062	845	41%
J O Combs Unified School District	5	1,236	378	31%	1,183	441	37%
Mammoth-San Manuel Unified District	2	215	99	46%	197	93	47%
Maricopa Unified School District	6	1,617	534	33%	1,694	627	37%
Mary C O'Brien Accommodation District	1	58	20	34%	57	9	16%
Oracle Elementary District	1	143	67	47%	130	63	48%
Picacho Elementary District	1	58	24	41%	73	42	58%
Ray Unified District	1	106	44	42%	108	30	28%
Red Rock Elementary District	1	147	45	31%	111	37	33%
Stanfield Elementary District	1	203	99	49%	198	92	46%
Superior Unified School District	1	122	50	41%	106	52	49%
Toltec School District	3	449	163	36%	457	181	40%
Pinal Region Charter Schools	17	3,702	1,240	33%	4,101	1,423	35%
Pinal County Schools	60	13,650	5,007	37%	13,753	5,523	40%
All Arizona Schools	1,185	278,142	93,719	34%	283,147	103,078	36%

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

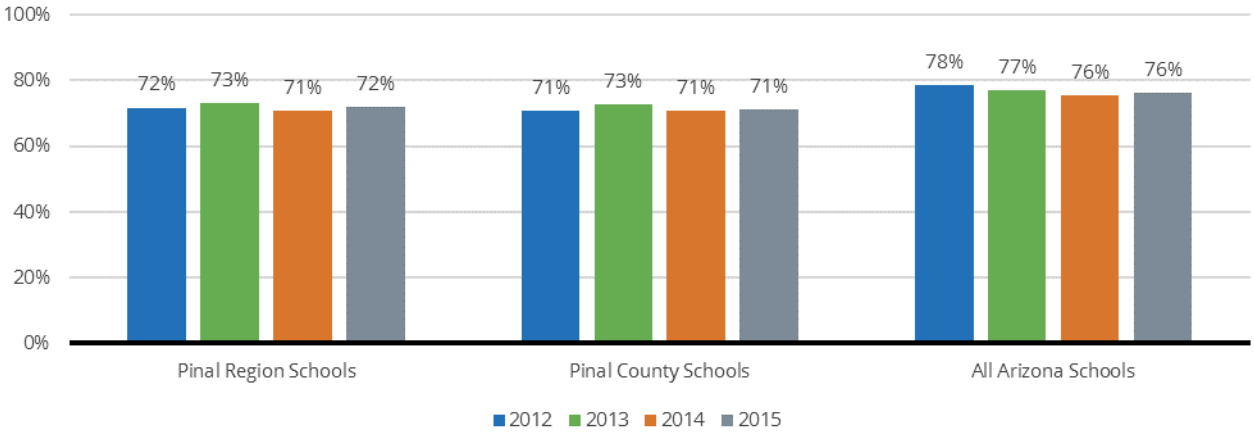
Note: The school-district data in this table include only the schools that fall within the region's boundaries. For districts that are partially outside of the region, the data for the complete district is likely to vary from the percentages reported here.

Figure 23. Drop-out Rates (2011-2014)



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

Figure 24. 4-Year Graduation Rates (2011-2014)



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

Table 39. High School Drop-Out and Graduation Rates, 2012 to 2014

	Total number of high schools and alternative schools	Drop-out rate, 2012	Drop-out rate, 2013	Drop-out rate, 2014	Drop-out rate, 2015	Four-year graduation rate, 2011	Four-year graduation rate, 2012	Four-year graduation rate, 2013	Four-year graduation rate, 2014
Pinal Region Schools	**33**	**5%**	**5%**	**5%**	**6%**	**72%**	**73%**	**71%**	**72%**
Apache Junction Unified District	2	3%	3%	3%	4%	76%	78%	78%	75%
Casa Grande Union High School District	4	7%	8%	8%	9%	79%	76%	73%	71%
Coolidge Unified District	4	6%	6%	7%	9%	72%	71%	73%	65%
Florence Unified School District	5	3%	3%	3%	3%	74%	79%	75%	81%
J O Combs Unified School District	1	1%	2%	1%	2%	0%	71%	75%	82%
Mammoth-San Manuel Unified District	1	2%	4%	4%	3%	82%	78%	79%	84%
Maricopa Unified School District	2	4%	5%	5%	6%	76%	76%	72%	71%
Mary C O'Brien Accommodation District	1	19%	34%	24%	32%	33%	30%	DS	31%
Ray Unified District	1	DS	DS	DS	DS	92%	86%	83%	88%
Santa Cruz Valley Union High School District	3	6%	3%	4%	6%	48%	67%	75%	78%
Superior Unified School District	1	DS	6%	DS	6%	88%	97%	81%	90%
Pinal Region Charter Schools	8	7%	7%	6%	6%	36%	40%	39%	50%
Pinal County Schools	51	5%	5%	5%	6%	71%	73%	71%	71%
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 Pinal Region's boundaries. For districts that are partially outside of the region, the data for the complete district is likely to vary from the percentages reported here.

Table 40. Level of Education for the Adult Population (Ages 25 and Older)

	Estimated population (ages 25 and older)	Less than high school	High school or GED	Some college or professional education	Bachelors degree or more
Pinal Region	**252,649**	**15%**	**30%**	**37%**	**18%**
Apache Junction-Gold Canyon	44,426	10%	32%	38%	19%
Casa Grande	38,571	16%	32%	35%	17%
Copper Corridor	11,419	16%	35%	37%	12%
Eloy-Arizona City	17,549	29%	34%	30%	8%
Florence-Coolidge	35,605	24%	31%	35%	9%
Maricopa-Ak Chin-Stanfield	34,830	13%	27%	38%	22%
Red Rock-Saddlebrooke	14,565	5%	22%	33%	40%
San Tan Valley-Queen Creek	55,683	10%	27%	43%	20%
Pinal County	258,629	15%	30%	37%	18%
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.[74] Gaps in language development between children from disadvantaged backgrounds and their more advantaged peers are already evident by 18 months of age;[75] those disparities that persist until kindergarten are predictive of later academic problems.[76]

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.[77,78] This is particularly true for children from disadvantaged backgrounds.[79] 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.[80]

Investment in children during the crucial first five years not only provides the necessary foundation for later achievement, but also produces a positive return on investment to society through increased educational achievement and employment, reductions in crime, and better overall health of those children as they mature into adults.[81, 82,83] Experts estimate that investments in quality early learning initiatives can offer returns as high as $16 per dollar spent.[84,85] 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. [86] 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.[87] If not enrolled in publically-funded programs, which are often free or reduced cost, the annual cost of full-time center-based care ($9,166) for a young child in Arizona is nearly equal to the cost of a year at a public college ($10,065).[88]

Child care subsidies can be a support for families who have financial barriers to accessing early learning services.[89] 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 five (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.)[90] 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.[91] 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 (three-star rating or higher) has increased in recent years with 25 percent of the 857 participating providers in 2013 and 65 percent of 918 participating providers in 2016 meeting or exceeding quality standards.[92] From a provider standpoint, participating in the Quality First program can also offer the benefit of enabling the provider to offer Quality First Scholarships, which help low-income families attend their program.[93]

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.[94]

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. [95]

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.[96,97]

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."[98] 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,[99] and are at an increased risk for maltreatment and neglect.[100, 101] Almost half (46%) of families with a child with special needs in Arizona have incomes below 200 percent of the federal poverty level.[102]

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.[103,104,105] 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),[106] the Arizona Early Intervention Program (AzEIP),[107] and the Division of Developmental Disabilities (DDD).[108]

What the Data Tell Us

Child Care and Preschool

In 2015-2016, there were 112 registered child care providers in the Pinal Region, approved to serve up to 5,026 children (Table 41). Figure 25 illustrates where the different early care programs are located in the Pinal Region. The Arizona Department of Economic Security's 2014 Market Rate Survey,[109] which surveyed a total of 3,726 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. If that is the case in Pinal, then the availability of child care slots in the region may be closer to 2,900; moreover, those slots include those slated for school-age children; slots for infants and toddlers are often harder to secure. With a population of young children of about 35,000 (see Table 1), and over 17,000 of whom have all parents in the labor force (Figure 27), there are likely to be between 7 and 12 young children for each available child care slot in the region.[xi] This estimate varies dramatically by sub-region (Figure 26); in the Copper Corridor, there are approximately three children ages birth to five for each available child care spot; in the Red Rock-Saddlebrooke area, that number is closer to 76 children per spot. Places lacking an adequate child care supply have been termed "child care deserts," defined as zip codes where there are

[xi] 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.

more than three times as many children under age five as there are spaces in the child care settings.[110] Using that definition, the Pinal Region could be considered a child care desert.

Most of the providers (exclusive of Head Start, ADE preschools and Quality First Programs) registered through the Child Care Resource & Referral (CCR&R) guide[xii] were classified as family child care providers (n=34) and child care centers (n=17) (Table 42). Family and group homes are an important part of the child care landscape because they are much more likely to provide late-night, all-night, and weekend care, which may be crucial for parents.[111]

Of the 112 known child care providers, about 30 percent (n=34) are participating in the Quality First program; most of these (n=29) are center-based providers. Casa Grande and the Copper Corridor sub-region stand out as having 50% of their child care programs participate. Of the 34 programs that participate in the Quality First program, most (21, 62%) have a 2-star rating, which is also the most common rating among sites statewide (Table 43). The 2-star rating is described as a "progressing star" by First Things First, and means that the program is "approaching quality standards."[112] There are 11 programs in the Pinal Region that have achieved the 3- or 4-star rating, indicating they are meeting or exceeding quality standards. As of June 2016, there were no 5-star sites in the Pinal Region. There are an additional five sites in Pinal County that are participating in Quality First that are not included in the Pinal Region; these are located on tribal lands of either the Gila River Indian Community, the Tohono O'odham Nation, or the San Carlos Apache Tribe.

United Way of Pinal County also provides support to kith and kin caregivers through the Family, Friend, and Neighbor Program. This program can support up to 75 providers per fiscal year, and its reach is strongest in Casa Grande and Maricopa-Ak Chin-Stanfield sub-regions (Table 45). The number of grandparents participating in this program has been growing steadily since 2009, and as of FY2015, grandparents represented 53 percent of the Family, Friend, and Neighbor in-home providers program (Table 47; Table 46). The Program Director of the Friend Family Neighbor Caregiver Outreach Assistance Project at United Way also noted that annual enrollment is capped at 73, but that interest surpasses the number they are able to enroll. These kith and kin caregivers play an important role in caring for young children in the region, given the relatively small number registered child care providers.

According to data from the American Community Survey, 29 percent of children in the Pinal Region aged 3 and 4 were enrolled in nursery school, preschool, or kindergarten, meaning that relatively fewer participate compared to children statewide (36%) (Figure 28). The highest rates of participation occur in the Copper Corridor (42%) and Maricopa-Ak Chin-Stanfield (41%) sub-regions, which surpass the statewide rate of participation (Table 47; Figure 29). A key informant described these sub-regions as places that are "highly community oriented" and as places where home schooling and home child care

[xii] 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 Care and Adult 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 an infant/toddler CPR and First Aid certification, and maintaining an Arizona Level I Fingerprint Clearance Card.

are popular as well. The lowest rates of participation are in the Florence-Coolidge (20%), Red Rock-Saddlebrooke (22%), and San Tan Valley-Queen Creek (22%) sub-regions.

Twelve sites in the Pinal Region are Head Start programs, and an additional 14 operate at a public school (Table 39; Table 41). The Early Head Start and Head Start programs serve over 1000 children in the Pinal Region annually (Table 48), and with the exception of the Toltec program, there was a waitlist of children hoping to receive services in 2014-2015. Most of the programs are run through Pinal Gila Community Child Services, and a key informant notes that since the agency spans both counties, it's possible that Pinal children attend programs in Gila County (e.g., the Winkelman Head Start) and vice versa. Chicanos Por La Causa runs one Migrant Head Start program in Eloy and one in Queen Creek that serves children from both Maricopa and Pinal Counties. The Eloy Migrant Head Start program has a capacity of 40 preschoolers and 16 infants.

Table 41. Child Care Capacity, by Type of Site

	Total Number and Total Capacity of Child Care Sites		Number and Capacity of Quality First Sites		Number and Capacity of Head Start Sites (Excluding Any QF Sites)		Number and Capacity of Public-School-Based Sites (Excluding Any QF or HS Sites)		Number and Capacity of Other Child Care Providers	
Pinal Region	**112**	**5,026**	**34**	**2,188**	**12**	**1,143**	**14**	**437**	**52**	**1,258**
Apache Junction-Gold Canyon	13	894	4	420	1	147	1	80	7	247
Casa Grande	22	1,109	11	717	1	245	0	0	10	147
Copper Corridor	10	387	5	261	3	103	1	19	1	<10
Eloy-Arizona City	8	307	2	64	2	200	2	35	2	<10
Florence-Coolidge	17	818	6	284	2	237	2	37	7	260
Maricopa-Ak Chin-Stanfield	16	789	3	346	2	140	2	157	9	146
Red Rock-Saddlebrooke	2	15	0	0	0	0	2	15	0	0
San Tan Valley-Queen Creek	24	707	3	96	1	71	4	94	16	446
Pinal County	122	5,293	39	2,488	14	1,042	15	462	54	1,301
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 Pinal County do not include enrollment data for tribal or migrant head start programs.

Figure 25. Child Care Centers and Population of Children Ages 0 to 5

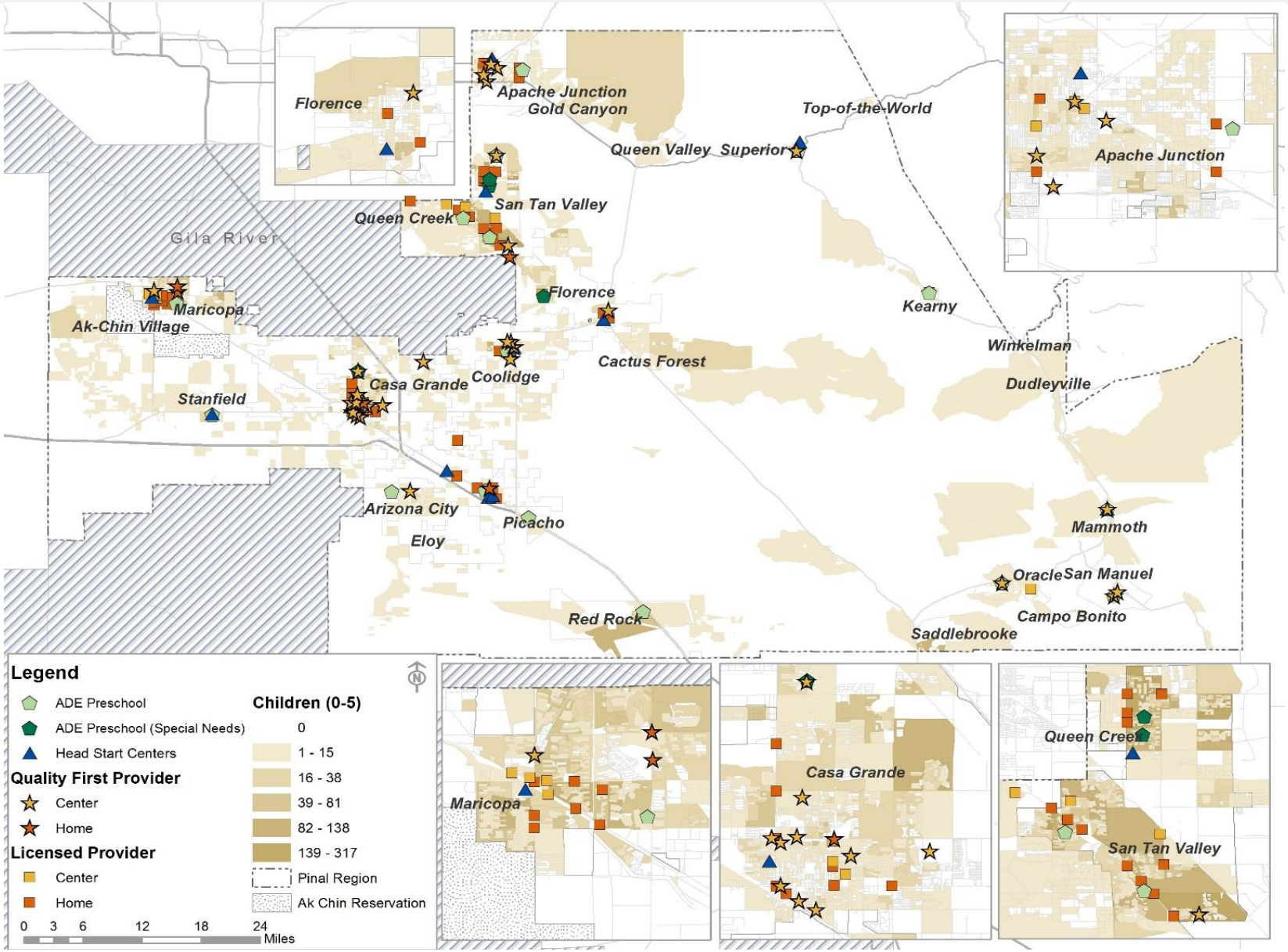
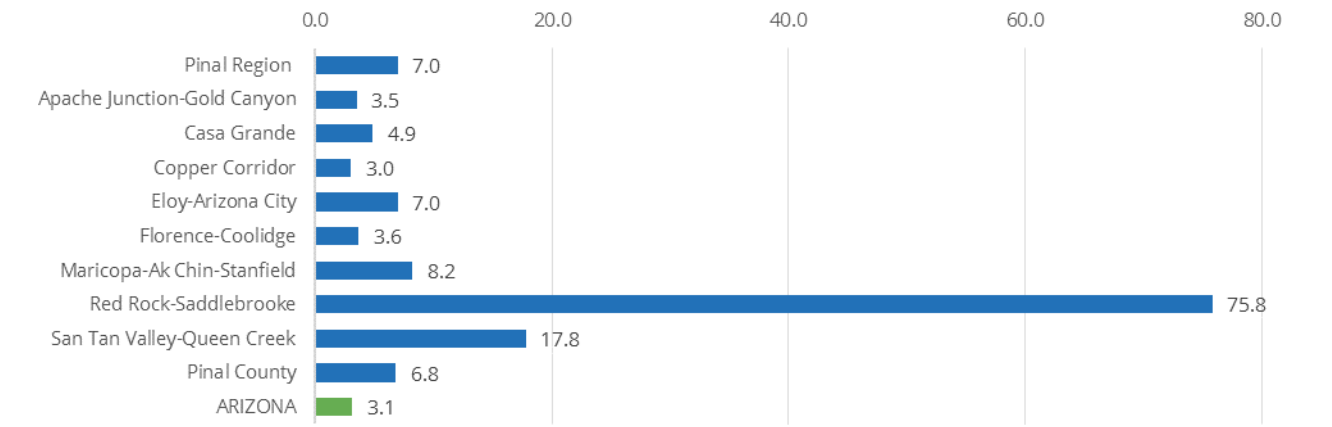
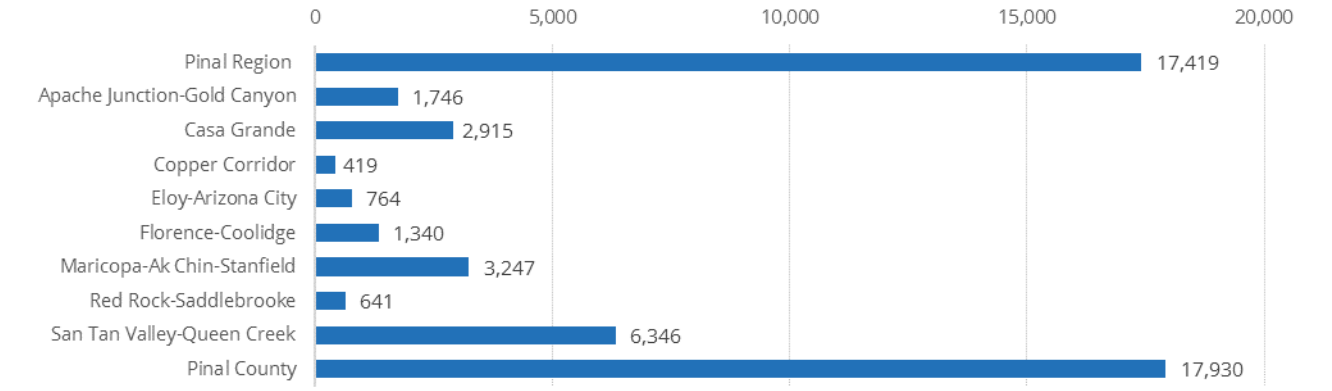


Figure 26. Ratio of children 0-5 in the region to child care capacity



Source: Arizona Department of Economic Security (2016). [Child Care Resource & Referral dataset]. Unpublished data.
U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P14

Figure 27. Children (0-5) with all parents in the labor force



Definition: Children living with one parent who is in the labor force or children living with both parents with both parent in the labor force.
Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B23008

Table 42. Types of Child Care Providers Registered through CCR&R

	Nanny / Individual		Family Child Care		Child Care Center		Total	
Pinal Region	**1**	**4**	**34**	**170**	**17**	**1,084**	**52**	**1,258**
Apache Junction-Gold Canyon	0	0	5	20	2	227	7	247
Casa Grande	0	0	8	44	2	103	10	147
Copper Corridor	0	0	1	4	0	0	1	4
Eloy-Arizona City	0	0	2	8	0	0	2	8
Florence-Coolidge	0	0	3	18	4	242	7	260
Maricopa-Ak Chin-Stanfield	1	4	4	16	4	126	9	146
Red Rock-Saddlebrooke	0	0	0	0	0	0	0	0
San Tan Valley-Queen Creek	0	0	11	60	5	386	16	446
Pinal County	1	4	34	170	19	1,127	54	1,301
ARIZONA	50	3,134	156	1,234	916	75,173	710	70,805

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

Table 43. Numbers and Capacities of Quality First Sites, as of June 2016, by Star Rating

	Number and Capacity of 1-Star QF Sites		Number and Capacity of 2-Star QF Sites		Number and Capacity of 3-Star QF Sites		Number and Capacity of 4-Star QF Sites		Number and Capacity of 5-Star QF Sites		Number and Capacity of QF Sites Not Publically Rated		Total Number and Total Capacity of All QF Sites	
Pinal Region	**0**	**0**	**21**	**1,528**	**7**	**415**	**4**	**153**	**0**	**0**	**2**	**92**	**34**	**2,188**
Pinal County	0	0	22	1,548	8	435	6	332	0	0	3	173	39	2,488
ARIZONA	2	96	288	27,350	262	20,978	143	10,106	36	2,350	180	13,880	911	74,760

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

Table 44. Quality First Providers by Type

	Center		Head Start		Home		Total	
Pinal Region	**29**	**2,153**	**0**	**0**	**5**	**35**	**34**	**2,188**
Apache Junction-Gold Canyon	4	420	0	0	0	0	4	420
Casa Grande	10	707	0	0	1	10	11	717
Copper Corridor	5	261	0	0	0	0	5	261
Eloy-Arizona City	1	59	0	0	1	5	2	64
Florence-Coolidge	6	284	0	0	0	0	6	284
Maricopa-Ak Chin-Stanfield	1	331	0	0	2	15	3	346
Red Rock-Saddlebrooke	0	0	0	0	0	0	0	0
San Tan Valley-Queen Creek	2	91	0	0	1	5	3	96
Pinal County	32	2,352	2	101	5	35	39	2,488
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.qualityfirstaz.com;

Table 45. Unregulated Child Care Providers Enrolled in the Family, Friend, and Neighbor Program with United Way of Pinal County

	Providers during FY 2009-10	Providers during FY 2010-11	Providers during FY 2011-12	Providers during FY 2012-13	Providers during FY 2013-14	Providers during FY 2014-15	Providers during FY 2015-16
Pinal Region	55	60	62	63	66	66	73
Apache Junction-Gold Canyon	0	1	1	2	2	0	0
Casa Grande	24	21	9	20	23	23	21
Copper Corridor	3	2	5	5	4	4	2
Eloy-Arizona City	7	3	4	3	5	4	8
Florence-Coolidge	2	4	8	3	3	3	7
Maricopa-Ak Chin-Stanfield	12	11	17	21	24	29	22
Red Rock-Saddlebrooke	0	0	0	0	0	0	2
San Tan Valley-Queen Creek	7	18	18	9	5	3	11
Pinal County	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ARIZONA	N/A	N/A	N/A	N/A	N/A	N/A	N/A

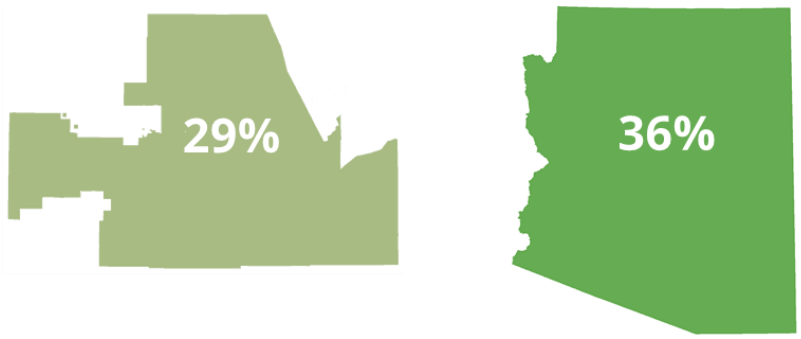
Source: United Way of Pinal County (2016). Unpublished data

Table 46. Grandparent Providers Enrolled in the Family, Friend, and Neighbor Program with United Way of Pinal County

	Grandparent providers during FY 2009-10	Grandparent providers during FY 2010-11	Grandparent providers during FY 2011-12	Grandparent providers during FY 2012-13	Grandparent providers during FY 2013-14	Grandparent providers during FY 2014-15	Grandparent providers during FY 2015-16
Pinal Region	7	7	9	11	21	22	39
Pinal County	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ARIZONA	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Source: United Way of Pinal County (2016). Unpublished data.

Figure 28. Percent of 3 & 4 year-olds enrolled in public or private school



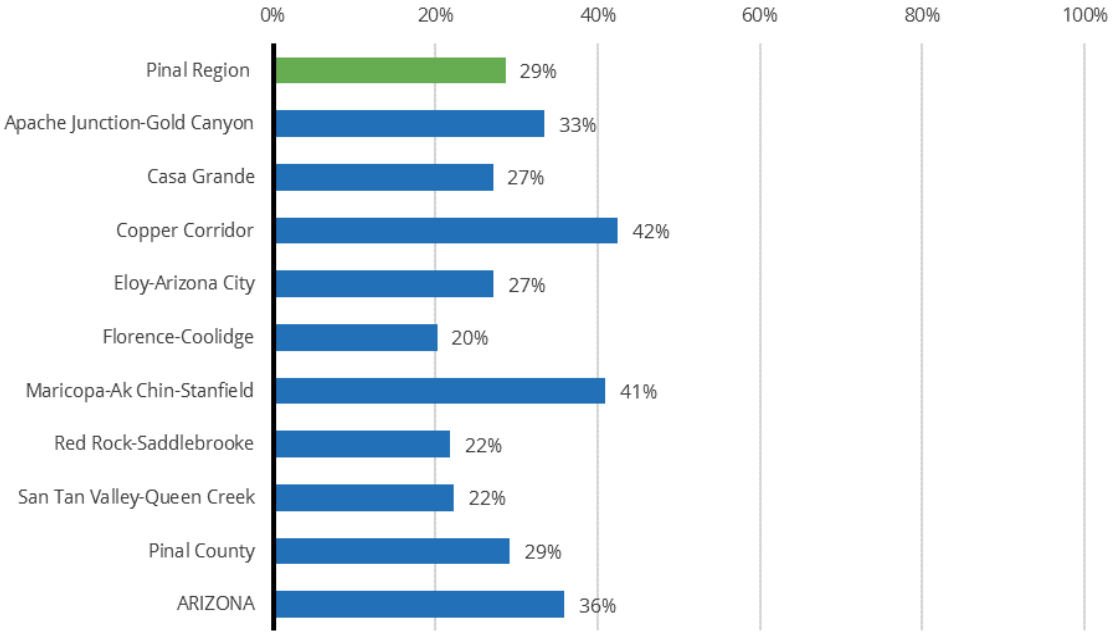
Definition: Children living with one parent who is in the labor force or children living with both parents with both parent in the labor force.
Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B23008

Table 47. Estimated Numbers of Children (Ages 3 and 4) Enrolled in School

	Estimated population (ages 3 and 4)	Enrolled in public or private school
Pinal Region	**11,175**	**29%**
Apache Junction-Gold Canyon	875	33%
Casa Grande	1,928	27%
Copper Corridor	452	42%
Eloy-Arizona City	530	27%
Florence-Coolidge	792	20%
Maricopa-Ak Chin-Stanfield	2,226	41%
Red Rock-Saddlebrooke	279	22%
San Tan Valley-Queen Creek	4,093	22%
Pinal County	11,601	29%
ARIZONA	184,637	36%

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

Figure 29. 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

Table 48. Head Start and Early Head Start Enrollment, for the 2013-14 and 2014-15 School Years

Center	2013-2014 Total	2013-2014 Early Head Start	2013-2014 Head Start	2014-2015 Total	2014-2015 Early Head Start	2014-2015 Head Start
Pinal Region Total	**1006**	**170**	**836**	**1117**	**220**	**897**
Apache Junction	137	21	116	147	30	117
Casa Grande	235	34	201	245	35	210
Coolidge	154	26	128	161	34	127
Eloy	100	10	90	157	38	119
Florence	60	14	46	76	18	58
Mammoth	53	19	34	54	20	34
Maricopa	76	18	58	71	16	55
San Tan Valley	68	16	52	71	14	57
Stanfield	45	12	33	69	14	55
Superior	23	0	23	23	<10	22
Toltec	55	0	55	43	0	43

Source: Pinal Gila Community Child Services (2016). [Head Start enrollment]. Unpublished data.

Cost of Care

The cost of care in Pinal County varies by the type of care and the age of the child receiving care; the median cost in the county relative to the cost of like care across the state differs depending on the situation. For example, residents in Pinal County tend to pay lower prices for child care centers (e.g., $39 per day for infant care vs. $42, Table 49) but higher prices for approved family and certified group homes (e.g., $25 per day for infant care vs. $22 in family homes, $30 vs. $27 in group homes) than parents statewide (Table 50; Figure 30). However, the cost of infant care in family and group homes is comparable to the cost of care for older children in the Pinal Region, which is unusual – typically the lower teacher-to-child ratio needed for infant care necessitates a higher cost of care.

Families in Pinal are paying a similar proportion (14-17%, depending on the child's age) of their overall income for a child care slot as other families statewide (Table 52). 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.[113] Families in the Pinal Region are paying considerably more than that. In addition, 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. Furthermore, 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 (see Table 14), resulting in a higher proportion of their income being spent on child care.

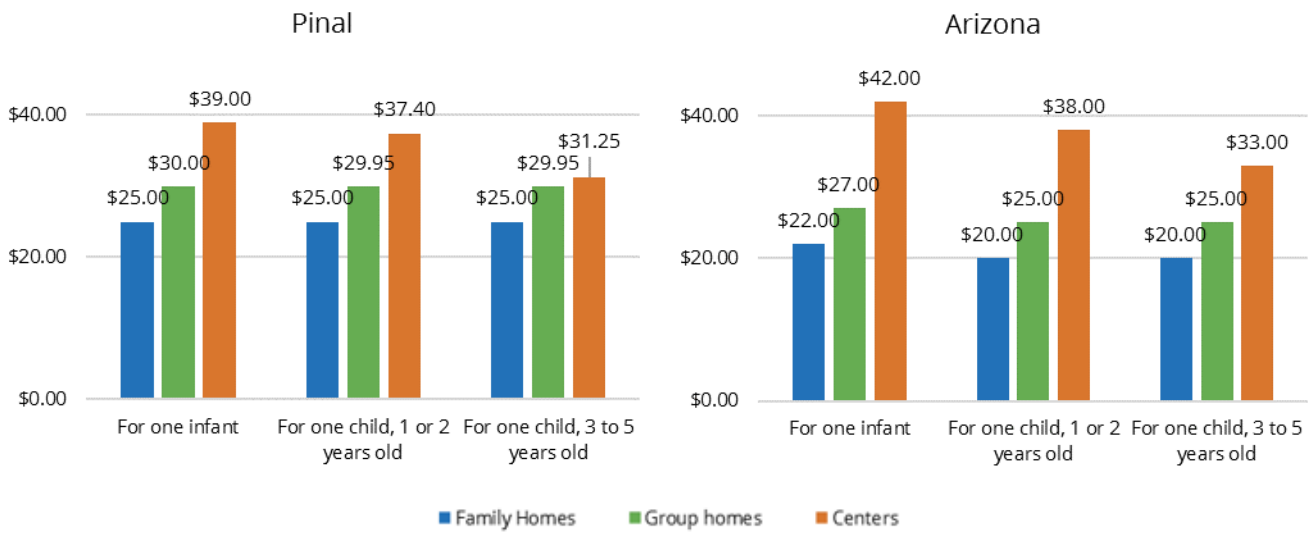
Subsidies from the Department of Economic Security (DES) can help families shoulder the cost burden of child care. DES prioritizes assistance to families who receive Cash Assistance (TANF), those who are transitioning off Cash Assistance to employment, and families involved with the Department of Child Safety (DCS) for subsidies. 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.[114] The number of children on the waitlist in Pinal has grown each year since 2013; the most recent data from 2015 showed 254 children whose families were hoping to receive support (Table 53), even though the number of children receiving a subsidy increased from 1,235 in 2014 to 2,006 in 2015. Nearly one-third of those who received subsidies in 2015 were involved with DCS; 87 percent of DCS-involved children received a subsidy, suggesting that this is an important support for children in the child welfare system (Table 54).

Table 49. Median Daily Charge for Full-Time Child Care in Licensed Child Care Centers

	For one infant	For one child, 1 or 2 years old	For one child, 3 to 5 years old
Pinal Region	N/A	N/A	N/A
Pinal 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.

Figure 30. Median Daily Charge for Full-Time Child Care



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

Table 50. Median Daily Charge for Full-Time Child Care in Approved Family Homes

	For one infant	For one child, 1 or 2 years old	For one child, 3 to 5 years old
Pinal Region	N/A	N/A	N/A
Pinal 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.

Table 51. Median Daily Charge for Full-Time Child Care in Certified Group Homes

	For one infant	For one child, 1 or 2 years old	For one child, 3 to 5 years old
Pinal Region	N/A	N/A	N/A
Pinal 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.

Table 52. 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 infant	For one child, 1 or 2 years old	For one child, 3 to 5 years old
Pinal Region	N/A	N/A	N/A	N/A
Pinal County	$55,513	17%	16%	14%
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 53. Department of Economic Security (DES) Child Care Subsidies for Children (Ages 0 to 5), 2013 to 2015

	Children eligible for subsidy during 2013	Children receiving subsidy during 2013	Children on waiting list during 2013	Children eligible for subsidy during 2014	Children receiving subsidy during 2014	Children on waiting list during 2014	Children eligible for subsidy during 2015	Children receiving subsidy during 2015	Children on waiting list during 2015
Pinal Region	**1,383**	**1,253**	**198**	**1,394**	**1,235**	**235**	**2,263**	**2,006**	**254**
Pinal County	1,388	1,263	203	1,402	1,244	235	2,283	2,022	254
ARIZONA	28,429	27,041	5,094	29,180	26,685	5,195	43,860	38,855	5,140

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

Table 54. DES Child Care Subsidies for Children Involved in the Department of Child Safety (DCS) During 2015

	Number of DCS-Involved Children Eligible for Subsidy	Number of DCS-Involved Children Receiving Subsidy	Percent of DCS-Involved Children Receiving Subsidy
Pinal Region	**894**	**774**	**87%**
Pinal County	901	777	86%
ARIZONA	18,417	15,785	86%

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

Child Care Professionals

According to the 2012 *Early Care and Education Workforce Survey*, the teacher turnover rate has the highest prevalence in the early care and education field, averaging 30 percent across the nation[115]. The study also revealed that the state of Arizona reported that early care and education teachers earned about half of the yearly earnings for kindergarten and elementary school teachers, which translates to be similar to those of the average high school graduate ($9.45).[116] While teacher and assistant teacher wages have failed to keep up with inflation and the cost of living changes, the 2012 survey results showed that the number of teachers and assistant teachers obtaining a credential or college degree has increased slightly since the 2007 survey. In Arizona, Head Start centers were seen to have the highest retention rate with 71 percent of Head Start teachers being employed more than five years or more[117]. Additionally, Head Start teacher assistants were also seen to have high retention rates (86 percent) in those being employed for three years or more. The 2012 survey shows that Arizona continues to struggle with two areas of teacher retention: wages and benefits.

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

Among children birth to 5, the National Survey of Children with Special Health Care Needs estimated that 7.6 percent of children (and about 18% of school-aged children) in Arizona have special health care needs.[xiii] Children with special health care needs (CSHCN) were also more likely to have experienced two or more adverse childhood experiences (ACEs) compared to their typically-developing peers, adding to their need for additional supports for healthy development.[118] 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).[119] This may be due in part to the reduced rates of having a "medical home" among CSHCN in Arizona; 36% of CSHCN in Arizona received care coordinated through a medical home versus 43% nationwide.[120] The American Academy of Pediatrics defines a medical home as care that is "accessible, continuous, comprehensive, family centered, coordinated, compassionate, and culturally effective… delivered or directed by well-trained physicians who provide primary care and help to manage and facilitate essentially all aspects of pediatric care."[121]

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.[122] In the Pinal Region and across Arizona, more children were referred to and served by the AzEIP in FY2015 than in either of the two years prior (Figure 31). In 2015, 692 children ages 0 to 2 were served through the AzEIP program (Table 55). Based on the 2010 population estimates for children 0 to 2, this means that AzEIP services, designed to prevent and address developmental delays, are used by approximately 4 percent of children. Research suggests that about 13 percent of children would typically qualify for early intervention services,[123] which may mean that hundreds of Pinal children who would benefit from services are not receiving them.

The Division of Developmental Disabilities (DDD) reached more children in FY2015 (the most recent year of data) than in years prior. 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 under

[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."*

the age of six are eligible if they show significant delays in one or more of these areas of development: physical, cognitive, communication, social emotional or self-help.[124] There was an uptick in FY2015 in the number of referrals for children ages 0-2 (n=162) and 3-5 (n=140), both in the Pinal Region and statewide, compared to previous years (Table 56). Twenty-one children ages 0 to 2 years were evaluated, along with 74 children ages 3 to 5 years. The number children ages 0 to 2 years served by DDD has ranged from a low of 120 in FY2014 to a high of 171 in FY2013; it was 150 in FY2015, (Table 58; Figure 32). The number of children served who are ages 3 to 5 years have been more constant over time, increasingly slightly from a low of 172 in FY2012 to a high in FY2015 of 187. The number of DDD service visits was 9,220 in FY2015 for children ages 0-2; with a reported 150 children served, this works out to about 61 visits per child. For children ages 3 to 5, there were 26,234 service visits, or about 140 per child.

The Head Start, Early Head Start, and public preschool programs are also supporting children who have disabilities. Head Start appears to be a particularly important service in Apache Junction, where 28 and 24 children with disabilities were served in 2013 and 2014, respectively (Table 60). Similar numbers were served in Casa Grande, but that is a much more populous sub-region. Table 61 shows the number of preschoolers in special education from 2012 to 2015 by district.

Among children who are in special education programs in public preschools, the majority of children in Pinal Region have either a developmental disability (40%) or speech or language impairment (36%) (Figure 33). Casa Grande serves a slightly higher than expected (based on regional and statewide rates) of children with vision and hearing impairments (Table 62). A key informant also noted that children with special needs are often not diagnosed “until signs become obvious – sometimes not until elementary school, especially if the child is not enrolled in preschool” and expressed the concern that the numbers presented here may dramatic underestimates.

At the pre-kindergarten level, 60 percent of Pinal Region students are in special education, compared to 46 percent statewide (Table 63). In the largest school district, Casa Grande Elementary District, all 65 of the students enrolled in pre-kindergarten are in special education.

At the elementary school level, 11 percent of Pinal Region students are considered to have special needs, compared to 10 percent statewide

Figure 34. Kindergarten Through Third-Grade Enrollment of Special Needs Students

(Figure 34). Rates vary dramatically across districts; over one in every five students in the Oracle Elementary District has special needs, whereas only 3 percent of students in Picacho Elementary District are identified as students with special needs. Key informants noted that school districts had time-intensive processes and set a high bar for what constituted a special need; this approach may be keeping the number of special needs students beneath what might otherwise be expected in some districts.

The Individuals with Disabilities Education Improvement Act (IDEA), mandates that all children with disabilities have a free, appropriate, public education (FAPE).[xiv] 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.[xv] The importance of these early years are due to the plasticity of neural circuits in the first three years of life, and the impact on the developing brain of both positive and negative experiences in early life. Intervention is also more likely to be more effective and less costly if provided earlier in life.[xvi]

Table 55. Arizona Early Intervention Program (AzEIP) Referrals and Services for Children (Ages 0 to 2), 2013 to 2015

	Children (0-2) Referred to AzEIP During FY 2013	Children (0-2) Referred to AzEIP During FY 2014	Children (0-2) Referred to AzEIP During FY 2015	Children (0-2) Served by AzEIP During FY 2013	Children (0-2) Served by AzEIP During FY 2014	Children (0-2) Served by AzEIP During FY 2015
Pinal Region	**708**	**698**	**931**	**345**	**384**	**692**
Pinal County	736	733	937	365	407	729
ARIZONA	10,715	11,741	14,450	4,799	5,248	10,039

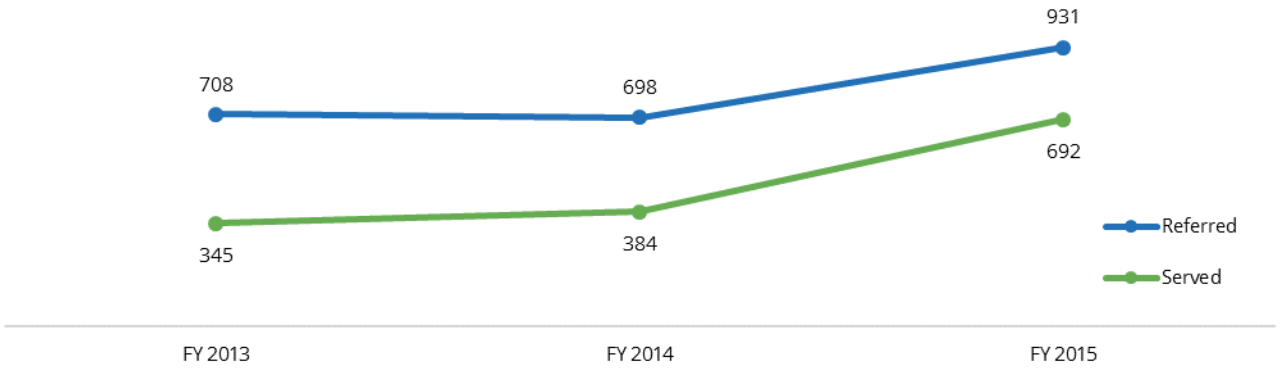
Source: Arizona Department of Economic Security (2016). [Arizona Early Intervention Program dataset]. Unpublished data.

[xiv] *The Individuals with Disabilities Education Improvement Act (IDEA 2004) Public Law 10/- 446. Retrieved from http://cpacinc.org/wp-content/uploads/2009/11/IDEA_facts.pdf*

[xv] *Early Intervention Program for Infants and Toddlers with Disabilities (Part C of IDEA). Retrieved from http://ectacenter.org/partc/partc.asp*

[xvi] *The National Early Childhood Technical Assistance Center. The Importance of Early Intervention for Infants and Toddlers with Disabilities and Their Families. July 2011. Retrieved from http://www.nectac.org/~pdfs/pubs/importanceofearlyintervention.pdf*

Figure 31. Arizona Early Intervention Program (AzEIP) Referrals and Services for Children (Ages 0 to 2) in the Pinal Region, 2013 to 2015



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

Table 56. Children (Ages 0 to 5) Referred to the Division of Developmental Disabilities (DDD), 2012 to 2015

	Number of Children (0-2) Referred, FY2012	Number of Children (0-2) Referred, FY2013	Number of Children (0-2) Referred, FY2014	Number of Children (0-2) Referred, FY2015	Number of Children (3-5) Referred, FY2012	Number of Children (3-5) Referred, FY2013	Number of Children (3-5) Referred, FY2014	Number of Children (3-5) Referred, FY2015
Pinal Region	**93**	**143**	**126**	**162**	**99**	**101**	**134**	**140**
Pinal County	100	147	132	166	100	102	136	143
ARIZONA	1,439	2,186	2,479	2,484	1,393	1,401	1,804	1,969

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

Table 57. Children (Ages 0 to 5) Evaluated by the Division of Developmental Disabilities (DDD), 2012 to 2015

	Number of Children (0-2) Evaluated, FY2012	Number of Children (0-2) Evaluated, FY2013	Number of Children (0-2) Evaluated, FY2014	Number of Children (0-2) Evaluated, FY2015	Number of Children (3-5) Evaluated, FY2012	Number of Children (3-5) Evaluated, FY2013	Number of Children (3-5) Evaluated, FY2014	Number of Children (3-5) Evaluated, FY2015
Pinal Region	**39**	**36**	**19**	**21**	**43**	**59**	**63**	**74**
Pinal County	42	37	19	21	43	59	64	74
ARIZONA	732	314	216	238	669	731	727	958

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

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

Table 58. Children (Ages 0 to 5) Served by the Division of Developmental Disabilities (DDD), 2012 to 2015

	Number of Children (0-2) Served, FY2012	Number of Children (0-2) Served, FY2013	Number of Children (0-2) Served, FY2014	Number of Children (0-2) Served, FY2015	Number of Children (3-5) Served, FY2012	Number of Children (3-5) Served, FY2013	Number of Children (3-5) Served, FY2014	Number of Children (3-5) Served, FY2015
Pinal Region	**148**	**171**	**120**	**150**	**172**	**183**	**183**	**187**
Pinal County	155	176	126	154	173	183	185	187
ARIZONA	2,646	2,693	2,341	2,336	2,563	2,600	2,533	2,540

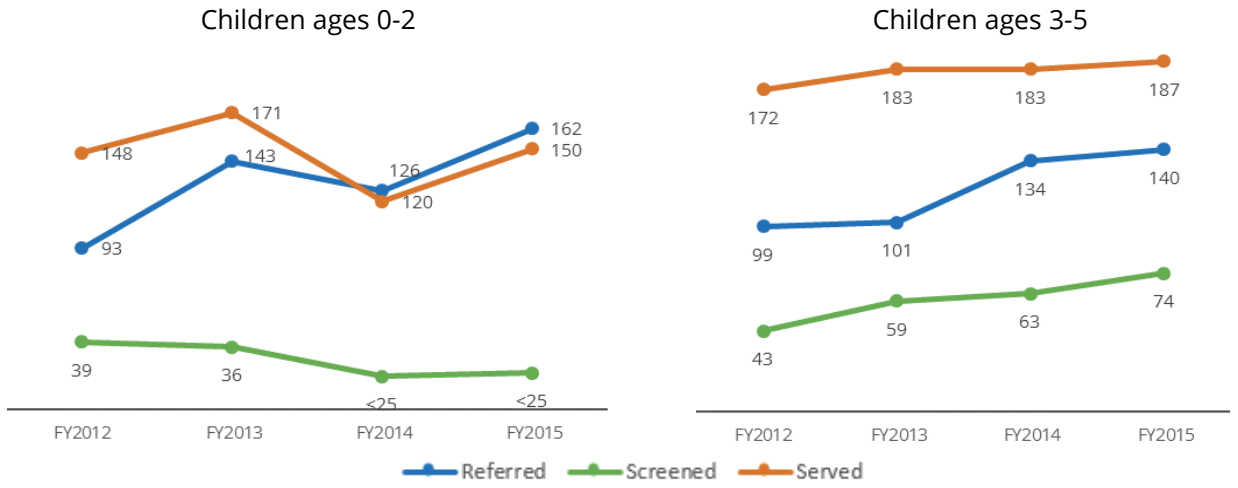
Source: Arizona Department of Economic Security (2016). [Division of Developmental Disabilities dataset]. Unpublished data.

Table 59. Division of Developmental Disabilities (DDD) Service Visits for Children (Ages 0 to 5), 2012 to 2015

	Number of Service Visits (Ages 0-2), FY2012	Number of Service Visits (Ages 0-2), FY2013	Number of Service Visits (Ages 0-2), FY2014	Number of Service Visits (Ages 0-2), FY2015	Number of Service Visits (Ages 3-5), FY2012	Number of Service Visits (Ages 3-5), FY2013	Number of Service Visits (Ages 3-5), FY2014	Number of Service Visits (Ages 3-5), FY2015
Pinal Region	**11,085**	**11,856**	**6,532**	**9,220**	**21,835**	**26,281**	**26,534**	**26,234**
Pinal County	11,196	12,102	6,714	9,392	21,961	26,281	26,608	26,234
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.

Figure 32. Division of Developmental Disabilities (DDD) Service Visits for Children (Ages 0 to 5) in the Pinal Region, 2013 to 2015



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

Table 60. Children in Head Start or Early Head Start Who Have a Disability

Center	School Year 2013-2014	School Year 2014-2015
Pinal Region Total	**121**	**125**
Apache Junction	28	24
Casa Grande	21	25
Coolidge	15	13
Eloy	<10	17
Florence	<10	<10
Mammoth	<10	<10
Maricopa	11	<10
San Tan Valley	12	12
Stanfield	<10	<10
Superior	0	0
Toltec	<10	<10

Source: Pinal Gila Community Child Services (2016). [Head Start enrollment]. Unpublished dataset.

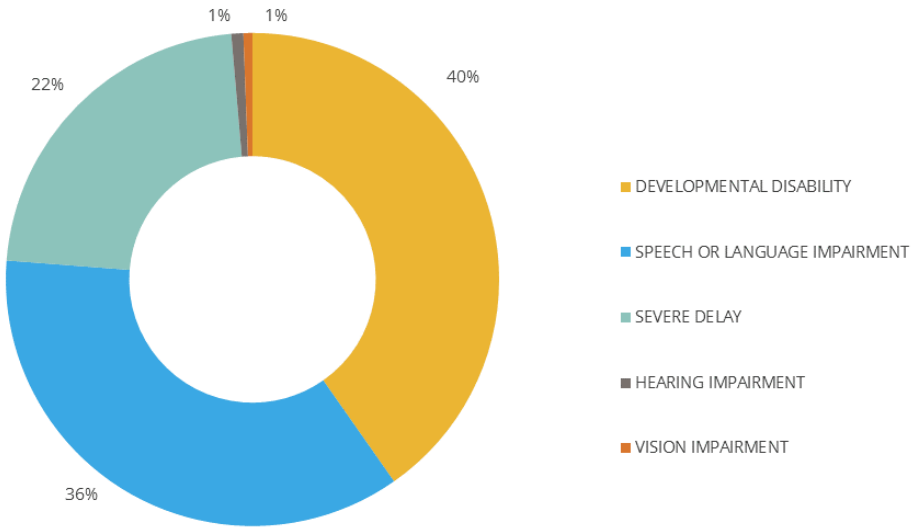
Table 61. Number of Preschoolers in Special Education, 2012 to 2015

	Total number of ADE preschools and elementary schools	Number of preschoolers in special education, 2012	Number of preschoolers in special education, 2013	Number of preschoolers in special education, 2014	Number of preschoolers in special education, 2015
Pinal Region Schools	28	529	506	509	509
Apache Junction Unified District	1	74	68	75	75
Casa Grande Elementary District	2	82	77	77	77
Coolidge Unified District	2	38	51	41	41
Eloy Elementary District	1	0	<25	<25	<25
Florence Unified School District	4	87	83	85	85
J O Combs Unified School District	4	78	73	96	96
Mammoth-San Manuel Unified District	2	<25	<25	<25	<25
Maricopa Unified School District	6	109	92	78	78
Mary C O'Brien Accommodation District	0	0	0	0	0
Oracle Elementary District	1	<25	<25	<25	<25
Picacho Elementary District	1	<25	0	0	0
Ray Unified District	1	<25	<25	<25	<25
Red Rock Elementary District	1	17	9	10	10
Stanfield Elementary District	1	<25	<25	0	0
Superior Unified School District	1	<25	0	0	0
Toltec School District	2	<25	<25	<25	<25
Pinal Region Charter Schools	15				
Pinal County Schools	31	577	558	571	
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 that are partially outside of the region, the data for the complete district is likely to vary from the percentages reported here.

Figure 33. Types of Disabilities Among Preschoolers in Special Education in the Pinal Region, 2015



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

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

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

Table 62. Types of Disabilities among Preschoolers in Special Education, 2015

	Developmental Disability	Hearing Impairment	Severe Delay	Speech or Language Impairment	Vision Impairment
Pinal Region Schools	**40%**	**1%**	**22%**	**36%**	**1%**
Apache Junction Unified District	52%	0%	27%	21%	0%
Casa Grande Elementary District	55%	3%	19%	21%	3%
Coolidge Unified District	41%	0%	17%	41%	0%
Eloy Elementary District	20%	0%	80%	0%	0%
Florence Unified School District	33%	2%	11%	54%	0%
J O Combs Unified School District	24%	0%	32%	44%	0%
Mammoth-San Manuel Unified District	50%	0%	0%	50%	0%
Maricopa Unified School District	36%	0%	26%	37%	1%
Oracle Elementary District	64%	0%	9%	27%	0%
Picacho Elementary District	N/A	N/A	N/A	N/A	N/A
Ray Unified District	100%	0%	0%	0%	0%
Red Rock Elementary District	20%	0%	30%	50%	0%
Stanfield Elementary District	N/A	N/A	N/A	N/A	N/A
Superior Unified School District	N/A	N/A	N/A	N/A	N/A
Toltec School District	50%	0%	29%	21%	0%
Pinal County Schools	40%	1%	22%	36%	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 Pinal Region's boundaries. For districts that 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.

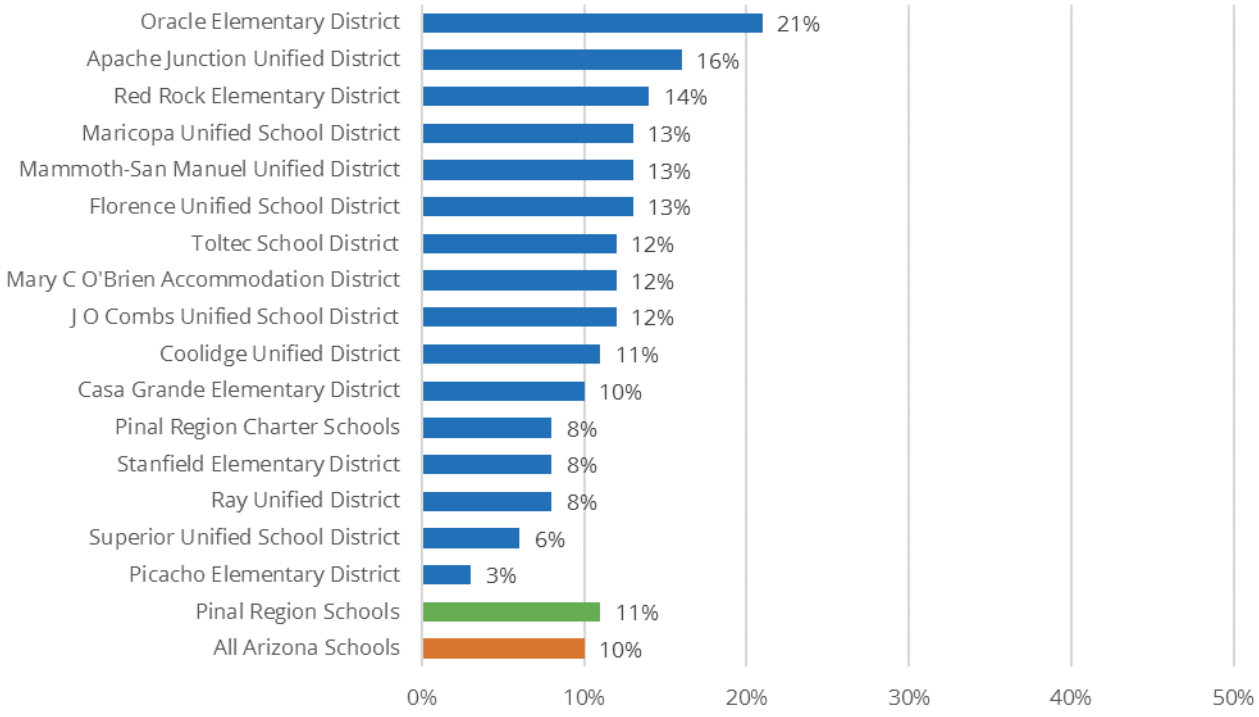
Table 63. Pre-Kindergarten Students in Special Education

	Number of students enrolled	Number of students in special education	Percent of students in special education
Pinal Region Schools	**793**	**472**	**60%**
Apache Junction Unified District	80	64	80%
Casa Grande Elementary District	65	65	100%
Coolidge Unified District	49	28	57%
Eloy Elementary District	17	<25	DS
Florence Unified School District	77	73	95%
J O Combs Unified School District	163	110	67%
Mammoth-San Manuel Unified District	77	<25	DS
Maricopa Unified School District	127	89	70%
Oracle Elementary District	38	<25	DS
Picacho Elementary District	<10	0	0%
Ray Unified District	19	<25	DS
Red Rock Elementary District	14	<25	DS
Stanfield Elementary District	30	<25	DS
Superior Unified School District	18	<25	DS
Toltec School District	18	<25	DS
Pinal County Schools	818	492	60%
All Arizona Schools	19,123	8,773	46%

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 that are partially outside of the region, the data for the complete district is likely to vary from the percentages reported here.

Figure 34. Kindergarten Through Third-Grade Enrollment of Special Needs Students



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

Child Health

Why Child Health Matters

Health encompasses not only physical health, but also mental, intellectual, social and emotional well-being. 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.[125] 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.[126,127] 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.[128,129,130]

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. [131] 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.[132,133] Children who lack health insurance are also more likely to be hospitalized and to miss school.[134]

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.[135] Arizona became the only state without an active CHIP program. However, in May 2016, the Arizona legislature voted to lift the freeze on KidsCare,[136] and in July 2016, applications began to be accepted for the first time in six years, with coverage beginning September 1, 2016.[137] 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.[138]

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.[139] 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.[140,141,142]

A mothers' weight status can also influence her child's health. Women who have obesity before they become pregnant have pregnancies with a higher risk of birth complications and neonatal and infant mortality.[143,144] Babies born to obese women are at risk for chronic conditions in later life such as diabetes and heart disease.[145] 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.[146]

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.[147]

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.[148] 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.[149] Healthy People 2020 aims to increase the proportion of infants who were ever breastfed to 81.9 percent.[150]

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.[151] 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.[152]

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.[153] 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.[154] 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%).[155]

In early childhood, illness and injury can cause not only trauma to a child but added stress for a family. Non-fatal unintentional injuries substantially impact the well-being of children,[156] and injuries are the leading cause of death in children in the United States.[157] 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.[158] 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.[159] 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[160], as well as included it as part of their Arizona Injury Prevention Plan.[161]

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.[162,163] Obesity can have negative consequences on physical, social, and psychological well-being that begin in childhood and continue into and throughout adulthood.[164] 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.[165] One component of establishing a healthy weight – physical activity – also promotes improved visual-motor integration skills and object manipulation skills, which in turn lead to improved executive function, social behaviors, and ultimately school readiness for young children.[166] The availability and accessibility of recreational facilities and resources that promote physical fitness can impact the ability of both child and adult community members to reap the benefits of physical activity.

What the Data Tell Us

Access to Care

A key factor in health care is health insurance, and 9 percent of young children in the region were estimated to be uninsured, along with 14 percent of the total population in the Pinal Region. These rates varied quite a bit among the sub-regions. Relatively few children in the Copper Corridor (2%), Florence-Coolidge (4%), and Casa Grande (4%) sub regions were uninsured. In contrast, 20 percent of young children in the Red Rock-Saddlebrooke sub-region and 16 percent in Maricopa-Ak Chin-Stanfield lack insurance (Table 64). The high rate of uninsurance in the Maricopa-Ak Chin-Stanfield sub-region is particularly interesting given that this sub-region has a much lower rate of children living below the poverty level than elsewhere in the region. This may be partially attributed to the fact that the U.S. Census Bureau does not consider coverage by the Indian Health Service to be insurance coverage, and a portion of the population in that sub-region reside on the Ak-Chin Indian Community reservation. However, only five percent of the children (Table 6) in the sub-region are American Indian, suggesting that other factors are accounting for the high rates of uninsurance among young children in both the Maricopa-Ak Chin-Stanfield and Red-Rock-Saddlebrooke areas.

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 9 percent.[167]

Compared to young children, members of the total (all ages) population were more likely to lack health insurance; this was true for the region as a whole and all of the sub-regions except for the Red Rock-Saddlebrooke sub-region, which has the lowest rate of adult uninsurance of any of the sub-regions. This is likely due to the presence within the sub-region (in Saddlebrooke) of affluent, adult-only (55+) communities where many residents are eligible for Medicare.

Table 64. Estimated Proportion of Population without Health Insurance

	Estimated Population (Ages 0-5)	Children (Ages 0-5) Without Health Insurance	Estimated Population (All Ages)	Persons (All Ages) Without Health Insurance
Pinal Region	**32,129**	**9%**	**356,109**	**14%**
Apache Junction-Gold Canyon	3,012	10%	56,924	14%
Casa Grande	5,170	4%	59,800	14%
Copper Corridor	1,108	2%	16,933	13%
Eloy-Arizona City	1,869	9%	19,707	18%
Florence-Coolidge	2,528	4%	33,912	13%
Maricopa-Ak Chin-Stanfield	5,871	16%	54,268	18%
Red Rock-Saddlebrooke	910	20%	17,349	8%
San Tan Valley-Queen Creek	11,661	8%	97,217	13%
Pinal County	33,270	9%	366,822	15%
ARIZONA	531,825	10%	6,453,706	16%

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

Pregnancies and Birth

In 2014, 4,490 babies were born to mothers living in Pinal County (Table 65). These data reflect the mother's county of residence, so women living in Pinal who delivered in Phoenix (Maricopa County) are still reflected here. These births represented 5.2 percent of the births statewide. Given that Pinal Region residents make up about 5.7 percent of the state population (Table 3), this was a slightly smaller number of births than would be expected based on the size of the region's population. In keeping with the projected population growth in Pinal, the number of births in the region is expected to increase

steadily through 2040. By 2040, Pinal mothers are expected to give birth to 10,029 babies, meaning that birthing facilities will need to accommodate more than twice as many mothers as they currently serve.

Table 65. Live Births During Calendar Year 2014, by Mother's Place of Residence

	Total number of births to Arizona-resident mothers in 2014
Pinal Region	-
Pinal County	4,490
ARIZONA	86,648

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

Table 66. Projected Number of Births Per Year, 2015 to 2040

	2015	2020	2025	2030	2035	2040
Pinal Region						
Pinal County	4,485	5,490	6,659	7,985	9,140	10,029
ARIZONA	86,475	94,177	102,207	108,600	112,982	116,633

Source: Arizona Department of Administration, Employment and Population Statistics (2015). 2015-2050 State and county population projections (medium series).

Maternal Characteristics

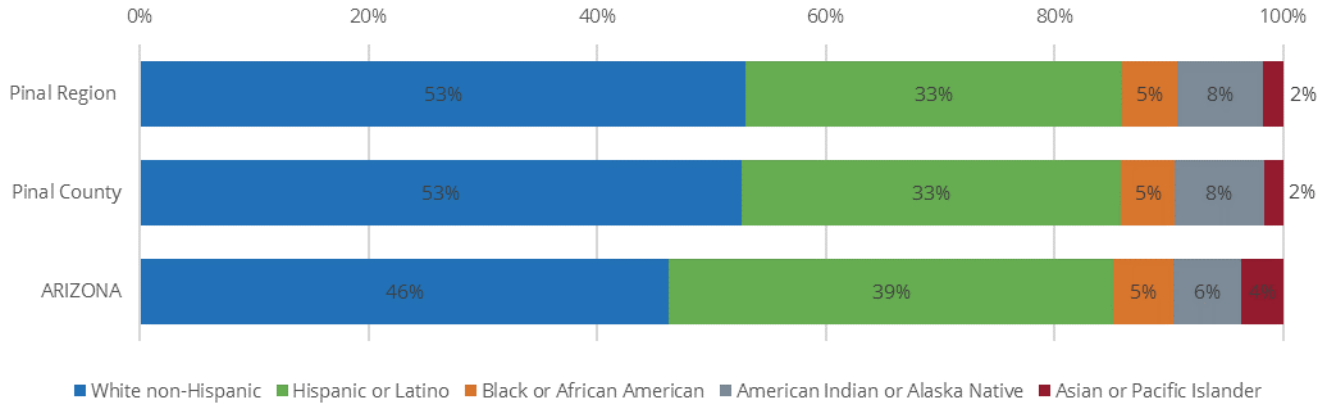
Of the mothers who gave birth in the Pinal Region in 2014, the majority (53%) were White, non-Hispanic (Figure 35). One-third (33%) of births were to Hispanic or Latina mothers, 8 percent were to American Indian mothers, 5 percent were to Black or African American mothers, and 2 percent were to mothers who identify as Asian or Pacific Islanders. Compared to the state as a whole, mothers in the Pinal Region were less likely to be Latina, and more likely to be White and American Indian. New mothers in the Pinal Region had somewhat lower educational attainment than mothers statewide; 47 percent had a high school education or less (45% statewide), and 15 percent had attained a bachelor's degree or more (23% statewide) (Table 67). The greatest proportion (38%) had some college or professional education (Figure 36).

The population of new mothers in Pinal was very similar to those statewide on other attributes. Nearly half (45%) of mothers were not married and 8 percent were in their teens in both the region and the

state (Table 68). In Pinal, over half of births (54%) were to mothers relying on AHCCCS or Indian Health Service (IHS) coverage, which was similar to the statewide rate of 55 percent. A higher proportion of mothers in the Pinal Region reported smoking (6.4%) than across the state (4.6%), though both areas fall above the Healthy People 2020 goal of 1.4 percent. Given the 4,512 births in the Pinal Region, achieving the Healthy People 2020 goal would mean reducing the number of mothers who smoked during pregnancy from 289 to 63, i.e., achieving cessation for 226 women.

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 had overweight or obesity before pregnancy in 2014.[168] 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.[169] In the Pinal Region, this rate was slightly higher still; 26 percent of women were overweight, and 33 percent were obese, for a total of 59 percent who were overweight or obese before becoming pregnant (Figure 37). The rate of obesity in the region and the state has increased slightly but steadily since 2012; this mirrors national trends as well.[170]

Figure 35. Race and Ethnicity of Mothers Giving Birth in 2014



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

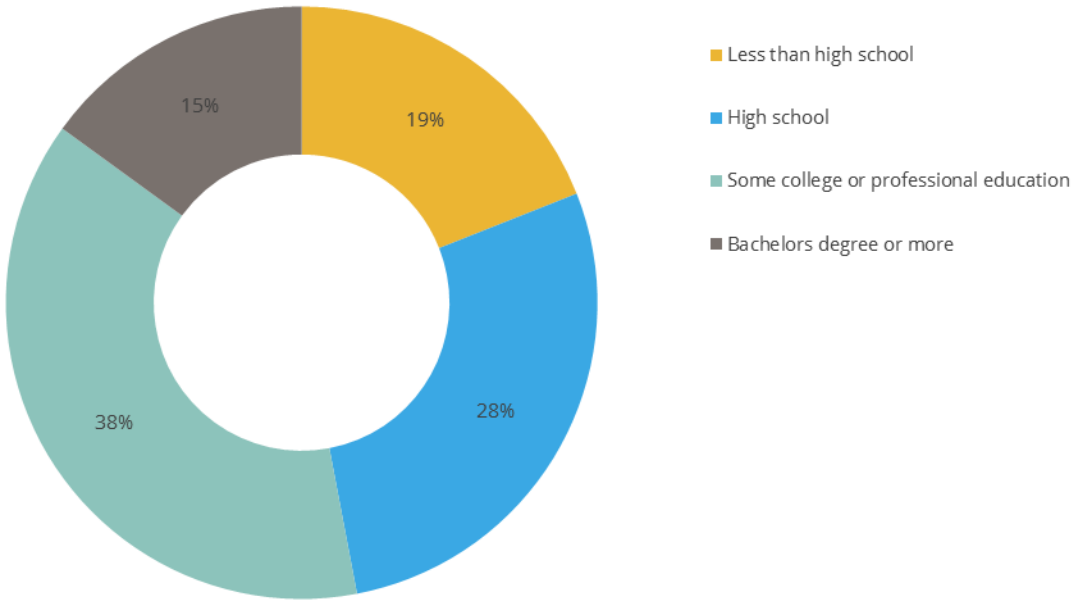
Table 67. Live Births During Calendar Year 2014, by Mother's Educational Attainment

	Less than high school	High school	Some college or professional education	Bachelors degree or more
Pinal Region	**19%**	**28%**	**38%**	**15%**
Pinal County	19%	28%	37%	15%
ARIZONA	20%	25%	31%	23%

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

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

Figure 36. Live Births During 2014 in the Pinal Region, by Mother's Educational Attainment



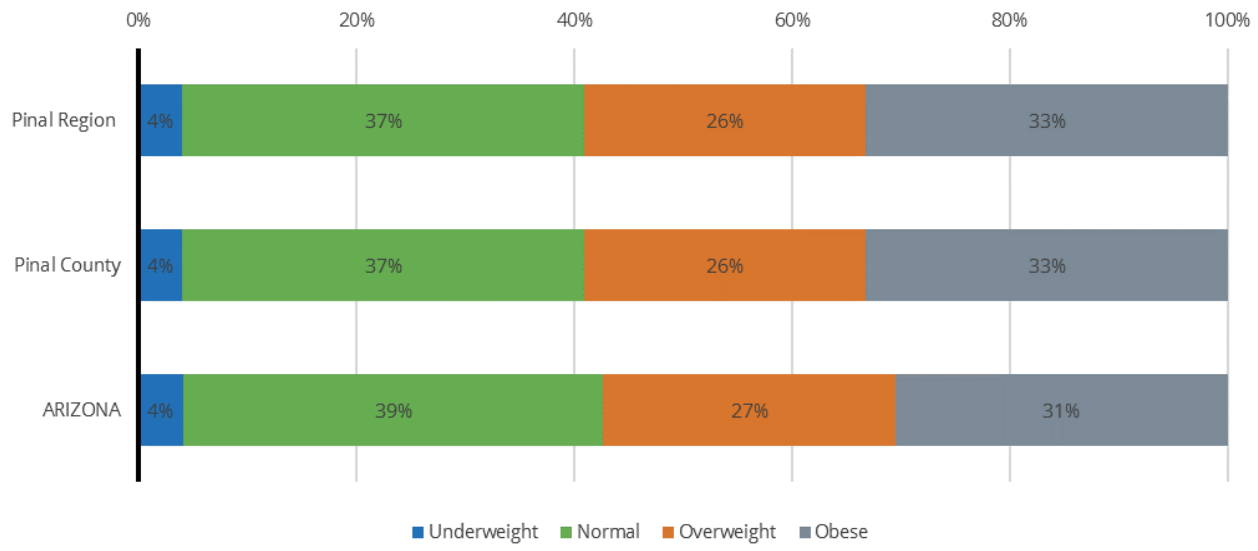
Source: Arizona Department of Health Services (2016). [Vital statistics births dataset]. Unpublished data.

Table 68. Other Characteristics of Mothers Giving Birth in 2014

	Mother was not married	Mother was 19 or younger	Mother was 17 or younger	Birth was covered by AHCCCS or the Indian Health Service (IHS)	Tobacco use during pregnancy
Pinal Region	45.2%	7.9%	2.1%	53.9%	6.4%
Pinal County	45.5%	8.0%	2.0%	54.5%	6.5%
ARIZONA	44.7%	7.6%	2.1%	54.5%	4.6%

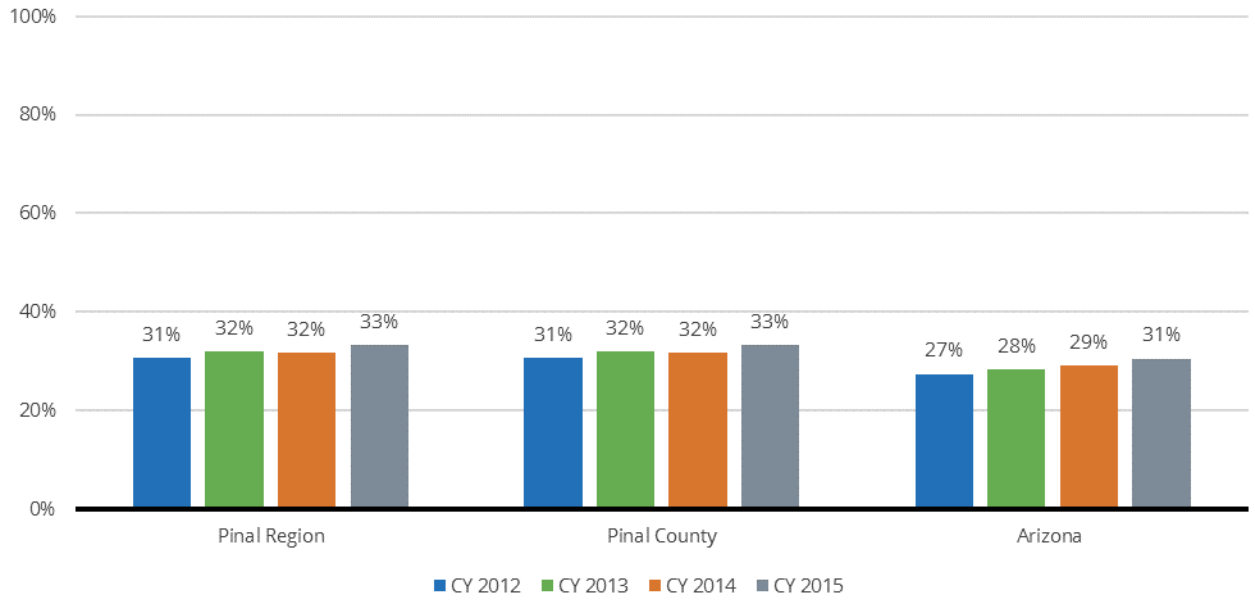
Source: Arizona Department of Health Services (2016). [Vital statistics births dataset]. Unpublished data.

Figure 37. Pre-Pregnancy Weight Status for WIC Women, 2015



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

Figure 38. Pre-Pregnancy Obesity Rates for WIC Women, 2012 to 2015



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

Table 69. Pre-Pregnancy Obesity Rates for WIC Women, 2012 to 2015

	2012	2013	2014	2015
Pinal Region	**31%**	**32%**	**32%**	**33%**
Pinal County	31%	32%	32%	33%
ARIZONA	27%	28%	29%	31%

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. Prior to 2014, the percent of women with early prenatal care was consistently near 85 percent, meeting the Healthy People 2020 goal (Figure 39).[171] 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 (12.3% in the Pinal Region). In the Pinal Region in 2014, among mothers with known data, 78.4 percent of mothers obtained prenatal care during the first trimester, suggesting that the Pinal Region is meeting Healthy People 2020 (Table 70). With regard to preconception health, there is a downward trend in the proportion of Arizona 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. Statewide, this rate has fallen from 47 percent in 2011, to 35 percent in 2014; in Pinal County, the rate in 2014 was the lowest in the state (25%).[172]

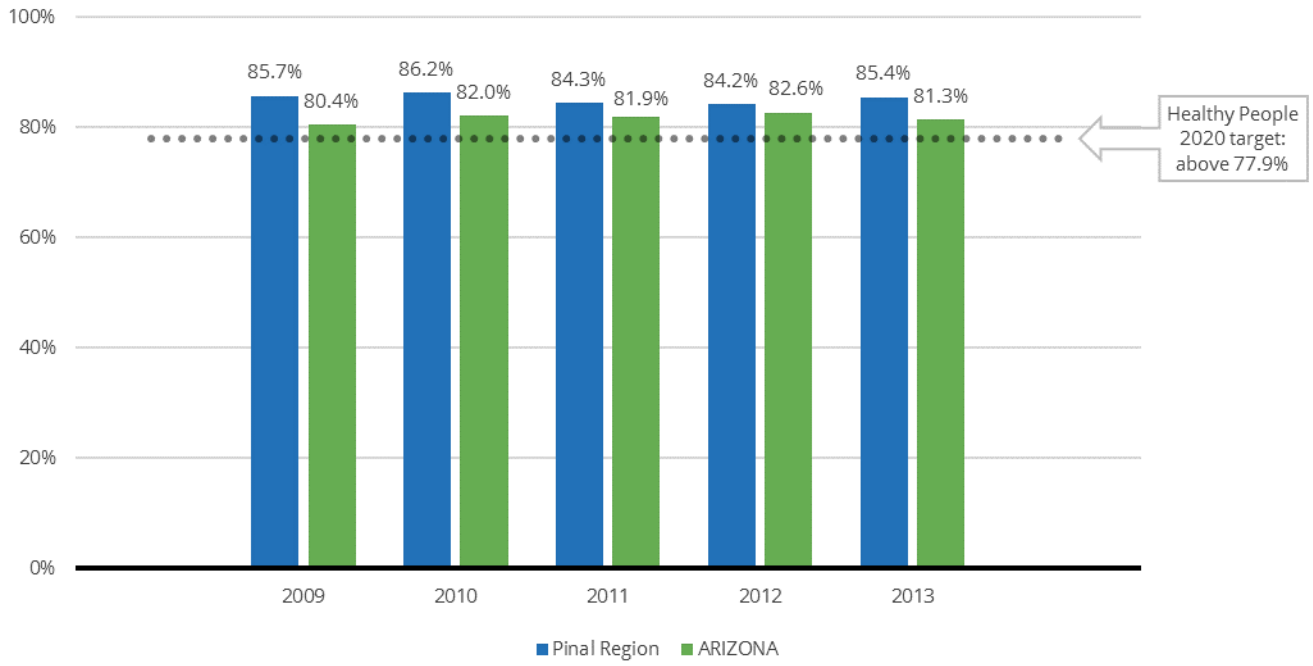
On a more positive note, most mothers are receiving at least some form of prenatal care; only 4.3 percent of babies in the Pinal Region were born to mothers who had had fewer than 5 prenatal care visits (Table 70). In this regard, the Pinal Region is doing better than elsewhere in Arizona, where 6.5 percent of births were to mothers who had fewer than 5 prenatal care visits.

Table 70. Live Births During Calendar Year 2014, by Number of Prenatal Visits

	No Visits	1-4 Visits	5-8 Visits	9-12 Visits	13+ Visits	Percent of Births with Fewer Than five Prenatal Care Visits	Percent of Births with Prenatal Care Begun in First Trimester
Pinal Region	**1%**	**3%**	**11%**	**45%**	**36%**	**4%**	**78.4%**
Pinal County	1%	3%	12%	45%	36%	4%	78.1%
ARIZONA	2%	4%	15%	47%	31%	6%	71.7%

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

Figure 39. Percent of Births with Prenatal Care Begun in the First Trimester, 2009-2013



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

Birth Outcomes

With regard to perinatal health, babies in the Pinal Region were similar to babies statewide. In both the region and the state in 2014, 7.4 percent of babies were low birth weight and 9.3 percent were premature (Table 71). 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 Pinal Region has achieved both Healthy People 2020 goals (Figure 40; Figure 41). A slightly higher proportion (7.6%) of babies in the county were born at low birth weights.

Infants participating in WIC in the Pinal Region (2015: 68%) and Arizona (71%) both lag behind the Healthy People 2020 goal of 81.9 percent of babies ever being breastfed (Table 72; Figure 42); data on the complete (i.e., including those not participating in WIC) Pinal Region population are unavailable. However, data from the National Immunization Survey on children born in 2013 estimated the statewide rate of ever-breastfed was 85.0%, suggesting that WIC participants are less likely to be breastfed than other infants.[xvii] Thus, it is possible that the region overall does currently meet the Healthy People 2020 goal. Additionally, although the rate among WIC participants (68.3%) in the region is below the target, it has increased by 10 percentage points over the last three years (Table 72).

Most infants in the Pinal Region received a hearing screening. Although about 3 out of 100 did not pass the initial screen, only 0.6 percent of those screened required a diagnostic evaluation; 0.1 percent were found to have confirmed hearing loss (Figure 43).

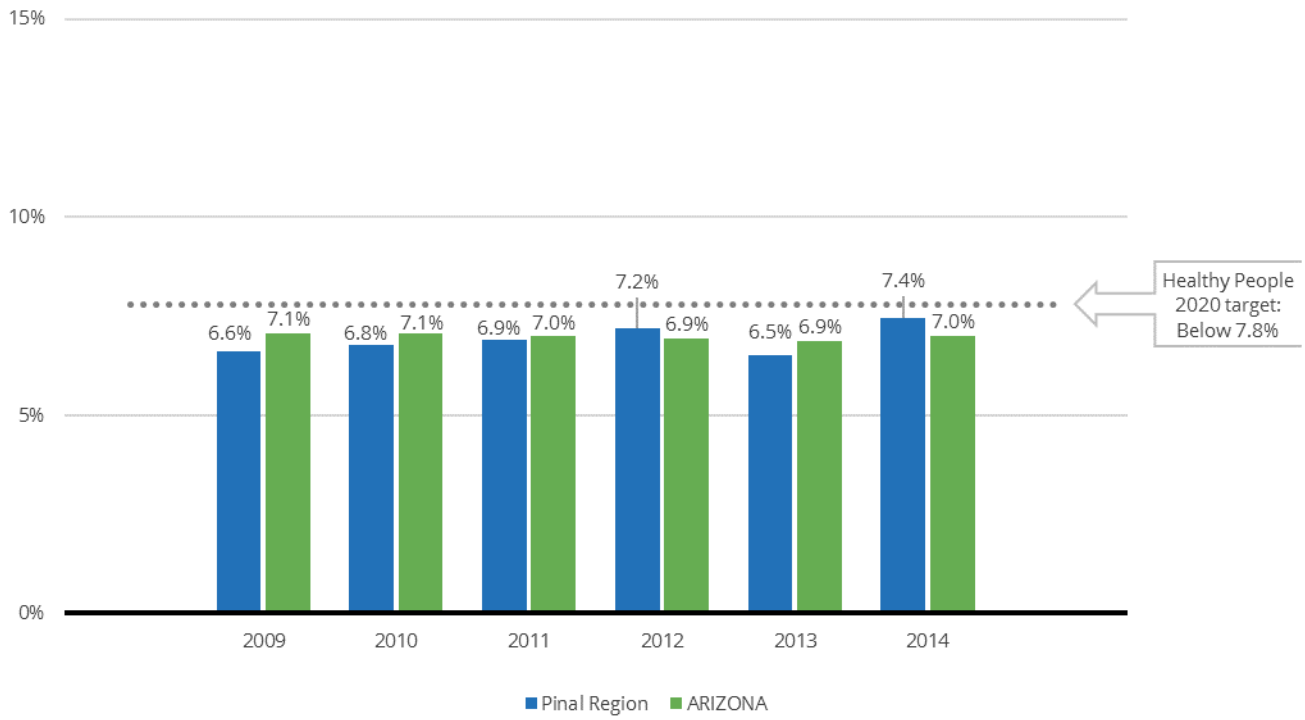
Table 71. Other Characteristics of Babies Born in 2014

	Baby Had Low Birthweight (5.5 lb. or less)	Healthy People 2020 Target for Low-Birthweight Babies	Newborns Admitted to Intensive Care Unit	Healthy People 2020 Target for Premature Babies	Percent of Premature Births (under 37 weeks)
Pinal Region	**7.4%**	**<7.8%**	**9.2%**	**<11.4%**	**9.3%**
Pinal County	7.6%	<7.8%	9.3%	<11.4%	9.3%
ARIZONA	7.0%	<7.8%	6.7%	<11.4%	9.0%

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

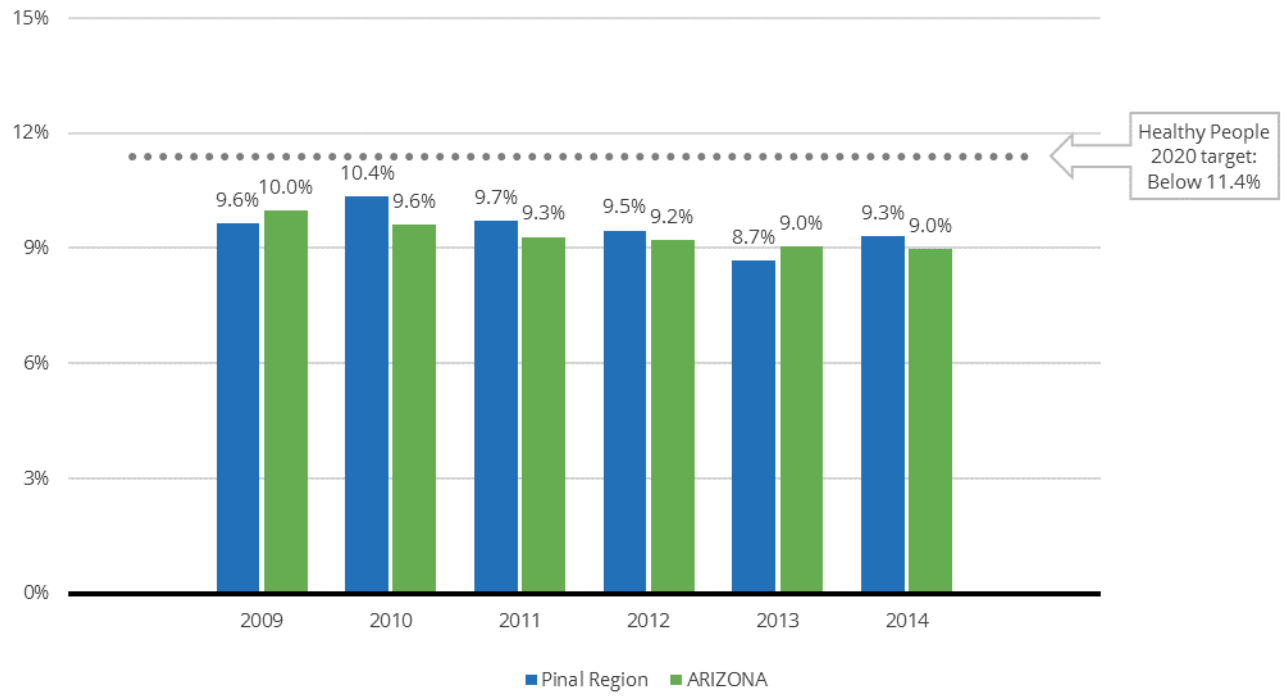
[xvii] *This estimate is based on a sample of 291 births in Arizona in 2013. Rates of Any and Exclusive Breastfeeding by State among Children Born in 2013. Data available at: https://www.cdc.gov/breastfeeding/data/nis_data/rates-any-exclusive-bf-state-2013.htm*

Figure 40. 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 41. Percent of Babies Born Premature in 2014 (37 Weeks or Less)



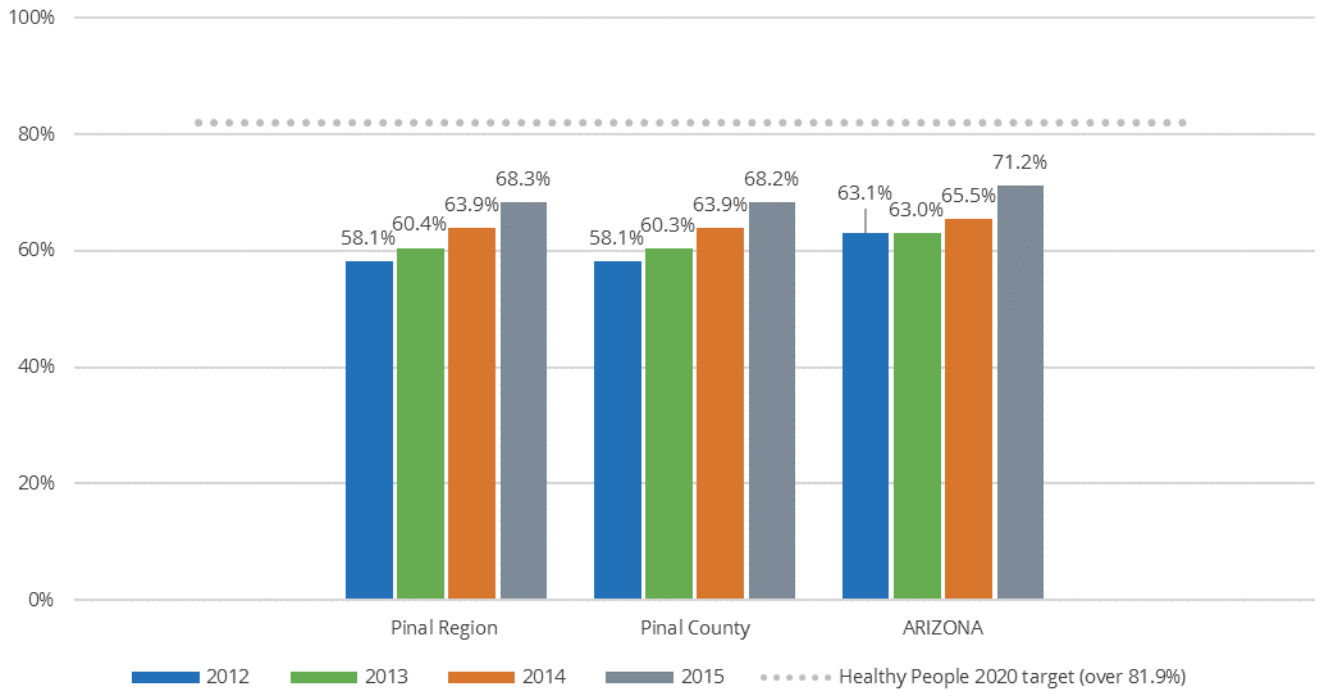
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Table 72. WIC Infants Who Were Ever Breastfed, 2012 to 2015

	Number of Infants for Whom Breastfeeding Status is Known	Healthy People 2020 Target for Breastfeeding	2012	2013	2014	2015	Change From 2012 to 2015
Pinal Region	**2454**	**81.9%**	**58%**	**60%**	**64%**	**68%**	**+10%**
Pinal County	2466	81.9%	58%	60%	64%	68%	+10%
ARIZONA	43891	81.9%	63%	63%	65%	71%	+8%

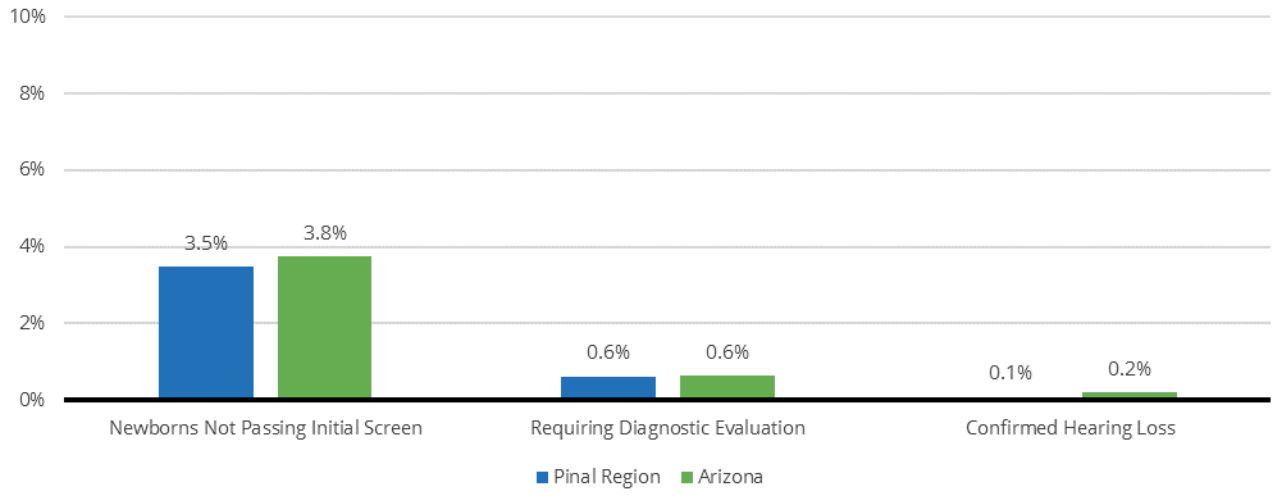
Source: Arizona Department of Health Services (2016). [WIC datasets]. Unpublished data.

Figure 42. WIC Infants Who Were Ever Breastfed, 2012 to 2015



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

Figure 43. Newborn Hearing Screening Results



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 Pinal Region had completed each of the three major (DTAP, polio, and MMR) vaccine series; the regional and county rates were higher than those of the state (Table 73). The Healthy People 2020 target for vaccination coverage for children ages 19-35 months for these vaccines is 90 percent,[173] 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.[xviii] 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 79 percent of children in child care had completed the recommended two immunizations. 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.[xix] Although the rate of personal exemptions among kindergarteners (4.5%) was nearly twice that of children in child care (2.3%) (Figure 44), children in kindergarten were vaccinated at similar rates to children in child care for the region (Table 74). The region's rates of vaccine coverage for kindergarteners were comparable to those at the county and state level.

Table 73. Vaccination Rates and Exemption Rates for Children in Child Care

	Students Enrolled	4+ DTAP	3+ Polio	2+ MMR	3+ HIB	2 Hep A	3+ Hep B	1+ Varicella	Religious Exemption	Medical Exemption
Pinal Region	**2,872**	**93%**	**96%**	**97%**	**95%**	**79%**	**95%**	**97%**	**2.3%**	**0.3%**
Pinal County	2,996	94%	96%	97%	95%	79%	96%	97%	2.2%	0.3%
ARIZONA	92,128	92%	93%	94%	92%	81%	92%	95%	3.5%	0.5%

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

[xviii] *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*

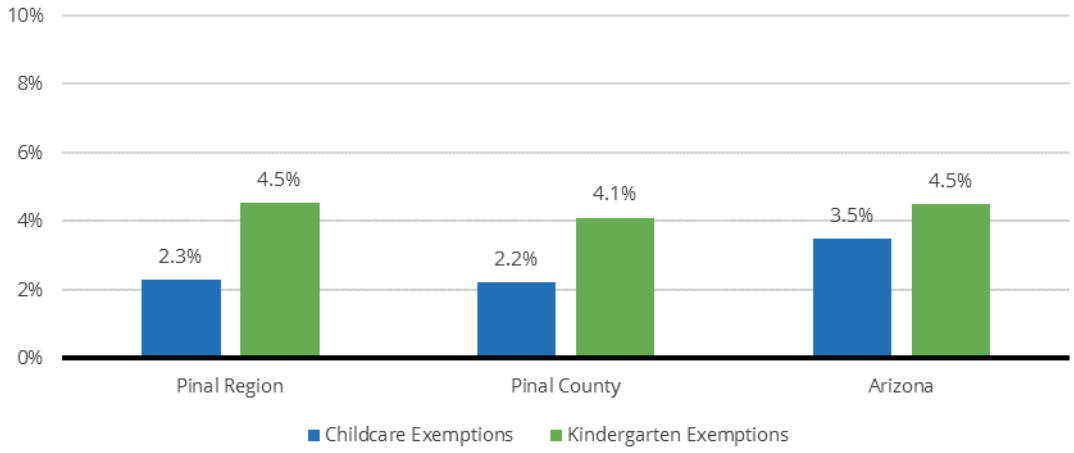
[xix] *The CDC immunization schedule recommends initiating the Hepatitis A vaccine at 12 through 23 months, with the second dose administered 6 to 18 months later. For more information see:* https://www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html

Table 74. Vaccination Rates and Exemption Rates for Kindergarten Children

	Students Enrolled	4+ DTAP	3+ Polio	2+ MMR	3+ Hep B	1+ Varicella	Personal Exemption	Medical Exemption
Pinal Region	**4,158**	**94%**	**94%**	**94%**	**96%**	**96%**	**4.5%**	**0.3%**
Pinal County	4,201	94%	95%	95%	96%	97%	4.1%	0.3%
ARIZONA	83,088	94%	95%	94%	96%	97%	4.5%	0.3%

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

Figure 44. Vaccine Exemption Rates for Children in 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, Arizona Department of Health Services, in partnership with First Thing First, administered the Healthy Smiles Healthy Bodies survey to 3,630 kindergarten children during the 2014-2015 school year.[xx,174] 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/caregiver questionnaire component. In the Pinal Region, 219 children were screened and 98 parents or caregivers answered at least one question on the questionnaire given with their child's screening. Untreated decay experience and need for dental care was reported for 29 percent of kindergarteners in the region, which was slightly higher than the state (27%). In overall decay experience, 41 percent of kindergarteners in the Pinal Region reported decay experience compared to Arizona's 52 percent; in fact, Pinal children fared the best of children in any region. While the state has met its own 2020 benchmark (no more than 32% of children with untreated tooth decay) and is on track towards the Healthy People's 2020 target (26%), there remains a need for focused oral health efforts on primary prevention across the state.

Childhood Injury, Illness and Mortality

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, 39 percent of which were determined to be preventable and 74 percent (566) of which were young children from birth to age five. More than one-third of these deaths (38%) occurred in the neonatal period (birth-27 days) and were due to natural causes (prematurity, neurological disorders, and other medical conditions). The infancy age group (28-365 days) saw 23 percent of these deaths, which were largely due to suffocation. About 13 percent of these deaths were amongst children 1-4 years old, an age group which reported high rates of fatalities due to drowning, motor vehicle accidents, and blunt force trauma.

Local CFR Teams conduct an annual report which reviews each death in the state and determines the preventability of each of these deaths. According to the 2015 review, it was determined that 39 percent of all deaths were likely preventable while 9 percent of deaths' preventability could not be determined. In 2015, 10 percent of perinatal deaths, 48 percent of infant deaths, and 57 percent of young child deaths in Arizona were deemed preventable.

Additionally, the CFR Teams determine which deaths can be classified as maltreatment based on the actions or failures to take appropriate preventative action by a parent, guardian, or caretaker. In the 2015 review, 11 percent of all child fatalities were due to maltreatment and all of these deaths were determined to have been preventable. These maltreatment deaths are classified in one of three categories: homicide (e.g. abusive force trauma), natural (e.g. failure to obtain medical care or prenatal substance use that caused premature death), or accidental (e.g. the unintentional injuries caused by negligence or impaired driving).[175]

In 2015, Pinal County reported 52 deaths among its population of 99,049 children aged 0-17, which is equivalent to a death rate of 52.5 children per 100,000 residents.[176] This is higher than the overall Arizona rate for 2015, which was 47.3 child deaths per 100,000 residents. Across the state, the two

[xx] *Please see appendix for methodology.*

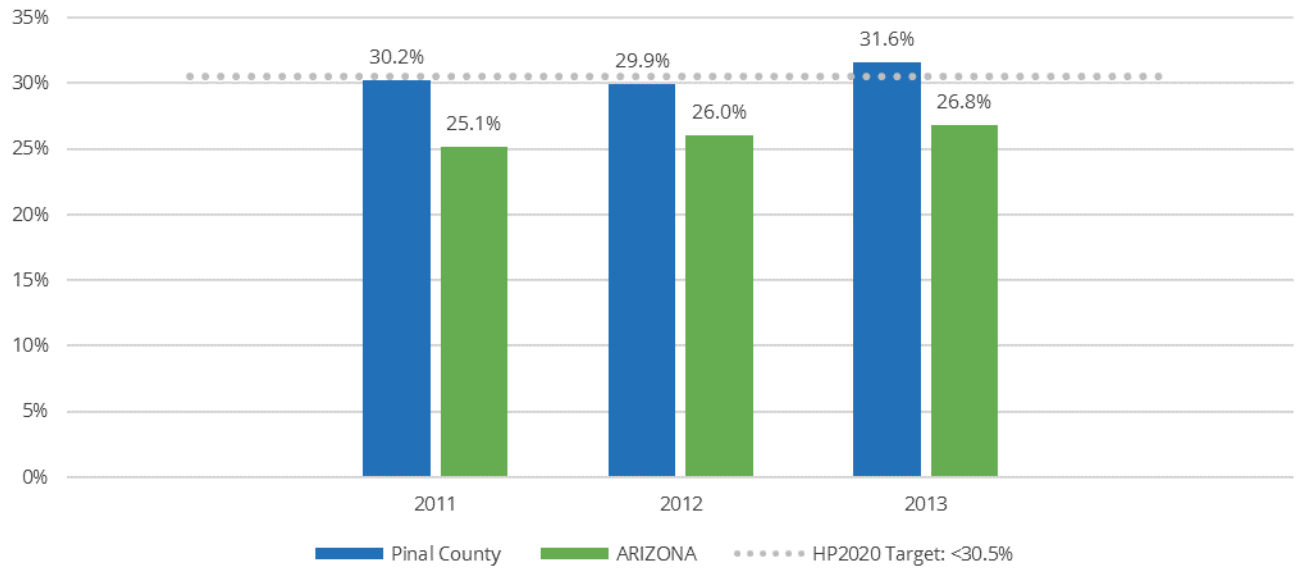
leading causes of death were those classified as home-safety related (rate of 7.9 per 100,000 children) and maltreatment (rate of 5.3 per 100,000 children).

Weight Status

Based on data from the Centers for Disease Control and Prevention (CDC), adult obesity is more prevalent in Pinal County than statewide (Figure 45). Moreover, the adult obesity rate in the county has increased slightly between 2011 and 2013 (from 30.2% to 31.6%). This recent rise means that Pinal County no longer meets the Healthy People 2020 goal of having no more than 30.5 percent of the population have obesity.[xxi]

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, 12 percent have obesity and an additional 13 percent have overweight (Figure 46). These proportions remained relatively stable between 2012 and 2015, dipping slightly after 2012 but rising again in 2015 (Table 76). This pattern mirrors what national patterns, where 2014 saw a decrease from 2010 among WIC participants ages 2 to 4.[177] Based on these data, the Pinal Region is not meeting the Healthy People 2020 target, although it is 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.

Figure 45. Adult Obesity Rate



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

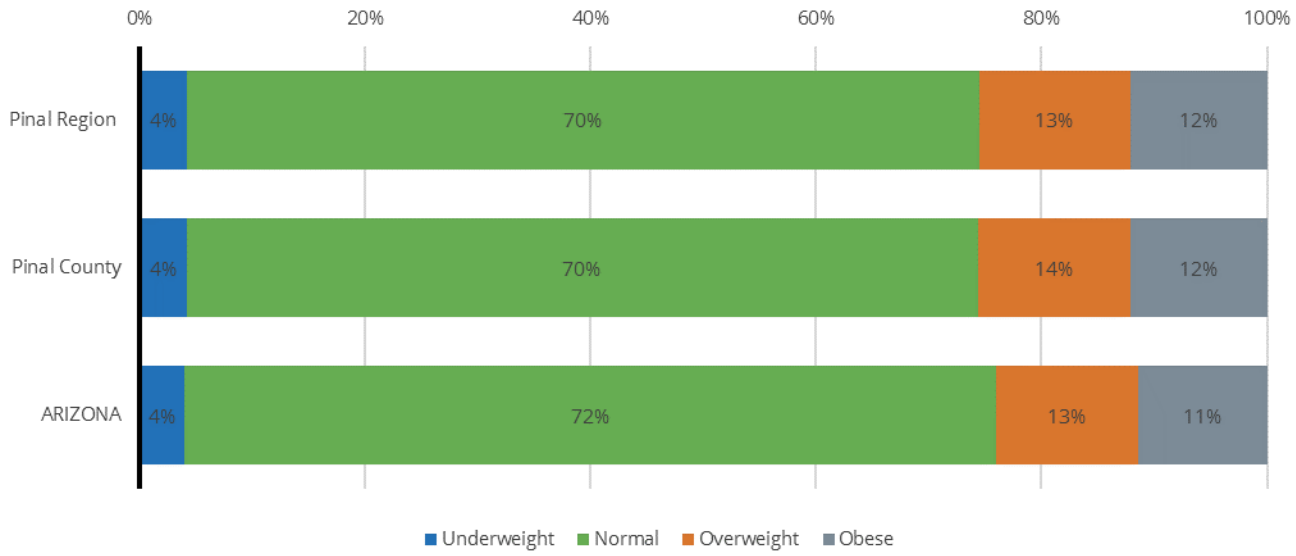
[xxi] Note that the Centers for Disease Control now use language consistent with the perspective that obesity is a disease state. We have adopted that language. See https://www.cdc.gov/obesity/data/adult.html.

Table 75. Adult Obesity Rate, According to the CDC

	CDC Obesity Rate, 2011	CDC Obesity Rate, 2012	CDC Obesity Rate, 2013
Pinal Region	N/A	N/A	N/A
Pinal County	30%	30%	32%
ARIZONA	25%	26%	27%

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

Figure 46. WIC Children's Weight Status, 2015



Source: Arizona Department of Health Services (2009-2012). Arizona Behavioral Risk Factor Surveillance System Survey. Retrieved from www.azdhs.gov/preparedness/public-health-statistics/behavioral-risk-factor-surveillance/index.php#reports

Table 76. WIC Children's Obesity Rates, 2012 to 2015

	Healthy People 2020 Target for Childhood Obesity	2012	2013	2014	2015
Pinal Region	**<9.4%**	**12.5%**	**11.0%**	**11.0%**	**12.1%**
Pinal County	<9.4%	12.5%	11.3%	11.1%	12.1%
ARIZONA	<9.4%	12.7%	12.3%	11.1%	11.4%

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[178,179] and promote better social, physical, academic and economic outcomes later in that child's life.[180,181] Parental and family involvement is positively linked to academic skills and literacy in preschool, kindergarten and elementary school.[182] 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.[183] 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 Family and Community Survey, a phone-based survey, was designed 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[184]; 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.[185]

Not all children are able to begin their lives in the most positive, stable environments. Adverse Childhood Experiences (ACEs)[xxii] 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.[186] Children in Arizona are more likely to have experienced two or more ACEs (31.1%) than children across the country (21.1%).[187] 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. [188] 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.[189]

[xxii] *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.[190] 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. [191] 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.[192]

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.[193] 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.[194] 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.[195]

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."[196] When young children experience stress and trauma they have limited responses available to react to those experiences.

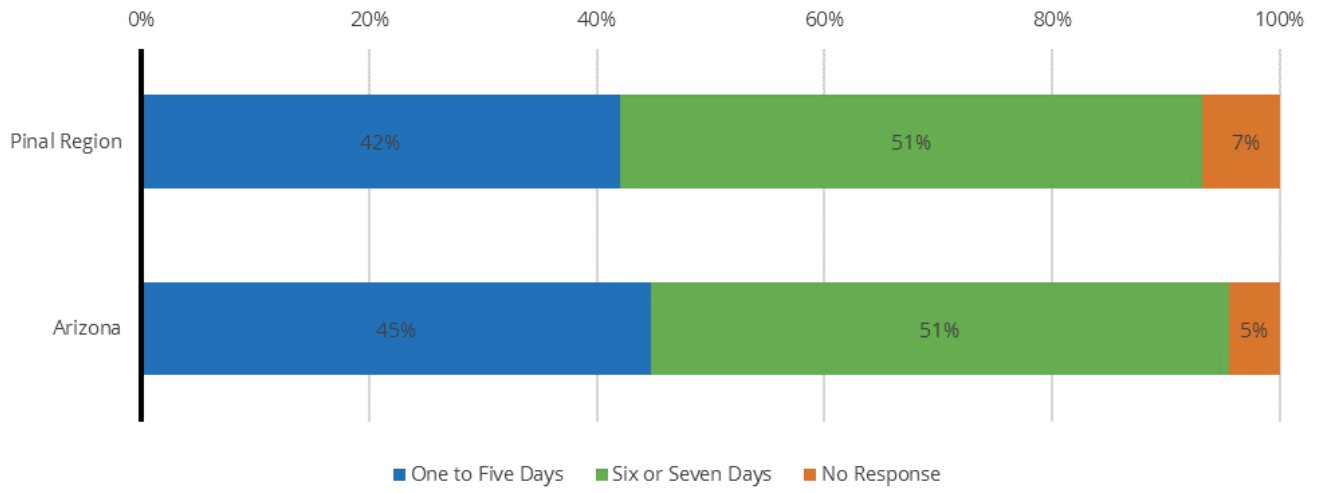
Children exposed to alcohol and drugs during gestation also face behavioral and other concerns. Opiate use during pregnancy, both illegal and prescribed use, has been associated with neonatal abstinence syndrome (NAS), where infants born exposed to these substances exhibit withdrawal creating longer hospital stays, increased health care costs and increased complications for infants born with NAS.[197] 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.[198] 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

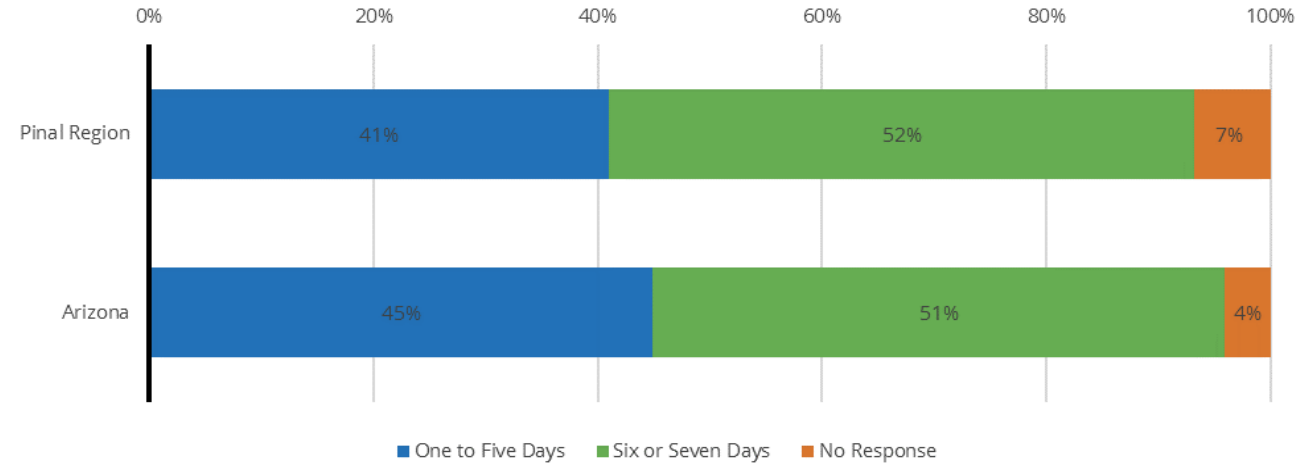
The First Things First Family and Community Survey is a phone-based survey designed to measure many critical areas of parents' knowledge, skills, and behaviors related to their young children. In the Pinal Region, 200 people responded to the 2012 First Things First Family and Community Survey. Among 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. Parents in the Pinal Region were equally likely to report reading to their children (51%), and more likely to report telling stories to their children (52%) and drawing with their child (51%) six or seven days a week compared to parents across the state (51%, 51% and 47% respectively) (Figure 47; Figure 48; Figure 49). Parents in the Pinal Region also showed a better understanding that brain development can be impacted prenatally or right from birth (86%) than did respondents across the state as a whole (80%) (Figure 50).

Figure 47. Responses to "During the past week, how many days did you or other family members read stories to your child?"



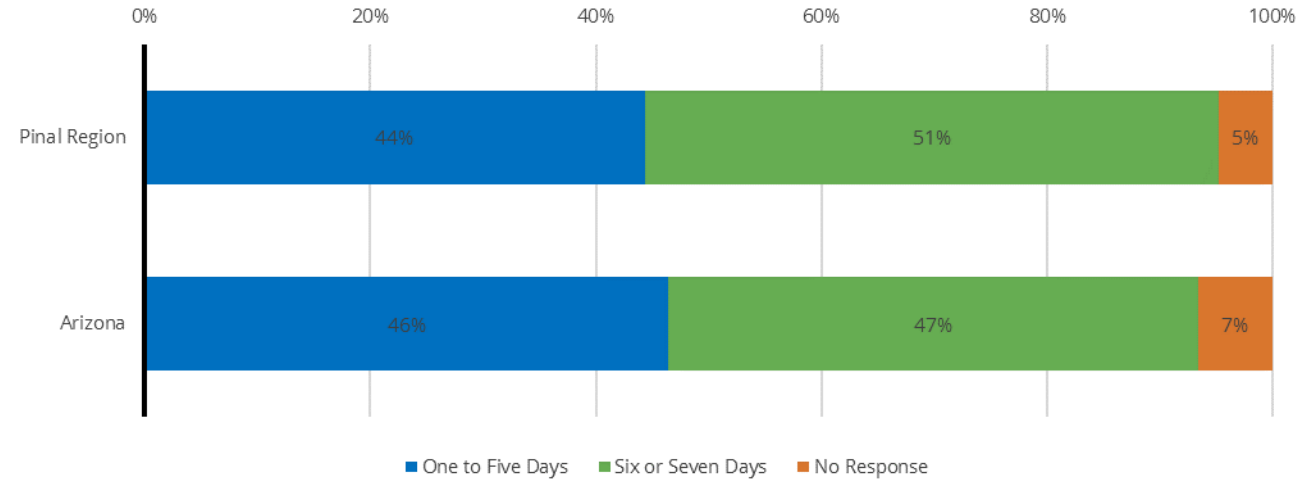
Source: First Things First (2014). [2012 Family and Community Survey dataset]. Unpublished data.

Figure 48. Telling stories or singing song to young children (Family and Community Survey, 2012)



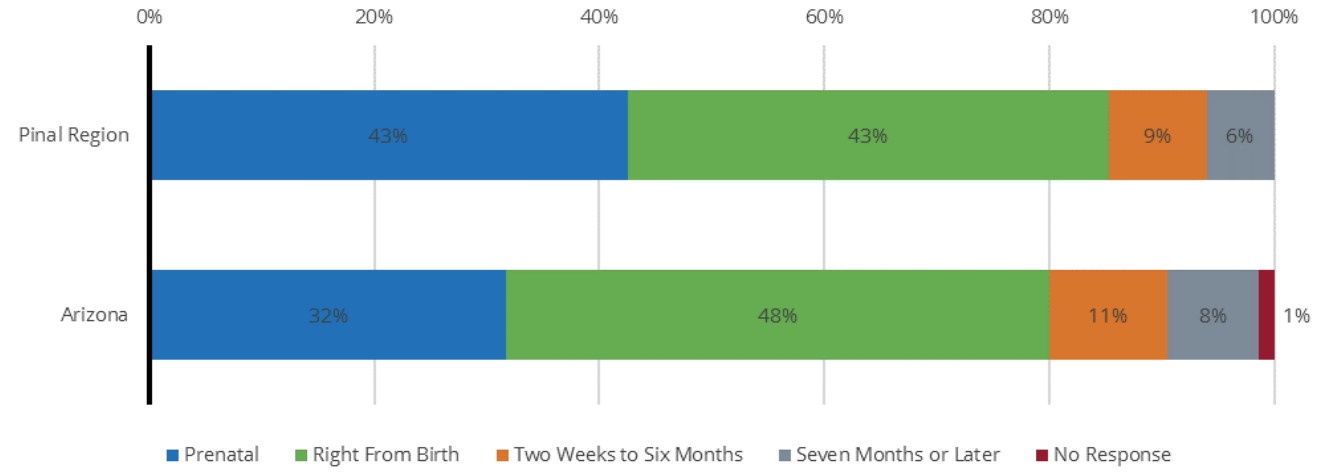
Source: First Things First (2014). [2012 Family and Community Survey dataset]. Unpublished data.

Figure 49. Drawing and scribbling with young children (Family and Community Survey, 2012)



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

Figure 50. Understanding of prenatal brain development (Family and Community Survey, 2012)



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

Child Welfare

The Arizona Department of Child Safety (DCS) 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. In the last two reporting periods available, reports were lower, with 24,787 reports in the last period available, April 1-September 30, 2016.[199] According to this latest report, 1,632 reports of abuse and neglect were received during that period for Pinal County. Over the last 7 reporting periods, there has been an uptick in the number of substantiated cases, most notably in the reporting period ending in September 2016, when there were 144 substantiated cases – nearly triple the number in the prior period (Figure 51). During that same period, 195 (12.3%) of reports resulted in a removal from the home (Table 77); note this number reflects all children, not just those aged birth to 5. The proportion of reports resulting in removal was similar (12.2%) across the state as a whole. For reports of maltreatment that were substantiated during that period, most (85%) were cases of neglect, followed by physical (14%) and sexual (1%) abuse (Table 78).

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. [200] The total number of children entering out-of-home care in Pinal County for the April 1- September 30, 2016 reporting period (n=336) is higher than the number of removals resulting from substantiated reports of abuse (n=195), which could be due to several reasons. 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 voluntary foster care agreements (Table 79).

DCS prioritizes placing children with kin, i.e., extended family, whenever possible. During the last reporting period, 46 percent of children in out-of-home care were with family members. [201] Efforts made by DCS to further enable kinship placements including addressing barriers to licensing, increasing use of Placement Coordinators, and initiating the use of Family Engagement Specialists to work with youth to identify possible kinship caregivers. If the rate of children placed with family members in Pinal is similar to the statewide rate (county-level data were not available), an estimated 155 children would have been placed by DCS with kinship caregivers in Pinal County between April 1 and September 30, 2016. In the six-month period between October 1, 2015 and March 31, 2016, there were 204 instances of the court granting termination of parental rights in Pinal.

Nearly half of all cases passing through dependency court in Pinal County involve children between the ages of zero and 5 (Figure 52). A key informant noted that substance-exposed newborns make up a majority of the open dependency cases. DCS notes that the Substance Exposed Newborn Safe Environment (SENSE) program has expanded into Pinal County. [202] The program develops and coordinates a plan integrating intensive in-home services and DCS case management.

Children not placed with family members or foster families are likely to be placed in congregate care which include emergency shelters, group homes, and residential treatment centers. The use of congregate care is influenced by an inadequate supply of foster care homes across the state, and inadequate access to behavioral health services that would support placement in family settings.[203] The use of congregate care has also increased for the youngest children, 12 and under, during the same time period where congregate placement decreased for older children. Between 2009 and 2013

predominate placement (i.e. where a child has spent more than 50 percent of their time) in congregate care increased from 4.9 to 8.4 percent for children 12 and under in Arizona. For children of all ages, the length of time spent in congregate care also increased, and both of these factors have been shown to adversely affect children's ability to form relationships and can delay or undermine permanency goals such as reunification, adoption and guardianship. [204]

The inadequate supply of foster care homes across the state has been an ongoing issue. Factors impacting this deficit include DCS not recruiting enough licensed foster homes to care for children with special needs or that are able to take sibling groups. Insufficient training of foster care families to manage the behaviors of children in their care, inadequate oversight of foster home recruitment and retention, inadequate support of foster families and the need for improved communication with DCS and child-placing agencies were also cited as factors limiting the number of available foster care homes.[205] A survey of former foster families included several recommendations for addressing this dearth including focusing agency efforts on retention of existing foster parents, assessing reasons why foster parents cease their role so these reasons can be addressed, increasing support for foster families including the availability of respite care for foster parents, financial support, and improved respect and appreciation from state child welfare and licensing agencies.[206]

Maintaining a child within the home if possible is also a consideration of DCS, and this can be supported by in-home services such as parent training, substance abuse treatment and behavioral health services. According to an independent review of DCS, these support services are lacking, and when available wait-times can be long.[207] According to a follow-up of this review, as part of the DCS strategic plan for fiscal year 2016, steps have begun to be implemented to reduce the number of children entering out-of-home care, and strategies have also been developed to reduce the use of congregate care placements.[208]

Table 77: Department of Child Safety Reports and Removals, April to September 2016

	Number of reports received, April to September 2016	Number of reports assigned, April to September 2016	Number of reports with removal, April to September 2016	Removal rate
Pinal Region	N/A	N/A	N/A	N/A
Pinal County	1,632	1,590	195	12.30%
ARIZONA	24,787	24,403	2,967	12.20%

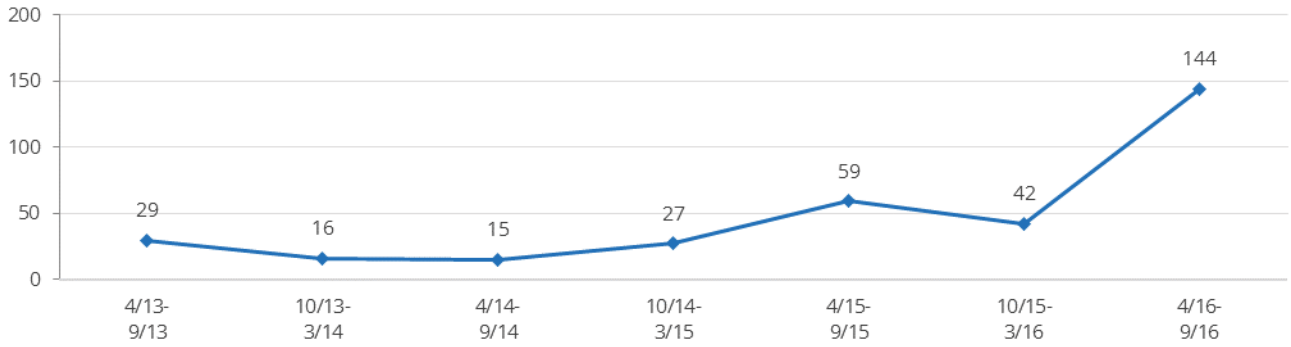
Source: Department of Child Safety (2016). Child welfare reporting requirements semi-annual report for the period of April 1, 2016 through September 30, 2016. Tables 5, 15. Retrieved from https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirments_Apr16_Sept16.pdf

Table 78: Department of Child Safety Substantiated Maltreatment Reports, April to September 2016

	Number of substantiated maltreatment reports	Neglect	Physical Abuse	Sexual Abuse	Emotional Abuse
Pinal Region	N/A	N/A	N/A	N/A	N/A
Pinal County	144	122	20	2	0
ARIZONA	2,823	2,462	296	64	1

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_Apr16_Sept16.pdf

Figure 51. Total number of reports assigned for investigation resulting in substantiation, April 2013-September 2016



Source: Department of Child Safety (2016). Child welfare reporting requirements semi-annual reports.

Table 79: Children Entering Out-of-Home Care, April to September 2016

	Number of children removed	Number of children with a prior removal within the previous 24 months	Percent of children with a prior removal within the previous 24 months
Pinal Region	N/A	N/A	N/A
Pinal County	336	33	10%
ARIZONA	5,669	715	13%

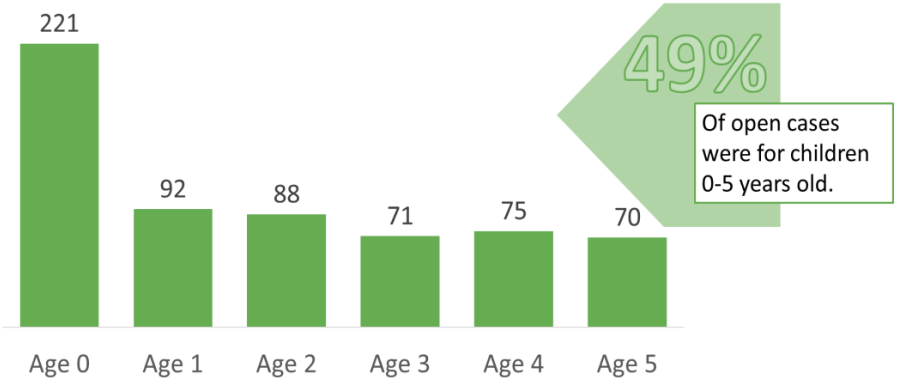
Source: Department of Child Safety (2016). Child welfare reporting requirements semi-annual report for the period of April 1, 2016 through September 30, 2016. Tables 31. Retrieved from https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirments_Apr16_Sept16.pdf

Table 80. Wards of the Court in Pinal County

	Percentage of All Open Petitions (Age 0)	Percentage of All Open Petitions (Age 1)	Percentage of All Open Petitions (Age 2)	Percentage of All Open Petitions (Age 3)	Percentage of All Open Petitions (Age 4)	Percentage of All Open Petitions (Age 5)	Percentage of All Open Petitions (Age 6)
Pinal Region	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pinal County	18%	7%	7%	6%	6%	6%	5%
ARIZONA	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Source: Pinal County Juvenile Court Services (2016). [June 2016 monthly dependency report]. Unpublished data.

Figure 52. Wards of the Court in Pinal County



Source: Pinal County Juvenile Court Services (2016). [June 2016 monthly dependency report]. Unpublished data.

Kinship Support Services

In 2012, the average monthly financial support from the state to unlicensed kinship caregivers per child was $65.57. This was a fraction of the $719.47 per child average monthly reimbursement to family foster care providers (licensed kinship and licensed non-kinship).[209] Most of the adults stepping into these caregiving roles are 41 years old or older, and many experience challenges in this new role. The Arizona's Children Association (AzCA) provides information, support, education, referrals, and advocacy for kinship caregivers.[210] AzCA was awarded a federal grant in 2012 to extend their program into Pinal County over the next three years and established a location in Casa Grande.

Domestic Violence

In fiscal year 2015, two domestic violence shelters in Pinal County, Against Abuse, Inc. and Community Alliance Against Family Abuse, served 546 people, 233 (43%) of whom were children. Additionally, 500 calls were made to hotline and information and referral (I&R) numbers (Table 81).

Table 81. Domestic Violence Shelters

	Total Number Served	Adults Served	Children Served	Number of Bed-Nights	Average Length of Stay (Days)	Number of Hours of Support Services	Number of Hotline and I&R Calls
Pinal Region	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pinal County	546	313	233	19,619	N/A	10,626	500
ARIZONA	7,567	3,862	3,705	293,970	39	144,025	25,185

Source: Arizona Department of Economic Security (2015). Domestic Violence Shelter Fund Report for SFY 2015. Retrieved from des.az.gov/digital-library/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.[xxiii] Pinal County is served by the South GSA, which is serviced by Cenpatico Integrated Care.

In 2015, 436 pregnant or parenting women received publically-funded behavioral health services through Cenpatico Integrated Care in the Pinal Region (Table 82). This was a 17 percent decline from the 528 women who received services in 2012. Conversely, slightly more children ages 0 to 5 received behavioral health services in the Pinal Region in 2015 (896) than in 2012 (841) (Table 83). This represents roughly 11 percent of young children in poverty in the Pinal Region (compared to about 9 percent 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,[211] suggesting that although there is improving coverage in the Pinal Region, there may be an unmet need for services for about 200 additional young children.[xxiv] A key informant noted that many sub-regions do not have accessible behavioral health services.

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.[212] 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 Pinal 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

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

[xxiv] Representing the difference between the 896 low-income children (11%) currently served, and the estimated 1090 (13%) likely in need

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. According to the Zero to Three Policy Center, 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.[213]

Table 82. Number of Pregnant or Parenting Women Receiving Behavioral Health Services, 2012 to 2015

	2012	2013	2014	2015	Change from 2012 to 2015
Pinal Region	**528**	**409**	**302**	**436**	**-17%**
Pinal County	529	409	302	438	-17%
ARIZONA	19,134	17,731	13,657	14,546	-24%

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

Table 83. Number of Children (Ages 0 to 5) Receiving Behavioral Health Services, 2012 to 2015

	2012	2013	2014	2015	Change from 2012 to 2015
Pinal Region	**841**	**859**	**902**	**896**	**+7%**
Pinal County	841	859	902	897	+7%
ARIZONA	13,110	14,396	12,396	14,374	+10%

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

Communication, Public Information, and Awareness[xxv]

[xxv] *The Communication, Public Information, and Awareness 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 that 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 84. First Things First Engagement of Early Childhood supporters, SFY2014 through SFY2016.

	Friends	Supporters	Champions
Pinal Region	834	146	31
ARIZONA	21,369	3,102	908

Source: First Things First.

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 Among Early Childhood Programs and Services 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."[xxvi] 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

[xxvi] *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.[xxvii]

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.

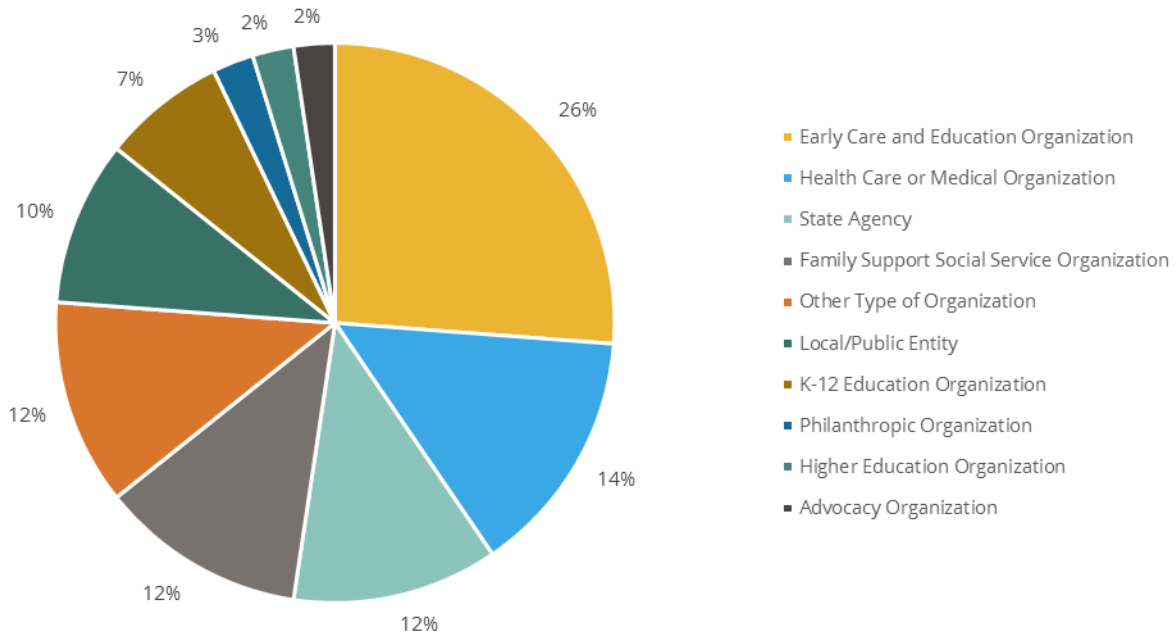
What the Data Tell Us

The results are based on the responses from 42 respondents that participated in the survey from Pinal County out of 77 that were contacted to participate, for a 55 percent overall survey response rate. However, please note that not all respondents answered each question, and that the number of respondents varies by question. 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 Early Care and Education (26%), followed by Health Care or Medical (14%), State Agency (12%), Family Support/Social Service agencies (12%), and "Other" (12%) (Figure 53).

[xxvii] *FTF tribal regions will be surveyed at a later date, once tribal approvals are sought and received for this work.*

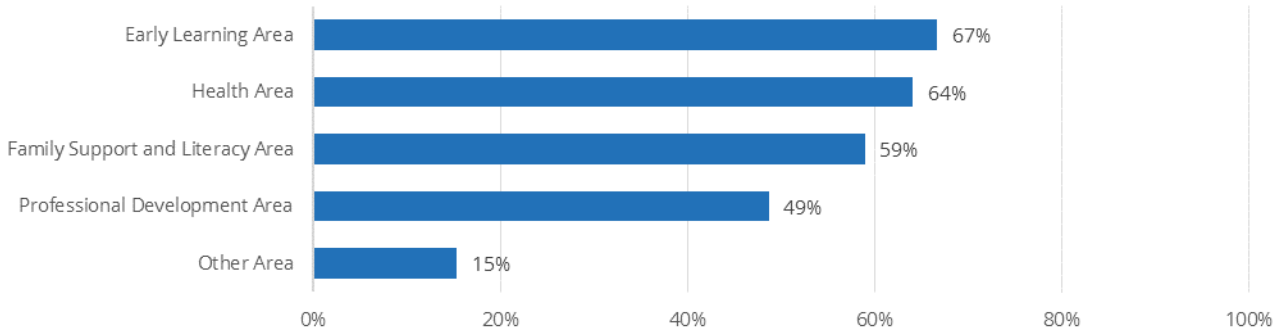
Figure 53. Sectors with which organizations work (N=42)



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

The majority of respondents (92%) consider themselves to be a part of the early childhood system in Pinal Region. Although they were from diverse types of organizations, the area respondents most reported engaging with was Early Learning (67%) (Figure 54). This is in accordance with the large percentage of respondents from the early care and education sector (Figure 53). Many partners reported engaging with multiple key areas of the early childhood system. Although only 14 percent of organizations identified their primary sector as health care, 64 percent of organizations engaged with child health.

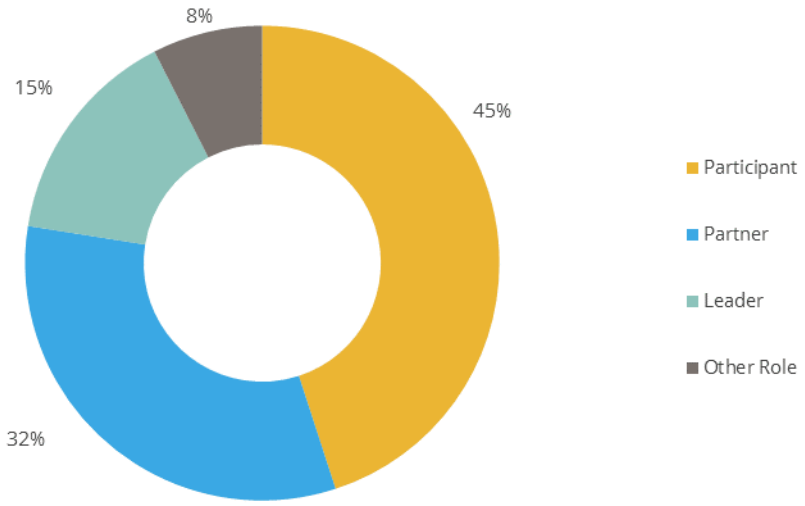
Figure 54. Percent of respondents engaging with each area(s) of the early childhood system (N=39)



Role of an Organization in the Early Childhood System

When asked about their organization's role in the development and advancement of the early childhood system in Pinal Region, respondents most commonly viewed their organization's role as a Participant (45%), i.e., one of many community organizations involved in supporting the early childhood system (Figure 55). About one-third (32%) 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. Fifteen percent indicated their organization was a Leader, i.e., they take the lead for convening and facilitating a group of community members. Eight percent of respondents 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. Respondents falling into the "other" category could likely be reclassified as participants (e.g., a preschool and behavioral health service provider).

Figure 55. Role of organization in the development and advancement of the Early Childhood System in Pinal County (N=40)



In their roles as participants, partners, or leaders, respondents noted numerous successful partnerships. Organizations that identified their role as that of a Participant described partnering with other groups for staff trainings and presentations, sharing resources put out by other groups (e.g., the First Things First Resource Book), serving in coalitions (e.g., Pinal Early Childhood Coalition), participating in special events (e.g., World Breastfeeding Week), and providing books to children at pediatric well-child visits. Organizations that identified their role as that of a Partner also indicated that they participated in coalitions, coordinated special events, provided physical space for outreach efforts of other organizations, and oversaw referrals to services. Organizations that identified their role as that of a Leader shared similar experiences in partnerships, with one organization actively

organizing and facilitating the Community Advocacy, Referral & Education (CARE) Network, the Annual Resource Roundup, and publishing a newsletter.

The following organizations were specifically mentioned as participating in successful partnerships in the Pinal Region.

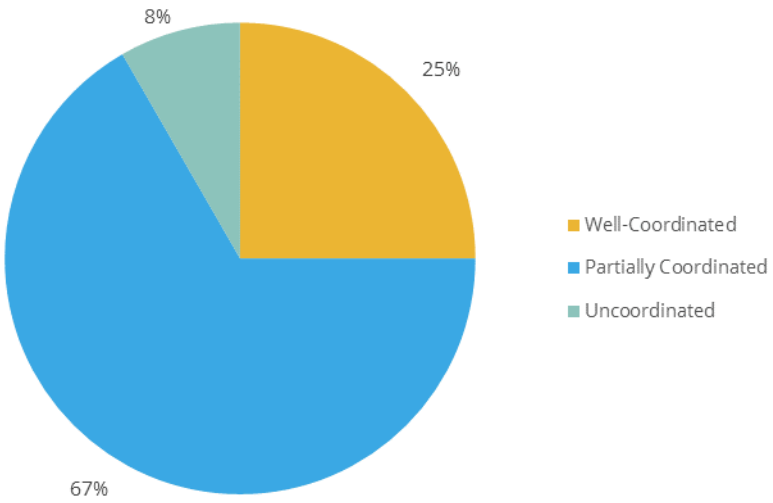
- Best for Babies Court team
- Arizona Early Intervention Project (AzEIP)
- University of Arizona Cooperative Extension
- First Things First
- Read On Arizona (including local coalitions)
- Pinal Early Childhood Coalition
- Community Advocacy, Referral & Education (CARE) Network
- Easter Seals Blake Foundation
- Early Head Start/ Head Start
- Home Visitation Coalition
- Apache Junction Public Library Parenting Education Program (Fun Van)
- SmartSupport
- Project Me Too
- STV Compassion Care Center

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.

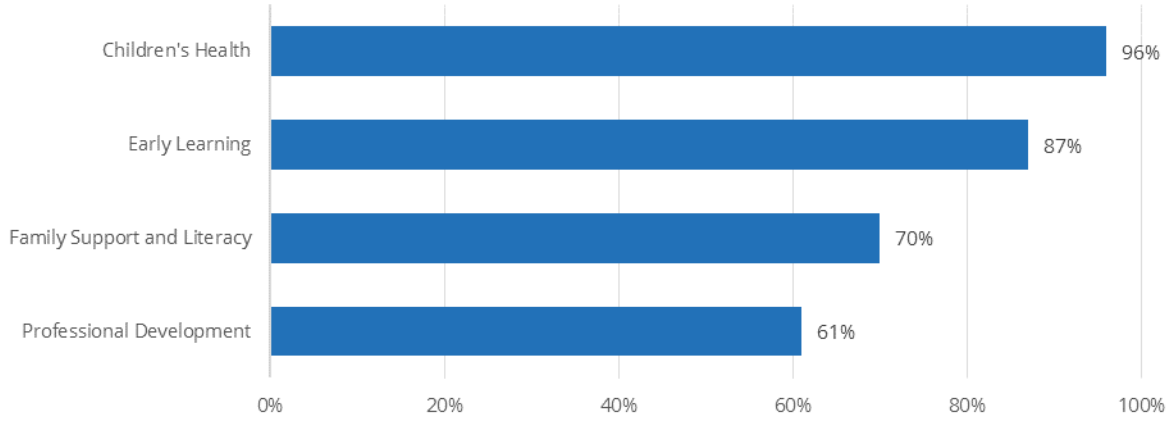
A majority (67%, n=16) of survey respondents described the early childhood system in Pinal County as a partially coordinated system, with one quarter of respondents (25%, n=6) describing the system as a well-coordinated system, and 8 percent (2 respondents) viewing the early childhood system as a group of separate, uncoordinated system partners working in isolation (Figure 56).

Figure 56. Describe the Early Childhood System in Pinal Region (N=24)



The majority of respondents reported that the early childhood system in Pinal County effectively addresses the needs of young children and their families (Figure 57). Nearly all respondents (96%) agreed that young children's health needs are effectively addressed by the system in the region. However, nearly one in three respondents felt that family support and literacy needs were not effectively addressed, and nearly 40 percent felt the professional development system is not effective.

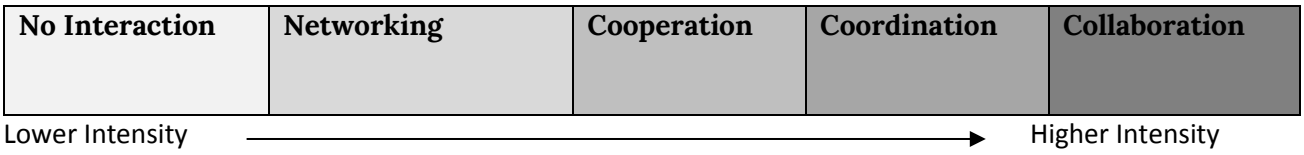
Figure 57. Percent agreeing that the Early Childhood System in Pinal County effectively addresses the needs of young children and their families across key areas (N=23)



Continuum of Collaboration in the Early Childhood System Areas

In order to understand the current system and 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 58).

Figure 58. The five levels of the Continuum of Collaboration



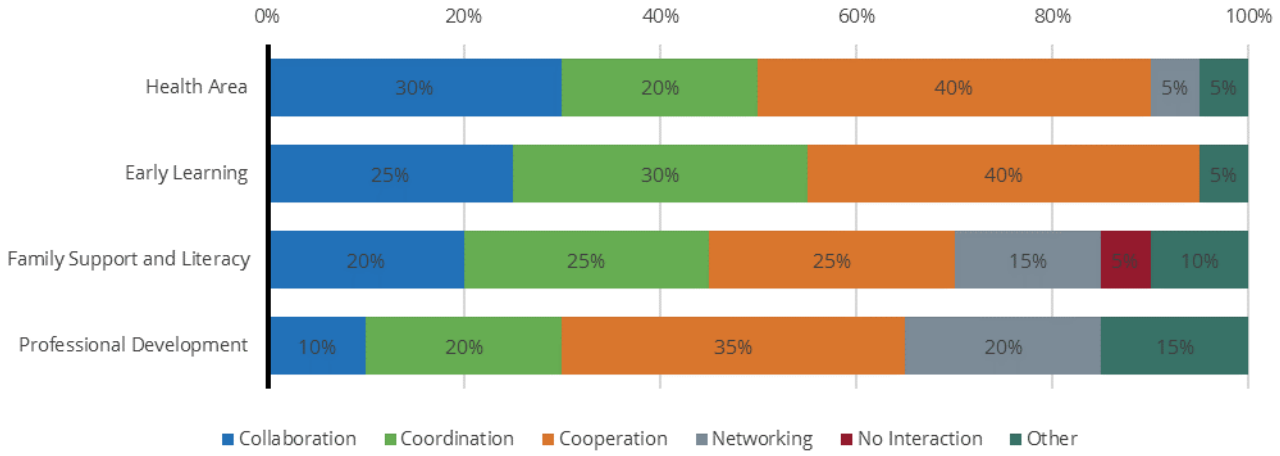
These stages, as described by Frey and colleagues,[214] are:

- **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 Pinal County for each area of the Early Childhood System. Fewer than half of the respondents chose to complete this section (n=20). In accordance with respondents' view of the early childhood system as only a partially coordinated system (Figure 56), 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. The most

collaboration among partners in Pinal County reportedly happened within the area of Children's Health, where 30% of respondents indicated that *collaboration* was occurring. This was followed by the areas of Early Learning (25%), Family Support and Literacy (20%), and Professional Development (10%) (Figure 59). This mirrors the results for effectiveness, suggesting that greater collaboration is more likely to result in families with young children having their needs effectively met.

Figure 59. Continuum of Collaboration in the Early Childhood System Areas (n=20)



Across all areas, the greatest proportion of respondents indicated that they perceived *cooperation* among system partners (Figure 59); a relationship characterized by short-term, informal relationships that exist without a clearly defined mission. With the exception of the Health area, a higher proportion of participants selected *coordination* than indicated *collaboration* as well. *Coordination*, a relationship of relatively high intensity, involves more formal planning and division of roles and opens communication channels between organizations. *Networking*, a relationship of low intensity, characterized by bringing individuals or organizations together for relationship building and information sharing, was more frequently indicated in the area of Professional Development (20%) than in other areas.

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.[xxviii] In the area of Family Support and Literacy, respondents felt that K-12 Education agencies (69%), Family Support/Social Service

[xxviii] *Note that only 16 participants completed this portion of the survey; one organization's response now carries a weight of about 7 percent.*

(69%), and Early Care and Education (63%) agencies were most involved in system building work in Pinal County (Figure 60).

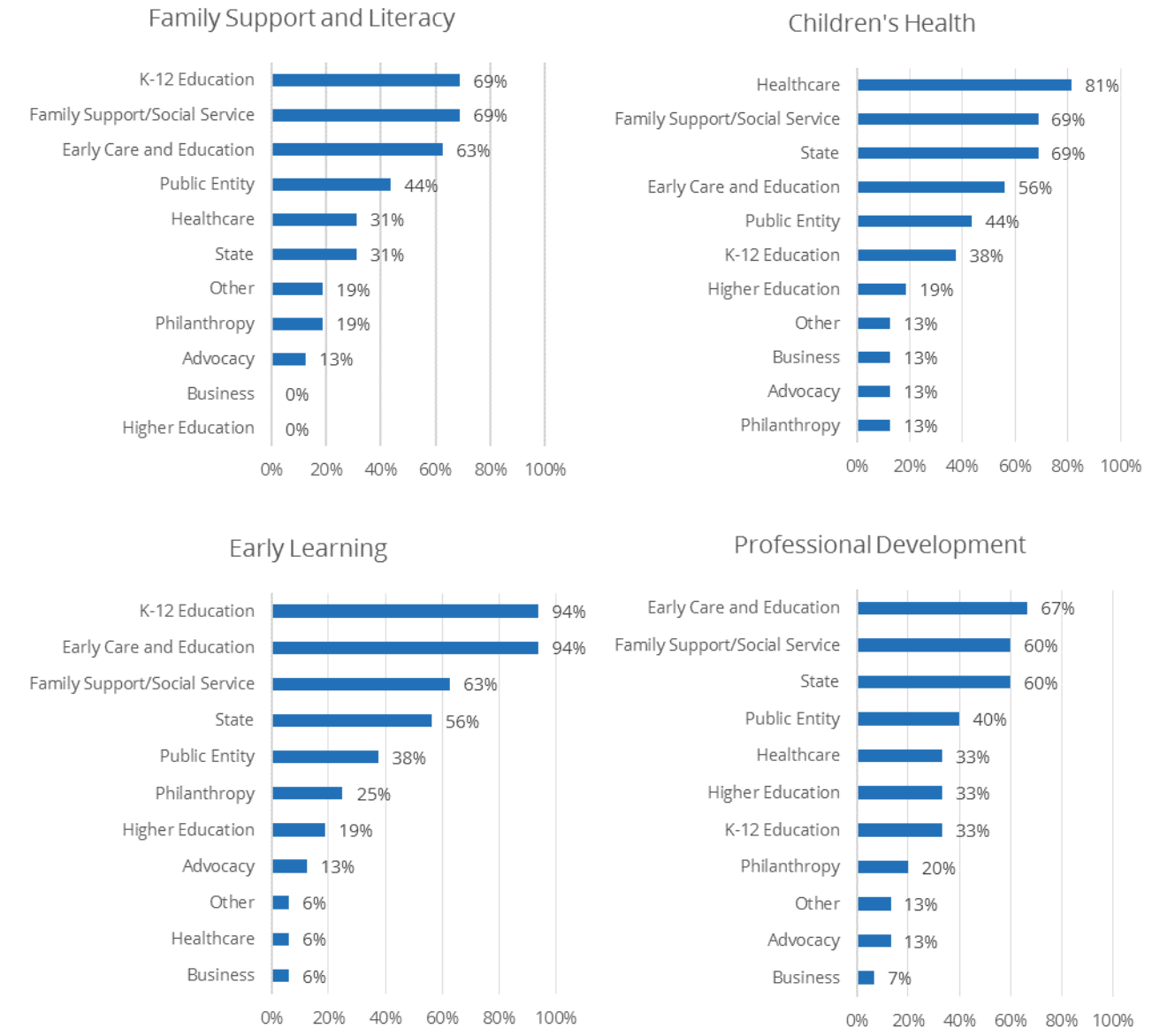
In the area of Children's Health, respondents indicated that the Health Care/Medical Sector (81%), Family Support/Social Service (69%), State Agencies (69%), and Early Care and Education (56%) sectors were the most engaged in systems buildings.

In the area of Early Learning, nearly all respondents (94%), noted that the K-12 Education and Early Care and Education sectors played a role in systems building. A majority of respondents also indicated engagement by Family Support and Social Services (63%) and State Agencies (56%).

Finally, in the area of Professional Development, most participants (67%) indicated that Early Care and Education were involved, followed by Family Support/Social Services (60%) and State Agencies (60%).

Across all four areas, the Business, Advocacy, Philanthropy, and Higher Education sectors played fairly small roles in system building work in Pinal County (Figure 60). Philanthropy was most important for Early Learning, where 25 percent of participants indicated its involvement, and Higher Education was the most engaged in work around Professional Development, where 33 percent of respondents noted contribution from that sector.

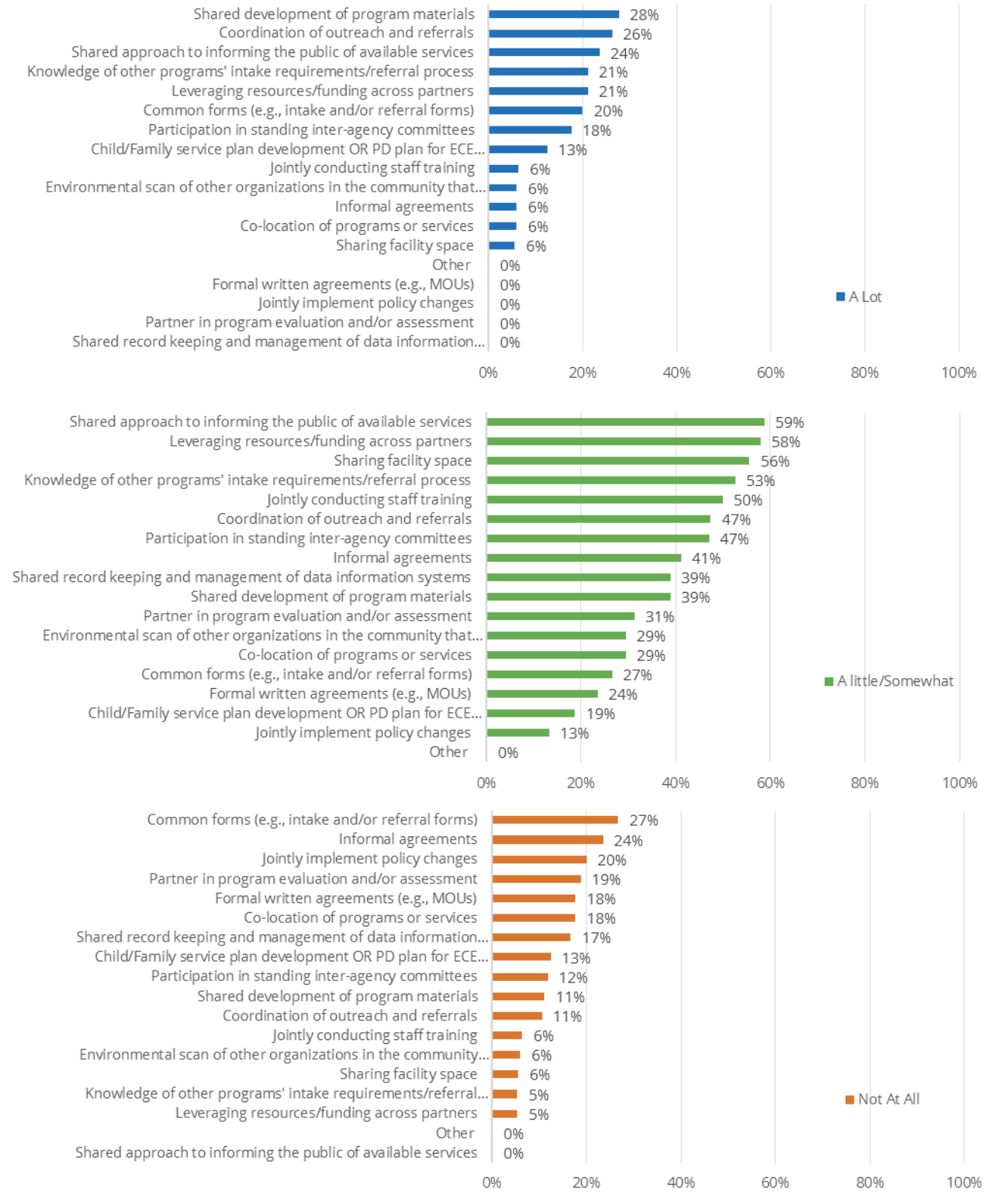
Figure 60. Sectors involved in/engaged in system building work in Pinal County (n=16)



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 many (23-28; 54%-67%, depending on the question) of those who agreed to take the survey opted not to respond to this portion of the survey.[xxix] Of those who did respond, many indicated that they did not know the answer for many activities.

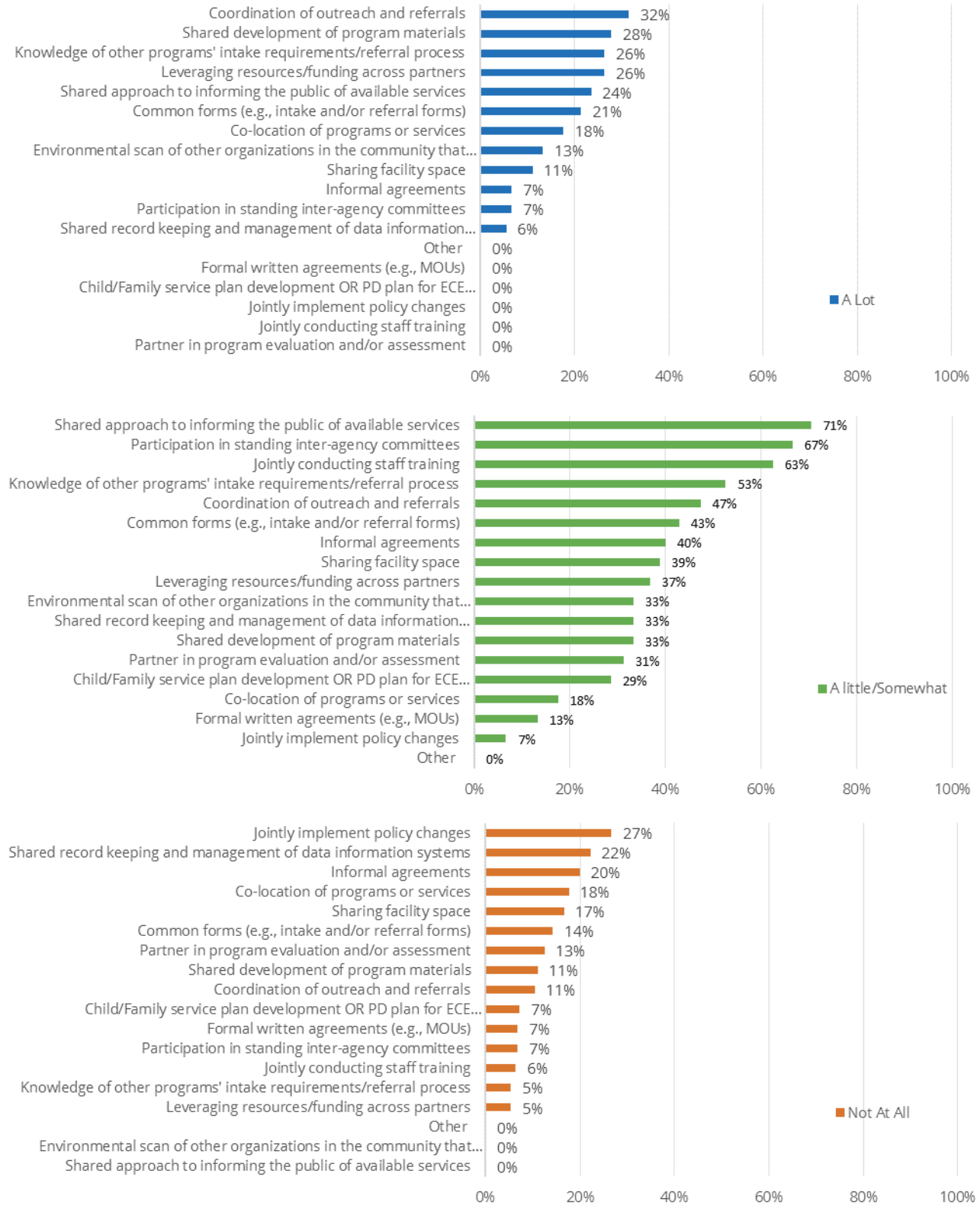
[xxix] *Based on the pool of 77 organizations and agencies who were sent the survey, this portion of the survey has a response rate of 18-25%.*

Figure 61. Frequency of Activities: Family Support & Literacy



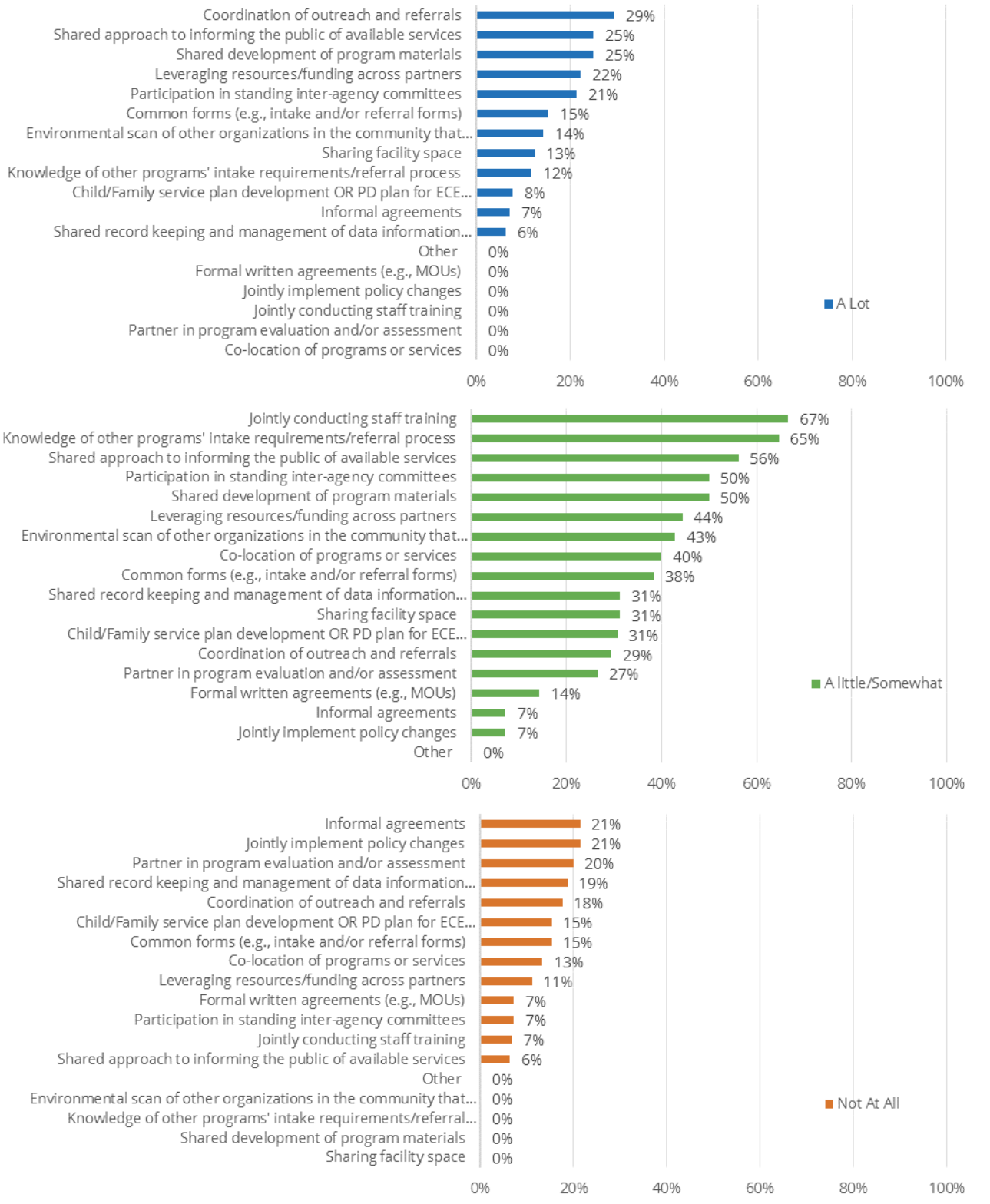
Based on the answers of those who did respond (n=14 to 19, depending on the question), activities that system partners within Family Support and Literacy are using include: shared approach to informing the public of available services, leveraging resources/funding across partners, coordination of outreach and referrals, and knowledge of other programs' intake requirements/referral process (Figure 61). Areas where there is a low perceived level of activity include: using common forms (e.g., intake and/or referral forms), having informal agreements, partnering in program evaluation and/or assessment. These activities represent opportunities for continued growth for system partners.

Figure 62. Frequency of Activities: Children's Health



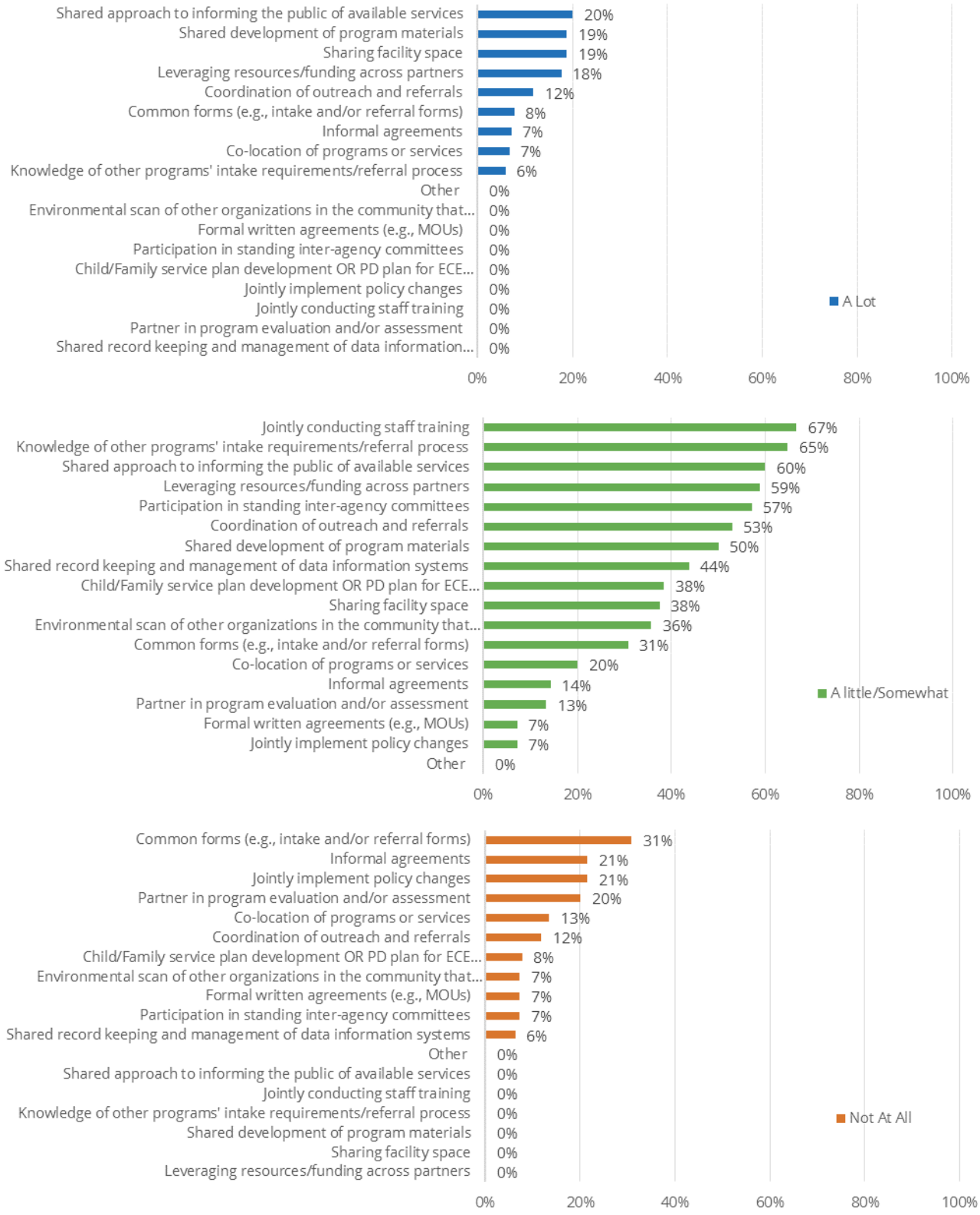
Nearly all respondents (94%) thought that there was at least a modest level of activity with regard to using a shared approach to informing the public of available services. Additional activities that system partners within Children's Health area are using include: knowledge of other programs' intake requirements/referral process, coordination of outreach and referrals, and participation in standing inter-agency committees (Figure 62). Areas where there is a low perceived level of activity include: jointly implementing policy changes, shared record keeping and management of data information systems, and having informal agreements. These activities may be opportunities for system partners to collaborate on in the future.

Figure 63. Frequency of Activities: Early Learning



Activities that system partners within the Early Learning area are perceived to be actively engaged in include: shared approach to informing the public of available services, knowledge of other programs' intake requirements/referral process, shared development of program materials (Figure 63). Activities where there is a low perceived level of use include: jointly implementing policy changes, informal agreements, partnering in program evaluation and/or assessment, and shared record keeping and management of data information systems. The Children's Health area was also weakest in these areas, suggesting that support for these activities could be beneficial across the early childhood system.

Figure 64. Frequency of Activities: Professional Development



Activities that system partners within the Professional Development area are perceived to be actively engaged in include: using shared approaches to informing the public of available services, leveraging resources/funding across partners, knowledge of other programs' intake requirements/referral process, and shared development of program materials (Figure 64). Activities where there is a low perceived level of use include: common forms (e.g., intake and/or referral forms), informal agreements, jointly implement policy changes, and partnerships in program evaluation and/or assessment.

Commonalities that emerged across all four topic areas were that respondents expressed relatively little knowledge about formal agreements, jointly implemented policy changes, and whether there were partnerships in program evaluation and/or assessment.

Barriers and Future Directions

Barriers and Future Directions

Participants were asked to reflect on barriers in moving the system forward with other early childhood system partners. The most commonly cited barrier was geographic, that is, the challenges of serving an area with high travel times and limited access in rural communities. Another common theme was that of limited human capital (i.e., qualified staff) and limited professional development opportunities (specific challenges around professional development opportunities being canceled were raised, as were frustrations about working with the local college). Multiple respondents also noted that professional silos continued to be problematic and that there was "not enough communication and collaboration among agencies in what others are doing/accomplishing." Respondents additionally expressed that they struggled to get communities – and even providers – to be aware, active, and engaged in the services that are available. Affordability and limited access to programs were also seen as barriers.

Survey participants were then asked to reflect on the role of the Pinal Regional Partnership Council (RPC) in supporting early childhood system building and collaboration efforts in the region. Noted contributions of the RPC included funding, supporting coalitions that bring together "a variety of organizations to work towards common goals," developing processes and a form for referrals, and publishing the Family Resource Guide.

Additional ideas for ways that the RPC could support early childhood system building and partner collaboration efforts in the Pinal Region included:

- Monthly or bi-monthly networking meetings among all licensed centers
- Supporting the expansion of affordable early childhood programs and after-school programs
- Fostering more early childhood focused activities in the community
- Increasing the number of professional development trainings available
- Becoming "more acquainted with the agencies on the front lines by visiting their programs and events,"
- Increased participation (by RPC members) in community activities.

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 Pinal 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 key informant information provided during a data interpretation session. A summary of identified regional assets is included below.

Population Characteristics

- Communities have a strong sense of pride and local identity.
- Communities are ethnically, racially, and culturally diverse.
- Relatively high rate (70%) of children living in two-parent households.
- About 15 percent of residents speak multiple languages proficiently.

Economic Characteristics

- Steadily declining unemployment rates (from 12.3% in 2009 to 6.3% in 2015).
- High rates (73%) of home-ownership.
- As of 2015, 141 sites participating in the Summer Food Service Program to help address hunger when school is not in session.
- The Child and Adult Care Food Program provided many more meals in 2015 (686,790) than in years prior (around 450,000 in 2012-2014).

Educational Indicators

- Mary C O'Brien Elementary School serves children with diverse learning needs, while also having some of the highest AzMERIT scores (67% passing both math and ELA) and best attendance rate (84% of students attend regularly).
- The Red Rock-Saddlebrooke area has high human capital with regard to the proportion of adults holding bachelor's degrees (40%).
- Pre-kindergarten programs in multiple communities are supporting the needs of students in special education.

Early Learning

- 34 providers participating in the Quality First program, 11 with a 3- or 4-star rating
- Child care centers are slightly lower cost in Pinal than elsewhere (e.g., $39.00/day for infant care in Pinal vs. $42.00/day care in Arizona).
- A strong network of Head Start and Migrant Head Start providers support both typically-developing students and students with special needs.
- Numerous (34) registered family child care providers, which are more likely to offer care for parents who work nights and weekends.
- The Friend Family Neighbor (FFN) Caregiver Outreach Assistance Project, run by United Way of Pinal County, supports kith and kin caregivers.

- Grandparents are increasingly enrolling in the FFN program and receiving support as they take on caregiving roles (73 enrollees in 2015-2016).
- Arizona Early Intervention Program (AzEIP) served nearly twice as many children in 2015 (692) as it did in years prior.

Child Health

- The majority (81%) of babies are born to mothers who received at least 9 prenatal care visits.
- Premature births declined between 2010 (10.4%) and 2013 (8.7%) (though did increase again in 2014 to 9.3%), and most babies (93%) are born at a healthy weight.
- Breastfeeding rates have been increasing among WIC participants (58%, 2012 to 68%, 2015).
- The vast majority of children in child care the Pinal Region are up-to-date on the CDC-recommended vaccinations.
- Of all the regions, Pinal has the lowest rate (41%) of children experiencing tooth decay.

Family Support and Literacy

- Two domestic violence shelters exist to serve women and families in need.
- Better for Babies Court Team exists to serve the unique needs of young children in the child welfare system.
- The Substance Exposed Newborn Safe Environment (SENSE) program has expanded to Pinal County.

Communication, Public Information and Awareness

- 31 early childhood "champions" are engaged in the Pinal Region, along with 146 "supporters" who have been trained in early childhood messaging.

System Coordination among Early Childhood Programs and Services

- The children's health system was widely perceived (96%) to be effectively addressing the needs of young children and their families.

Despite these many and varied regional assets, 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. The landscape of available services looks quite different for areas adjacent to the Phoenix metropolitan area. Key informants noted that Pinal is a collection of communities, and in some of the sub-regions where multiple communities were unified to facilitate reporting, it may be distorting the lived reality of children. This is likely to be especially true in areas with high numbers of retirees. For example, the Apache Junction-Gold Canyon sub-region unites two places with decidedly different demographic profiles: the median age in Gold Canyon is 63.4 and the median income is $67,202[215] whereas the median age in Apache Junction is 49 and the median income is $36,771.[216] The needs of children in Apache Junction run the risk of being overlooked for services because of their relatively well-off neighbors. Similarly, the Eloy-Arizona City and Copper Corridor sub-regions stood out as being different from the region overall on a number of indicators; such areas run the risk of being overlooked for services if only region or county-level "averages" are examined.

Many of these needs have been recognized as ongoing issues by the Pinal Regional Partnership Council and are being addressed by current First Things First-supported strategies in the region. These needs include:

- **A need for affordable, high quality and accessible child care** – The capacity of early care and education slots available compared to the number of young children in the region point to a shortage of affordable and accessible early care and learning opportunities in the region. While the cost of center-based care is lower in Pinal than elsewhere, family and group-based care is more expensive, both on an absolute scale and relative to the median income in the region. Families in Pinal are paying 14-17 percent of their income, depending on the child's age, for a child care slot; this exceeds the recommended 10 percent of annual income. Continued regional investment in Quality First Scholarships, Coaching and Incentives, and Child Care Health Consultation strategies may help address this issue, especially with a focus toward communities with the greatest need for early care and education providers.
- **A need for services for grandparents raising grandchildren and other kinship caregivers** – High percentages of children in some communities live with relatives or grandparents who are responsible for their care. Grandparent-headed families in all parts of the region are likely to have unique needs related to raising young children in all parts of the region. Additional services for kinship caregivers in the region could help support these families. The Friend Family Neighbor Caregiver Outreach Assistance Program by United Way of Pinal County, a funded strategy of the Regional Partnership Council, is helping to support kinship caregivers by offering professional development.
- **A need for additional resources for children with special needs** – Information obtained through key informants and quantitative data on early intervention referrals and numbers served, points to the need for additional resources for children with developmental, behavioral and physical health care needs. Behavioral health services are vital, but not readily accessible to children in all areas of the region. Early intervention can not only improve the developmental trajectory of individual children, but it can also reduce burdens on school districts by decreasing the need for special education services once children reach school age. The Pinal Regional Partnership Council has recognized this need and is partnering with the University of Arizona Cooperative Extension for developmental and sensory screenings and referrals for follow-up services in FY2017.[217]
- **A need for an improved educational pipeline** – Young children in the Pinal Region are often progressing into an educational setting that is not performing at an optimal level. Chronic absenteeism, increasing drop-out rates, decreasing graduation rates, and low passing rates on AzMERIT suggest that schools are not currently preparing all students for a successful future and career. Fewer than 1 in 5 adults aged 25 and older in the Pinal Region has a bachelor's or higher degree, and in the Florence-Coolidge, Eloy-Arizona City, and Copper Corridor sub-regions, the majority of adults have no post-secondary education. In the Florence-Coolidge and Eloy-Arizona City sub-regions, about 1 in every 4 adults did not complete high school. The funding of strategies targeting early childhood education helps to prepare students to succeed in school. Strategies focusing on parenting education and home visitation may help support parents as first teachers, regardless of their own education level.

A table of Pinal Regional Partnership Council funded strategies for fiscal year 2017 is provided in the appendix.

This report also highlighted some regional needs (i.e., issues of concern that affect many community members) that could be considered as additional targets by stakeholders in the region.

- **A need for increased prenatal and pre-conception care.** Women of child-bearing age in Pinal County were the least likely to have a doctor, nurse or other health care worker discuss ways to prepare for a healthy pregnancy and baby, relative to women in other Arizona counties. Given that nearly a quarter of pregnant women do not receive prenatal care in the first trimester, pre-conception conversations could provide an opportunity to promote healthy pregnancies. Education around the importance of early prenatal care could be addressed through existing regional strategies such as Home Visitation, Parent Education and Community Outreach and Awareness.
- **The need for additional resources for young children and families facing food insecurity** - Over a quarter of children (those under 18 years old) are food insecure, and about two-thirds of students have been eligible for free or reduced-price lunch since 2012 in the region. The region shows decreases in those receiving TANF and SNAP benefits (likely due to state-level funding decisions), lower levels of participation in WIC, and large percentages of families living near the poverty level. In the Eloy-Arizona City sub-region need is particularly great: both the total and the young child population are more likely to live below the poverty level than for the region as a whole, and more than one in five young children live with a single parent not in the labor force. Participation in CACFP has increased substantially in the region, suggesting that resources are expanding, however more resources are likely needed.
- **The need for Spanish-language and English-learning resources** – Although bilingualism and bi-culturalism are assets in the region, multiple sub-regions have substantial numbers of residents who do not speak English "very well", and the high proportion of English-language learners in schools in some districts requires a recognition that families may need additional Spanish-language supports to access services and resources. Undoubtedly such supports exist in many agencies and organizations across the region, but additional language support services, such as adult educational classes might be needed.

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

Population Characteristics

- Relatively high percentages of children in Copper Corridor (13%) and Red Rock-Saddlebrooke (8%) communities live with relatives other than their parents or with non-relatives, and in Eloy-Arizona City, a high percentage of grandchildren live with a grandparent without a parent present. These caregivers, particularly grandparents who may be older, may require additional support.

Economic Characteristics

- Nearly half (46%) of families in the region with children younger than 5 live below 185 percent of the Federal Poverty Level (FPL); in Eloy-Arizona City, this is true for over three-quarters (77%) of families.

- In the Copper Corridor (20%), Eloy-Arizona City (24%), Apache Junction-Gold Canyon (22%), and Casa Grande (15%) sub-regions, 15 percent or more of children live in a family with no parents in the labor force.
- Over a quarter (26%) of children are food insecure in the county, and three-quarters (75%) of children are likely eligible for nutrition assistance, but rates of enrollment in nutrition assistance programs are not nearly that high for young children.
- WIC participation rates are lower in the Pinal Region (71%) than the state (77%), meaning that eligible families are going without available supports.
- The per capita availability of grocery stores, including SNAP and WIC retailers, and fitness facilities is more limited than elsewhere in the state.

Educational Indicators

- The shares of students passing the AzMERIT Math (38%) and English Language Arts (35%) Assessments were lower than that of the state (41% and 40%, respectively), and particularly low in several regional school districts.
- Chronic absenteeism among young children in grades 1-3 is a significant problem (39%) in Pinal Region schools, and in most districts it worsened between 2014 and 2015.
- Drop-out rates are higher than rates across the state and increasing slightly, and graduation rates in Pinal schools are lower than those elsewhere in Arizona.
- Fewer than 2 in 10 (18%) adults have a bachelors degree or higher.

Early Learning

- There are many more children ages 0 to 5 than there are available child care slots.
- Quality First participation is minimal among home providers (only 5 in the region); these providers are more likely to provide night and weekend care and families enrolled in these centers may find QF scholarships especially helpful.
- Child care in group homes and family homes is more costly in Pinal than elsewhere.
- About 4 percent of children in the region received early intervention services whereas research suggests that 13 percent of children likely have special needs. Thus, a large number of children in the region may have special needs but not receive services.

Child Health

- High proportions of children in Maricopa-Ak Chin-Stanfield (16%) and Red Rock-Saddlebrooke (20%) appear to lack health insurance.
- The percent of mothers who reported smoking during pregnancy (6.4%) was higher than either the state rate (4.6%) or the Healthy People 2020 goal.
- Mothers using WIC in the Pinal Region and County were slightly more likely to have obesity (33%) than mothers elsewhere (31%), which can be associated with problems during pregnancy and birth.
- Pinal County has the lowest rate of pre-conception counseling by a health care provider.
- Pinal infants were admitted to the neonatal intensive care unit (NICU) at a higher rate (9.2%) than infants elsewhere (6.7%). Given the rates of uninsurance in some communities, this could be financially disastrous for some families.

- The region has a higher rate (29%) of children with untreated decay than the state overall and is not meeting the Healthy People 2020 benchmark.
- The adult obesity rate (31.6%) in Pinal County is higher than that of Arizona overall (26.8%) or the Healthy People 2020 target (<30.5%).
- About 25 percent of children in the Pinal Region have overweight or obesity, setting the stage for future health problems.

Family Support and Literacy

- Substantiated child welfare cases increased dramatically in 2016 (144 between April and September, up from 42 in the 6 months prior).
- Although there is improving coverage in the Pinal Region, many communities do not have access to behavioral health services, and there may be an unmet need for mental health services for about 200 additional young children in low-income families.

System Coordination among Early Childhood Programs and Services

- Three out of every four (75%) partners in the early childhood system did not feel that the system was well-coordinated.
- Partners in the early childhood system expressed relatively little knowledge about the use of formal agreements between partners, jointly implemented policy changes, and whether there were partnerships in program evaluation and/or assessment.

Successfully addressing the needs outlined in this report will require the continued concentrated effort of collaboration among First Things First and other state agencies, the Pinal Regional Partnership Council and staff, local providers, and other community stakeholders in the region. Although there are many challenges for families, leveraging unique opportunities for community collaboration, resource-sharing, and collective impact through both funded and unfunded strategies can help support the health, welfare, and development of the diverse families and young children of the Pinal Region.

APPENDICES

Table of Regional Strategies

Pinal Regional Partnership Council Planned Strategies for Fiscal Year 2017

Strategy	Strategy description
Quality First Scholarships	Provides scholarships to children to attend quality early care and education programs. Helps low-income families afford a better educational beginning for their children.
Quality First Coaching & Incentives	Supports provided to early care and education centers and homes to improve the quality of programs, including: on-site coaching and resources.
Quality First Academy	Provides professional development to enhance high quality coaching, consultation and technical assistance practices across the early childhood system.
Family, Friends & Neighbors	Supports provided to family, friend and neighbor caregivers include training and financial resources. Improves the quality of care and education that children receive in unregulated child care homes.
QF Child Care Health Consultation	Provides qualified health professionals who assist child care providers in achieving high standards related to health and safety for the children in their care. Improves the health and safety of children in a variety of child care settings.
Oral Health	Provides oral health screenings and fluoride varnish in a variety of community-based settings; provide training to families on the importance of oral health care for their children; and provide outreach to dentists to encourage service to children for a first dental visit by age one. Decreases preventable oral health problems in young children.
Mental Health Consultation	Provides mental health consultation to teachers and caregivers, and other early childhood professionals. Helps early childhood program staff to support the social-emotional development of young children.
Developmental and Sensory Screening	Provides children with developmental, oral, vision, and/or hearing screening and referrals for follow-up services. Increases children's access to preventive health care and helps to identify potential learning problems early on.
Parenting Education	Provides classes on parenting, child development and problem solving skills. Strengthens families with young children by providing voluntary classes in community-based settings.
Home Visitation	Provides voluntary in-home services for infants, children and their families, focusing on parenting skills, early physical and social development, literacy, health and nutrition. Connect families to resources to support their child's health and early learning. Gives young children stronger, more supportive relationships with their parents through in-home services on a variety of topics, including parenting skills, early childhood development, literacy, etc. Connects parents with community resources to help them better support their child's health and early learning.
Statewide Evaluation	Statewide evaluation includes the studies and evaluation work which inform the FTF Board and the 28 Regional Partnership Councils, examples are baseline Needs and Assets reports, specific focused studies, and statewide research and evaluation on the developing early childhood system.
Service Coordination	Through coordination and collaboration efforts, improves and streamlines processes including applications, service qualifications, service delivery and follow-up for families with young children. Reduces confusion and duplication for service providers and families. . Strengthens and improves the coordination of services and programs for children 5 and younger.
Media	Increases public awareness of the importance of early childhood development and health via a media campaign that draws viewers/listeners to the ReadyAZKids.com web site.
Community Outreach	Provides grassroots support and engagement to increase parent and community awareness of the importance of early childhood development and health.
Community Awareness	Uses a variety of community-based activities and materials to increase public awareness of the critical importance of early childhood development and health so that all Arizonans are actively engaged in supporting young kids in their communities.

Methods and Data Sources

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

U.S. Census and American Community Survey Data.

The U.S. Census[218] 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[219] 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 Pinal 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 Pinal 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:

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

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 20. 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 child care and early education capacity in the region. This measure was calculated by summing the child care 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 subregion 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.

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 Pinal Regional Partnership Council has identified the following topics as priority areas: (a) access to child care, (b) families of children with special needs, and (c) foster and kinship care.

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 Pinal Region Data Interpretation Session was held in Casa Grande on September 20, 2016 and included invited community members, including grantees, as well as the Regional Partnership Council and Regional Director and FTF Research and Evaluation staff. Feedback from participating session members are included as key informant citations within the report, as appropriate.

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.[xxx] 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.[xxxi] A total of 3,630 kindergarten children in Arizona received a dental screening. In the 5 regions, 219 children received a dental screening.

Sampling

[xxx] *Using another funding source, ADHS expanded data collection to include 3rd grade children but that information is not included in this report.*

[xxxi] *Schools serving children with special needs and schools located in tribal communities were excluded.*

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.[xxxii] 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.

Family Caregiver 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*[xxxiii]. Survey items explored multiple facets of parenting. The FTF Family and Community Survey had six major areas of inquiry:

[xxxii] *Probability proportional to size sampling: a sampling technique where the probability that a particular school will be chosen in the sample is proportional to the enrollment size of the school*

[xxxiii] 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

- 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 Pinal Region, 200 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 were 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.

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 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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