

# # FIRST THINGS FIRST

Yuma



## 2018 NEEDS AND ASSETS REPORT

# **YUMA REGIONAL PARTNERSHIP COUNCIL 2018 NEEDS AND ASSETS REPORT**

Prepared by

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University of Arizona

Funded by

First Things First Yuma Regional Partnership Council

# LETTER FROM THE CHAIR

January 26, 2018

## Message from the Chair:

Since the inception of First Things First, the Yuma 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 Yuma Regional Council would like to thank our Needs and Assets vendor, University of Arizona, Community Research, Evaluation, and Development (CRED) John and Doris Norton School of Family and Consumer Sciences College of Agriculture and Life Sciences, for their knowledge, expertise and analysis of the Yuma 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 Yuma 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,



Rev. Dr. Darren Hawkins, 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 Yuma 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 Yuma 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 Yuma 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 Arizona Health Care Cost Containment System, Yuma County Superintendent's office, all school districts in Yuma County, 8 Arizona PBS Educational Outreach, Arizona Western College, Association for Supportive Child Care, Campesinos Sin Fronteras, Chicanos Por la Causa, Child and Family Resources, Easter Seals Blake Foundation, Reach Out and Read Arizona-Yuma, Read on Yuma, Regional Center for Border Health, Sunset Community Health Center, The University of Arizona Cooperative Extension, United Way of Yuma County, Western Arizona Council of Governments, Yuma Community Food Bank, Yuma County AzAEYC, Yuma County Health District, Yuma Regional Medical Center, Yuma County Chamber of Commerce, Yuma County libraries, Yuma Sun, and members of the Yuma County Early Childhood Collaborative 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 Yuma Regional Partnership Council, your vision, dedication, and passion have been instrumental in improving outcomes for young children and families within the region. Our current efforts will build upon those successes with the ultimate goal of building a comprehensive early childhood system for the betterment of young children within the region and the entire state.

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# EXECUTIVE SUMMARY

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

## Population Characteristics

According to the U.S. Census, 17,983 children under the age of six reside in the Yuma Region representing approximately nine percent of the region's total population. This ranged from a low of seven percent of young children living in the East sub-region, to a high of 11 percent living in the South sub-region. The population of young children is projected to grow by 31 percent to 25,196 by 2040. Seventy-six percent of young children in the Yuma Region are Hispanic or Latino and 19 percent are white.

Based on data from the 2010 U.S. Census, one out of every five households (20%) in the Yuma Region has at least one child under 6 years old. The largest concentration of these families is in the South sub-region, where 32 percent of households have a young child. The East sub-region has relatively fewer households with young children (12%). According to the American Community Survey, 36 percent of children in the Yuma Region live with a single parent, which is slightly lower than the proportion statewide (38%). However, in the South sub-region, close to half (44%) of children live with a single parent, whereas in the East sub-region only 16 percent of young children live with a single parent. The proportion of young children living in a grandparent's household is slightly higher in the region (19%) than the state (14%). Forty-two percent of children ages birth to 17 living with grandparents in the Yuma Region live in multigenerational homes where the grandparent has assumed responsibility for the child, despite the presence of a parent, and eight percent of these children who live with their grandparents do not have a parent present in the household. A substantially higher proportion of the grandchildren living with their grandparents in the East sub-region (59%) are being raised with no parent present.

Less than half of Yuma Region residents age 5 and older (48%) speak English at home, with Spanish being the most common home language (50%). In the South sub-region, more than four out of five people (84%) speak Spanish at home, and almost half are limited-English speaking (that is, do not speak English "very well"). Twenty six percent of children enrolled in kindergarten through third grade in the region are classified as "English-language learners" (ELL).

## Economic Characteristics

The median income for Yuma County families is \$44,317. The median income for families with married parents (husband-wife) and children under age 18 is about \$7,500 higher (\$51,895); single-parent families make substantially less. The median income for households run by a single female in the Yuma Region is \$20,354; households led by single males make about 58 percent more (\$35,231). Twenty-one percent of the total (all-age) population of the Yuma Region lives in poverty, and 26 percent of the population aged birth to 5 lives in poverty in the region. In the South sub-region, both the total population (30%) and the young child population (32%) are more likely to live below the poverty level than for the region as a whole. Conversely, the percentage of those living in poverty in the Central and East sub-regions both fall below the regional and state percentages. More than half of families (58%) 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). More families with children in the East and South sub-regions are living below 185 percent of the FPL (69% and 73% respectively). In spite of this need, the number of young children supported by the TANF/Cash Assistance program has declined in recent years, in the region (-34%) and statewide (-39%).

Unemployment rates have dropped overall in Yuma County, but with an uptick in 2013. In 2016, the unemployment rate in Yuma County was 18.6 percent compared to 5.3 percent for the state. Over half (59%) of young children in the region live in a home where all the parents participate in the labor force.

In Yuma County 36 percent of children (those under 18 years old) are food insecure, higher than the state's 27 percent. Although the number of young children participating in SNAP has declined since 2012, this program still supports almost 10,000 children in the Yuma Region annually. WIC participation has also declined slightly in the region but still serves a considerable portion of the population of women and children (79% in 2015). Three quarters (74-75%) of students in the Yuma Region have been eligible for free or reduced-price lunch since 2012. Two programs that address food needs, the Summer Food Service Program (SFSP) and the Child and Adult Care Food Program (CACFP), have shown increases in meals served in Yuma County in recent years; a 22 percent increase for SFSP and 21 percent increase in CACFP.

Of the 69,533 occupied housing units in the Yuma Region, 69 percent are occupied by home-owners, with the highest rate of home-ownership in the East sub-region (76%). One-third of Yuma housing units require their residents to contribute more than 30 percent of their household income toward housing, compared to 34 percent statewide. In the East sub-region, housing is relatively more affordable, with only 19 percent of units crossing the 30 percent cost threshold, whereas in the South sub-region, 43 percent do.

### **Educational Indicators**

In the 2014-2015 school year, only 33 percent of Yuma Region students attained a proficient or highly proficient score on the third grade math assessment, which was a lower passing rate than across Arizona as a whole (41%). Performance on the English language arts (ELA) test was similar, with 29 percent of Yuma students demonstrating proficiency, compared to 40 percent across the state.

The percentage of elementary school students in grades one through three who were chronically absent remained unchanged from 2014 to 2015 in the Yuma Region (38%), but were slightly higher than those percentages across the state (34% in 2014 and 36% in 2015). The high school drop-out rate in Yuma Region fell slightly to four percent in 2015, from a high of five percent in 2012. The four-year graduation rate in the Yuma Region (76%) was the same as Arizona as whole (76%), and has been similar across previous years. In the Yuma Region, over a quarter of the population 25 and older (28%) did not complete high school, and in the South sub-region, half of adults did not complete high school; twice and over three times the state rate (14%).

### **Early Learning**

According to the most recent data available in 2015 and 2016, there were 150 registered child care providers approved to serve up to 4,945 children in the Yuma Region. With a population of young children of about 18,000 in the region, there are likely to be between four and seven young children for each available child care slot in the region. In particular, the South sub-region has a population of 5,258

children aged birth to 5, but total capacity to serve just 751 children. Of the 150 known child care providers, about one-quarter (n=37) are participating in the Quality First program, 19 sites are Head Start programs, an additional 10 operate at a public school, and 84 are other providers listed with Child Care Resource & Referral. Of the 37 programs that participate in the Quality First program in the Yuma Region, 26 (70%) have achieved the 3-, 4- or 5- star ratings, indicating they are meeting or exceeding quality standards. New early education resources have been developed in the region in the past two years, including new preschools made possible by the Preschool Development Grant, a new preschool at Pecan Grove made possible through collaboration between WACOG and Yuma District 1, and a new Early Head Start program.

Families in the Yuma Region are paying a slightly lower proportion (12-14%, depending on the child's age) of their overall income for a child care slot as other families statewide. Single parent homes, particularly those with a single female householder, have a lower median income, resulting in a higher proportion of their income being spent on child care. The number of children receiving a Department of Economic Security (DES) subsidy increased from 596 in 2014 to 974 in 2015.

Four colleges or universities offer degree or certification programs for early learning and child care professionals in the Yuma Region. Other early childhood education professional development opportunities are available in the region, including 20 trainings in Yuma County in English and Spanish listed in the most recent Arizona Childcare Resource and Referral quarterly newsletter, as well as resources provided by Eight-Arizona PBS, the Arizona Department of Education and the Arizona Early Childhood Workforce Registry.

In the Yuma Region and across Arizona, more children were referred to and served by AzEIP in FY2015 than in either of the two years prior. In 2015, 188 children ages 0 to 2 were served through the AzEIP program in the Yuma Region. However, an estimated near 1,000 Yuma children who would benefit from early intervention services are not receiving them. Although the number of children referred to DDD has increased between FY2012 and FY2015 for children aged 0 to 2 and 3 to 5, the number of children aged 0 to 2 served by DDD decreased from 49 in FY2012 to 47 in FY2015, whereas the number of older children (aged 3-5) served increased slightly during the same period (from 53 to 58). The number of preschoolers in special education in ADE schools has decreased slightly between 2012 (n=277) to 2015 (n=269). Among children who are in special education programs in public preschools in the Yuma Region, the majority of children have either a developmental disability (49%) or speech or language impairment (45%). For older children in the region, of the 10,698 children enrolled in kindergarten through third grade in October 2015, nine percent were enrolled in special education services in school, about three times the rate of children birth to 2 in the region being served by early intervention services (AzEIP and DDD). Information provided by key informants and through public forums in the region indicate long delays before screening appointments or referrals could be scheduled, and suggest that waitlists for speech language and occupational therapies are increasing because of a lack of providers to meet the needs of the region.

## **Child Health**

Twelve percent of young children in the Yuma Region are estimated to be uninsured, along with 20 percent of the total population in the region. Although children in the East sub-region had the lowest poverty rate (9%) for children aged birth to five, they have the highest uninsured rate (25%), twice the rate of the other sub-regions and of the state as a whole.

In 2014, 3,048 Yuma Region residents gave birth. The number of births in the region is expected to increase to 4,130 in 2040. Of the 3,048 mothers who gave birth in the Yuma Region in 2014, the majority (73%) were Hispanic or Latina. In terms of educational attainment, the greatest proportion of new mothers in the Yuma Region (32%) had some college or professional education, similar to the proportion across the state as a whole (31%). Just under half (43%) of mothers were not married in the region (45% statewide) and 10 percent were in their teens (8% statewide). A lower proportion of mothers in the Yuma Region reported smoking (2.4%) than across the state (4.6%). Sixty-three percent of women participating in WIC were overweight or obese before becoming pregnant, compared to 58 percent statewide, and the rate of pre-pregnancy obesity in the region and the state has increased slightly but steadily since 2012. In the Yuma Region in 2014, only 59.5 percent of mothers obtained prenatal care during the first trimester. Similarly concerning, in 2014, only 36 percent of women of child-bearing age (18-45) reported discussing preconception health with a health care provider in the Western Region, which includes Mohave, La Paz and Yuma Counties.

In the Yuma Region in 2014, 5.9 percent of babies born were low birth weight, compared to seven percent across the state. The percent of premature births was more similar, with 8.1 percent in the region, and nine percent across the state falling into this category. Infants participating in WIC in the Yuma Region being breastfed (2015: 73.8%) lag behind the Healthy People 2020 goal of 81.9 percent of babies ever being breastfed but above the rates of those ever breastfed across the state Arizona (71.2%).

Although immunization rates vary by vaccine, over 95 percent of children in child care and kindergarten in the Yuma Region had completed each of the three major (DTAP, polio, and MMR) vaccine series; the regional rates were higher than those of the state. Rates of personal exemptions for vaccinations among children in child care (0.6%) and kindergarten (1.2%) in the region were much lower than exemption rates at the state level (4% and 4.7% respectively).

The prevalence of untreated tooth decay in the Yuma Region (21%) was the third lowest of the county-based FTF regions, and the prevalence of untreated tooth decay in Yuma County (21%) was the lowest amongst all counties in the state. In overall decay experience, 51 percent of kindergarteners in the region evidenced decay experience compared to Arizona's 52 percent. Yuma First Smiles provides oral health education, screenings and fluoride varnish applications by a trained oral health care professional, and works with local dental providers to increase children's access to preventive dental care.

In the Yuma Region, emergency room visits by young children due to asthma decreased by 37 percent from 2012 to 2014, a decrease more than double the decline across the state during the same period (16% decrease). In Yuma County, the number of deaths among children (under 18 years of age) rose slightly between 2009 and 2011 to a high of 33 deaths, but then decreased to 26 deaths in 2014. The Yuma County Public Health Services District houses an Injury Prevention Program, including the Safe Kids Yuma County Coalition and the local Child Fatality Review Program.

Based on data from the Centers for Disease Control and Prevention (CDC), adult obesity has decreased slightly overall in Yuma County between 2011 and 2013 (from 31.2% to 30.5%). Although adult obesity rates for Yuma County have been consistently higher than those for the state, state rates increased from 25 to 27 percent over the same period. The prevalence of adult diabetes has been rising between 2009 and 2013, with 11.7 percent of the adult population of Yuma County having been diagnosed at some point in their lives with the disease as of 2013. Among children participating in WIC in the Yuma

Region, 13 percent have obesity and an additional 14 percent have overweight; proportions that have remained relatively stable between 2012 and 2015.

### **Family Support and Literacy**

Two assets related to literacy in the region are Read On Yuma and Reach Out and Read Yuma. The goals of Read On Yuma are to improve literacy and language acquisition among young children in Yuma County. Reach Out and Read Yuma promotes literacy during health interventions, when doctors, nurses and other health professionals advise parents about the importance of reading aloud to their children and provide developmentally-appropriate books for children during pediatric check-ups.

Of 555 reports of abuse and neglect of children birth to 17 received during the April 1–September 30, 2015 reporting period for Yuma County, 64 (12%) resulted in a removal from the home. As of August 2016, there were 120 licensed foster homes in Yuma County. One-hundred and ninety-six children were in licensed foster care in the county, 85 of whom were children aged five and under.

In 2015, 132 pregnant or parenting women received publically-funded behavioral health services in the Yuma Region; an increase of 45 percent from the 91 women who received services in 2012. The number of children ages birth to 5 receiving behavioral health services in the Yuma Region also increased from 2012 (n=302) to 2015 (n=346), representing a 15 percent increase.

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

Since state fiscal year 2011, First Things First has led a collaborative, concerted effort to build public awareness and support across Arizona. In addition, First Things First began a community engagement effort in SFY2014 to recruit, motivate and support community members to take action on behalf of young children. In the Yuma Region, these efforts have resulted in the recruitment of 1,519 Friends, 236 Supporters and 89 Champions during the period of FY2014 through 2016. In addition to these strategic communications efforts, First Things First has also led a concerted effort of policymaker awareness-building throughout the state. Finally, FTF recently launched enhanced online information for parents of young children, including the more intentional and strategic placement of early childhood content and resources in the digital platforms that today's parents frequent.

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

A majority (59%, n=13) of 22 survey respondents described the early childhood system in Yuma County as a well-coordinated system, with the remaining respondents (41%, n=9) describing the system as a partially coordinated system. A large majority of respondents (91%, n=20) agreed that young children's early learning and family support and literacy needs are effectively addressed by the system in the region. In addition, 86 percent of respondents (n=19) felt that professional development and children's health needs are effectively addressed. The Yuma Region has founded a variety of countywide initiatives to enhance the early childhood system including: the Yuma County Early Childhood Collaborative, Family Resource Fairs with early identification screenings, Hopeful Hearts- the Yuma County Court Team and Community Schools.

# 2018 NEEDS AND ASSETS REPORT

## About this Report

The data contained in this report come from a variety of sources. Some data were provided to First Things First by state agencies, such as the Arizona Department of Economic Security (DES), the Arizona Department of Education (ADE), and the Arizona Department of Health Services (ADHS). Other data were obtained from publically available sources, including the 2010 U.S. Census, the American Community Survey (ACS), the Arizona Department of Administration (ADOA), and the Arizona Department of Child Safety (DCS). Additionally, regional data from local agencies and the 2012 First Things First Family and Community Survey have been included where available and relevant. Not all data will be available at a First Things First (FTF) regional level because not all data sources analyze their data based on FTF regional boundaries. When regional data are unavailable, this will be noted by N/A.

This report follows the First Things First Data Dissemination and Suppression Guidelines. Throughout this report, suppressed counts will appear as either <10 or <25 in data tables, and percentages that could easily be converted to suppressed counts will appear as **DS** (data suppressed). The signifier **N/A** indicates where data is not available for a particular geography. Please also note that some data, such as that from the American Community Survey, are estimates that may be less precise for small areas. The ACS is a survey conducted by the U.S. Census Bureau each month by mail, telephone, and face-to-face interviews. The most recent and most reliable ACS data are averaged over the past five years; from surveys conducted from 2010 to 2014. For American Community Survey (ACS) sub-region data throughout the report, estimates based on a sample of fewer than 50 were excluded from presentation. In general, the reliability of ACS estimates is greater for more populated areas. For more detailed information on data sources, methodology, suppression guidelines, and limitation, please see the Appendix.

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

- 1) **Early education** (particularly in relation to children with special needs and early literacy) and
- 2) **Health.**

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

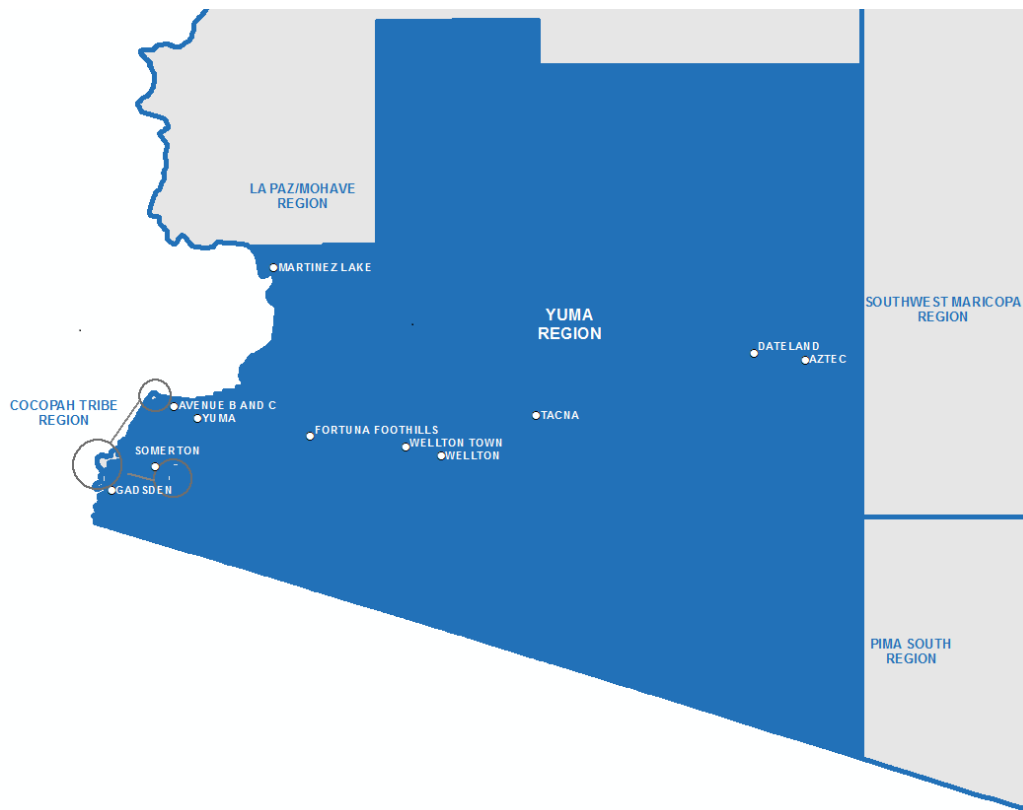
## Description of the Region

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

The First Things First Yuma Region lies in the southwest corner of Arizona, bordering Mexico and California. The Yuma Region has the same boundaries as Yuma County minus the Cocopah Tribe reservation lands (which are included in the First Things First Cocopah Region). In this report, data reported for the Yuma Region do not include the Cocopah Reservation, but data reported for Yuma County do include the Cocopah Reservation.

The Yuma Region covers about 5,500 square miles and had a population of 194,934 in the 2010 U. S. Census. The local economy is primarily based on farming, cattle, tourism, and two military bases. The Yuma Proving Ground and the Barry M Goldwater West Range are large, uninhabited areas within the Yuma Region. A small portion of the Fort Yuma-Quechan Reservation is located within the Yuma Region, near the city of Yuma. The larger, more populated part of the reservation lies across the Colorado River in California. Figure 1 shows the geographical area covered by the Yuma Region.

Figure 1. The Yuma First Things First Region



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

### The Three Sub-Regions of the Yuma Region

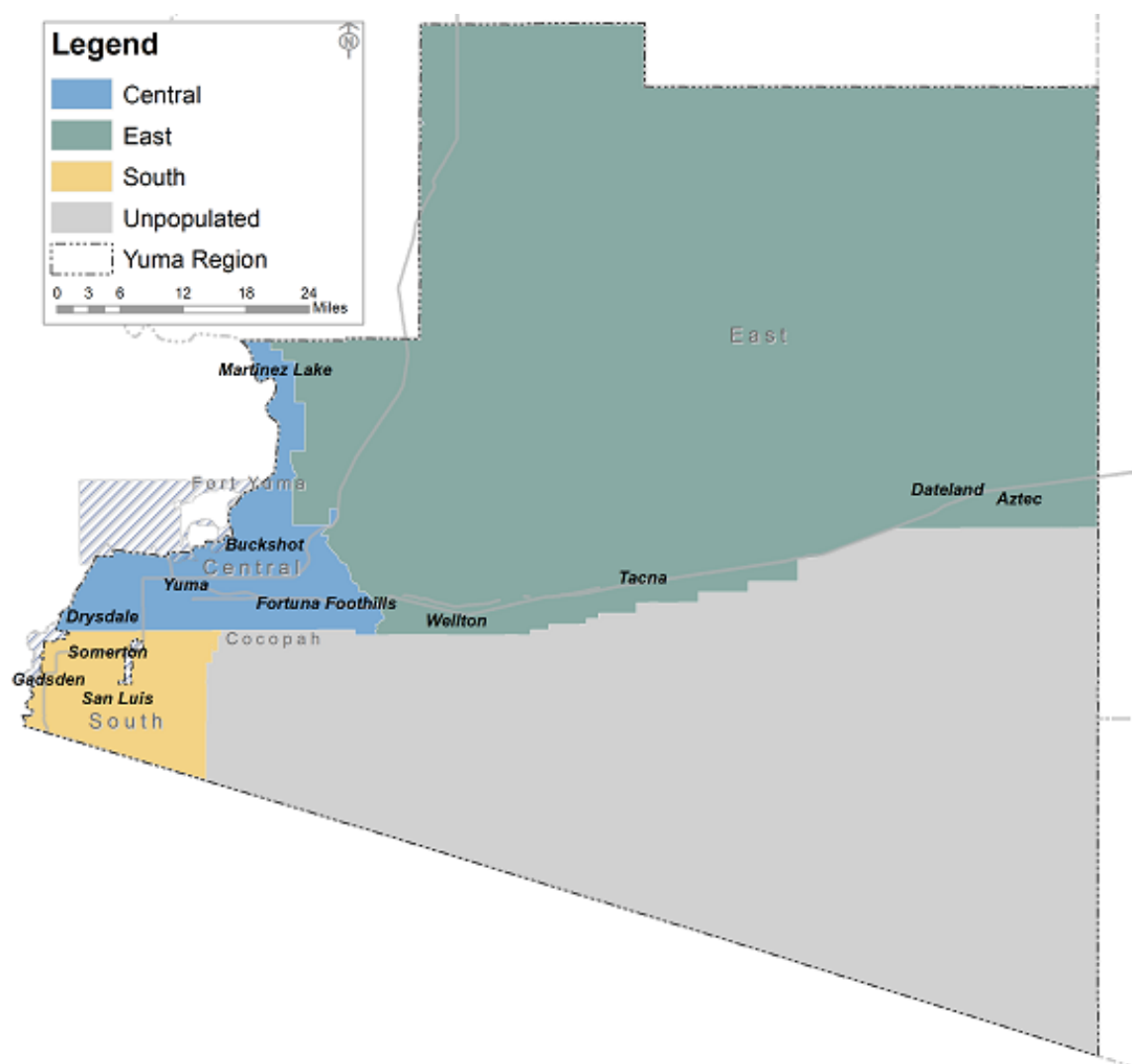
Because community-level information in rural areas is sparse, the Yuma Regional Partnership Council requested that data be analyzed and reported at the community level in order to provide a more complete picture of the region. Dividing the region into sub-regions helps the Council target strategies to use resources effectively and efficiently. Three geographic areas within the Yuma Region were identified by the Regional Partnership Council and Regional Director as focus areas. Figure 2 shows the sub-regions in the Yuma Region.

The **East** sub-region is defined as the three census tracts (112.01, 112.02, and 121) in the eastern part of the county, east of the Gila Mountains. This sub-region includes the town of Wellton and several unincorporated places: Wellton Hills, Roll, Tacna, Dateland, and Aztec. The East is the most lightly populated of the three sub-regions.

The **South** sub-region is defined as the nine census tracts (114.03, 114.05, 114.06, 115.01, 115.03, 115.04, 116, 118, and 9800.05) which lie south of County 14th Street. This sub-region includes the cities of San Luis and Somerton and the unincorporated places of Gadsden, Rancho Mesa Verde, and Orange Grove Mobile Manor. Census Tract 115.01 also includes the eastern and western sections of the Cocopah Reservation (which are not part of the Yuma First Things First Region).

The **Central** sub-region is, by population, the largest of the three. This sub-region includes the city of Yuma, and stretches east as far as Fortuna Foothills, and as far north as Martinez Lake. Other places within this sub-region include Buckshot, Donovan Estates, Drysdale, El Prado Estates, Padre Ranchitos, and Wall Lane. There are 41 census tracts in this sub-region (numbered 1 through 111, plus 117 and 9800.06). The northern section of the Cocopah Reservation lies in Census Tract 110.

Figure 2: Sub-Regions of the Yuma Region



Source: 2010 TIGER/Line Shapefiles prepared by the US Census. Map produced by CRED.



## POPULATION CHARACTERISTICS

## Why Population Characteristics Matter

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

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

Recognizing variations in regional language use and proficiency is also important to ensuring appropriate access to services and resources and identifying needed supports. Mastery of the language spoken in the home is related to school readiness and academic achievement.<sup>9</sup> Those children who engage in dual language learning have cognitive, social-emotional and learning benefits in early school and throughout their lifetimes.<sup>10</sup> Although dual language learning is an asset, some children come from limited English speaking households (that is, a household where none of the adult members speak English very well). Language barriers for these families can limit access to health care and social services, and can provide challenges to communication between parents and teachers, doctors and other providers, which can affect the quality of services children receive.<sup>11</sup> Assuring that early childhood resources and services are available in a language accessible to the child and caregivers is essential. Although Spanish is the most common second language spoken, Arizona is also home to a large number of Native communities, with numerous Native languages spoken by families in those communities. The U.S. Department of Health & Human Services recognizes that language preservation and revitalization are keys to strengthening culture in Native communities and to encouraging communities to move toward social unity and self-sufficiency.<sup>12</sup> Special consideration should be given

to respecting and supporting the numerous Native languages spoken, particularly in tribal communities around the state.

## What the Data Tell Us

### Demographics

According to the U.S. Census, 17,983 children under the age of six reside in the Yuma Region (see Table 1). Overall, the region population was 194,934 in 2010, meaning that approximately nine percent of the region's residents are young children. This ranged from a low of seven percent of young children living in the East sub-region, to a high of 11 percent living in the South sub-region (see Table 3).

Yuma County has experienced slightly slower population growth compared to the state as a whole since the turn of the century. Whereas Arizona saw a 19 percent increase in the number of young children, Yuma County saw a 17 percent increase (Table 2). The region is projected to have somewhat slower growth in the population of young children relative to the total population over the next several decades. The population of young children is projected to grow by 31 percent to 25,196 by 2040 and by 43 percent overall to 307,708 by 2040 (see Table 4 and Table 5). Although the numbers of young children in the region are expected to increase over the years, the percentage of the overall population to be comprised of young children is projected to fall to eight percent by 2040.

Seventy-six percent of young children in the Yuma Region are Hispanic or Latino and 19 percent are white. The percentage of Latino children in the Yuma Region is considerably higher than that across the state of Arizona as a whole (45%) (Table 7). Within the region, the South sub-region has a substantially higher proportion of Latino children, with almost all (97%) identified as Hispanic or Latino (Table 7). Compared to children, a smaller proportion of adults (those aged 18 and older) identify as Hispanic or Latino across both the region (53%) and state (25%) (Table 6).

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

	<b>Ages 0-5</b>	<b>Age 0</b>	<b>Age 1</b>	<b>Age 2</b>	<b>Age 3</b>	<b>Age 4</b>	<b>Age 5</b>
Yuma Region	17,983	2,924	2,953	3,040	3,013	3,004	3,049
Central	12,238	2,015	2,074	2,077	2,020	1,984	2,068
East	487	81	68	73	91	91	83
South	5,258	828	811	890	902	929	898
Yuma County	18,048	2,938	2,959	3,054	3,024	3,011	3,062
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

	<b>Number of children (ages 0-5) in 2000 Census</b>	<b>Number of children (ages 0-5) in 2010 Census</b>	<b>Percent change in population (ages 0-5), 2000 to 2010</b>
Yuma Region	N/A	17,983	N/A
Yuma County	15,441	18,048	17%
ARIZONA	459,141	546,609	19%

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

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

	All ages	Ages 0 to 5	Children (ages 0-5) as a percentage of the total population
Yuma Region	194,934	17,983	9%
Central	138,632	12,238	9%
East	7,184	487	7%
South	49,118	5,258	11%
Yuma County	195,751	18,048	9%
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
Yuma Region	N/A	N/A	N/A	N/A	N/A	N/A
Yuma County	19,215	20,398	22,246	23,481	24,365	25,196
ARIZONA	522,213	556,443	603,660	648,746	681,380	705,102

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

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

	2015	2020	2025	2030	2035	2040
Yuma Region	N/A	N/A	N/A	N/A	N/A	N/A
Yuma County	214,991	232,773	251,130	269,702	288,699	307,708
ARIZONA	6,758,251	7,346,787	7,944,753	8,535,913	9,128,899	9,706,815

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

Table 6: Race and Ethnicity of the 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)
Yuma Region	139,956	53%	42%	1%	2%	1%
Central	102,139	43%	52%	1%	2%	2%
East	5,554	34%	62%	0%	1%	1%
South	32,263	89%	8%	1%	1%	0%
Yuma County	140,566	53%	42%	1%	2%	1%
ARIZONA	4,763,003	25%	63%	4%	4%	3%

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

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

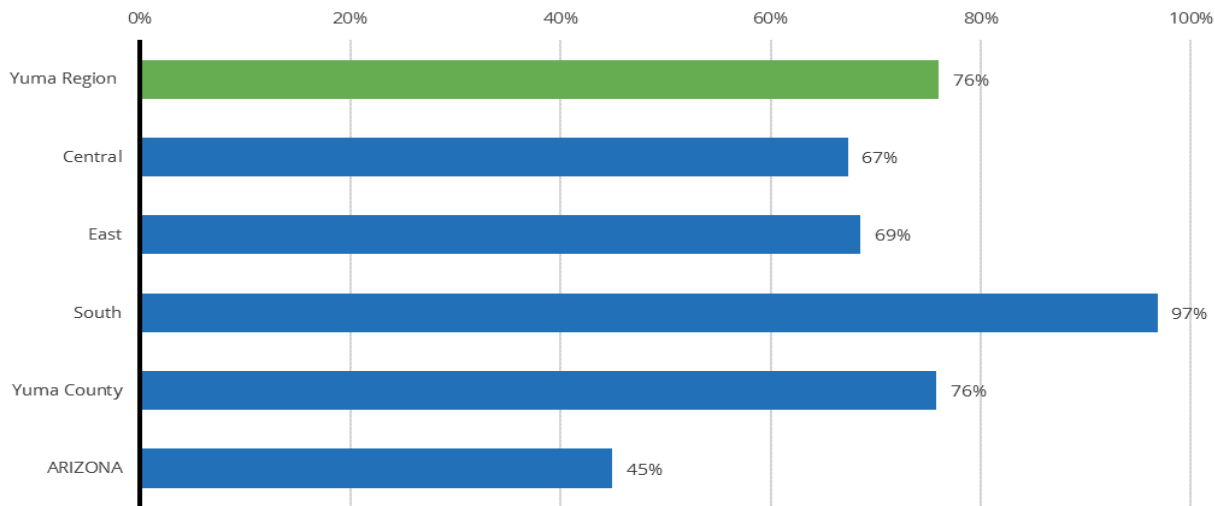
Table 7: Race and Ethnicity of the Population of Children (Ages 0 to 4) in the 2010 Census

	Population of children (ages 0- 4)	Hispanic or Latino	White alone (not Hispanic or Latino)	American Indian	African-American	Asian or Pacific Islander
Yuma Region	14,934	76%	19%	2%	2%	1%
Central	10,170	67%	26%	2%	3%	1%
East	404	69%	27%	0%	1%	0%
South	4,360	97%	2%	1%	1%	0%
Yuma County	14,986	76%	19%	2%	2%	1%
ARIZONA	455,715	45%	40%	6%	5%	3%

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

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

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



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

### Living Arrangements

Based on data from the 2010 U.S. Census, one out of every five households (20%) in the Yuma Region has at least one child under 6 years old (Table 8). The largest concentration of these families is in the South sub-region, where 32 percent of households have a young child. The East sub-region has relatively fewer households with young children (12%).

According to the American Community Survey, 36 percent of children in the Yuma Region live with a single parent, which is slightly lower than the proportion statewide (38%) (Figure 4). However, in the South sub-region, close to half (44%) of children live with a single parent, whereas in the East sub-region only 16 percent of young children live with a single parent. Children in the Central and East sub-regions are the most likely to live with two parents (65% and 81%, respectively). The U.S. Census Bureau has recently begun to collect data on the number of families with children (0-18) headed by same-sex parents. In Yuma County, 0.7 percent of families are same-sex households, compared to 0.9 percent in Arizona as a whole.<sup>13</sup>

The proportion of young children living in a grandparent's household is slightly higher in the region (19%) than the state (14%) (Figure 5). It is important to note that these households may be multigenerational – i.e., the grandparent is considered the head-of-household, but the child's parent(s) may also live there. Table 9 provides more information about the estimated 5,594 children ages birth to 17 living with grandparents in the Yuma Region.<sup>i</sup> Forty-two percent of these children (2349) live in multigenerational homes where the grandparent has assumed responsibility for the child, despite the

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

presence of a parent, and eight percent of these children who live with their grandparents (448) do not have a parent present in the household. A substantially higher proportion of the grandchildren living with their grandparents in the East sub-region (59%) are being raised with no parent present. For children who live with grandparents as a result of involvement in the child welfare system, evidence suggests that there are many benefits to being placed with family. These benefits include less disruption, greater stability (i.e., fewer placement changes), greater contact with the biological parents, the ability to maintain better connections to family, a continuity of cultural norms and values, and some evidence to suggest that children placed with family are less likely to experience additional maltreatment.<sup>14,15</sup> For ethnically diverse children, kinship care can also support linguistic heritage.

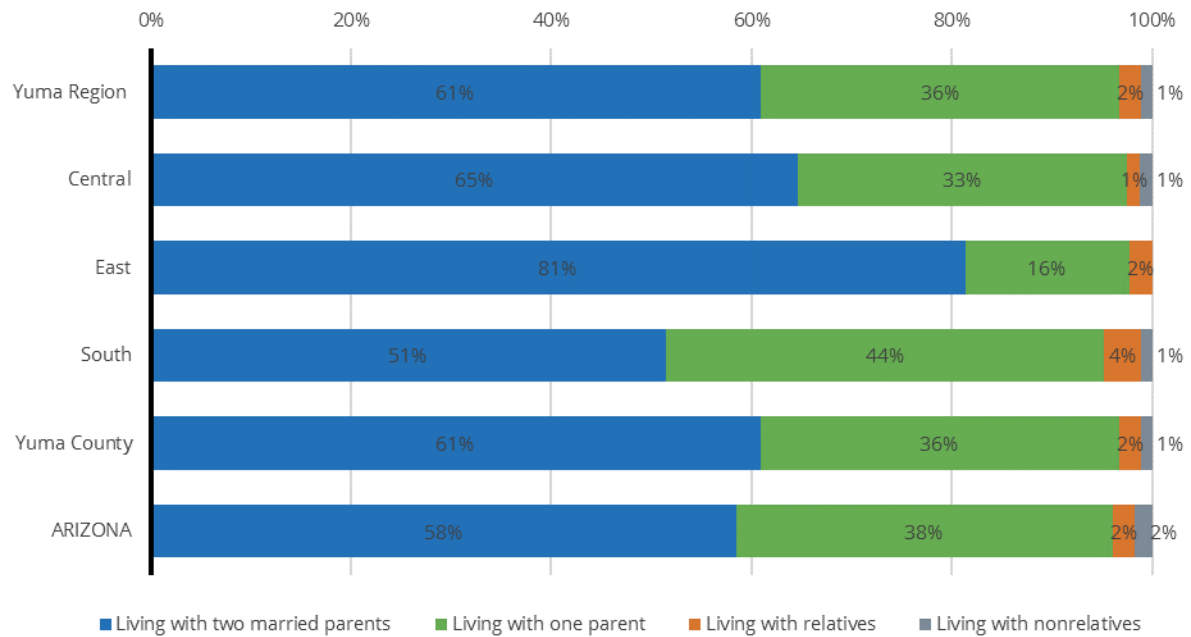
In the Yuma Region, 43 percent of children ages birth to 5 live with a foreign-born parent. This is considerably higher than the statewide proportion (27%), and the South sub-region stands out, having nearly two in three young children (62%) living with a foreign-born parent (Table 10).

Table 8: Composition of Households in the 2010 Census

	Total number of households	Total number of households with child(ren) under 6 years old	Percent of households with child(ren) under 6 years old	Households with child(ren) under 6 years old, husband-wife householders	Households with child(ren) under 6 years old, single male householder	Households with child(ren) under 6 years old, single female householder
Yuma Region	64,455	12,951	20%	67%	9%	24%
Central	49,859	8,837	18%	65%	10%	25%
East	2,803	349	12%	74%	11%	15%
South	11,793	3,765	32%	71%	7%	22%
Yuma County	64,767	12,998	20%	67%	9%	24%
ARIZONA	2,380,990	384,441	16%	65%	11%	24%

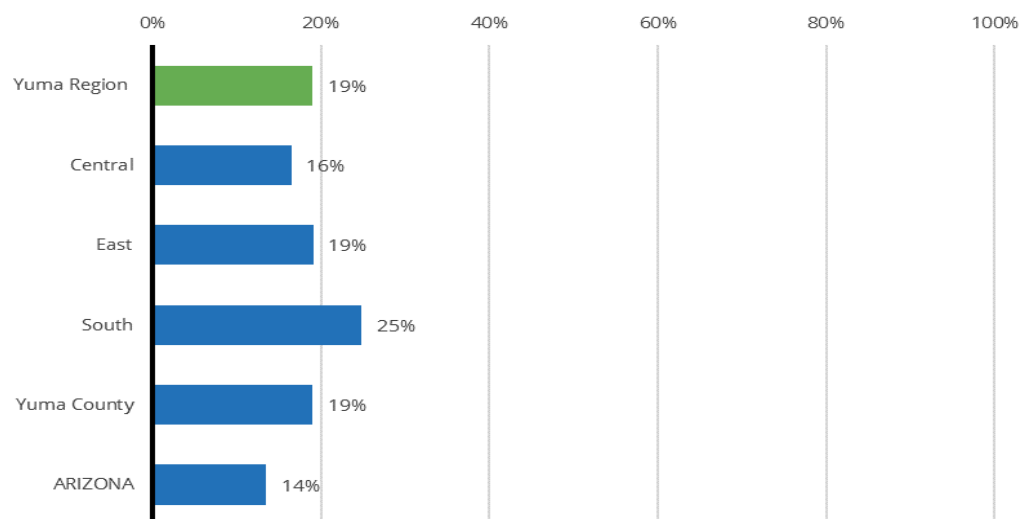
Source: U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P20

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



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

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



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

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

	Number of children (ages 0-17) living in a grandparent's household	Number of children (ages 0-17) living in a grandparent's household and the grandparent is responsible for the child	Number of children (ages 0-17) living in a grandparent's household and the grandparent is responsible for the child (with no parent present)
Yuma Region	5,594	42%	8%
Central	3,162	57%	9%
East	76	71%	59%
South	2,355	21%	6%
Yuma County	5,621	42%	9%
ARIZONA	140,038	53%	14%

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

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

	Children (ages 0-5) living with one or two parents	Children (ages 0-5) living with one or two foreign-born parents
Yuma Region	17,587	43%
Central	11,909	34%
East	378	44%
South	5,300	62%
Yuma County	17,661	43%
ARIZONA	510,658	27%

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

## Language Use

Less than half of Yuma Region residents age 5 and older (48%) speak English at home, with Spanish being the most common home language (50%) (Table 11). In the South sub-region, more than four out of five people (84%) speak Spanish at home, and almost half are limited-English speaking (that is, do not speak English “very well”) (Table 12).

Twenty six percent of children enrolled in kindergarten through third grade in the region are classified as “English-language learners” (ELL) (Table 13). This is much higher than the statewide proportion of 10

percent. Variability also exists within districts in the region, with the Gadsden and Somerton Elementary Districts having the highest proportions of students who are ELL (59% and 39%, respectively).

At a household level, 12 percent of households in the Yuma Region who speak Spanish at home are classified as limited-English-speaking; this is three times the proportion of households with that designation (4%) statewide (Table 14). In addition, in the South sub-region, more than one in three households (35%) may need additional language supports to access resources. Figure 6 illustrates where there are high numbers of households classified as limited English speaking, by census tract.

Table 11: 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 North American language at home	Speak another language at home
Yuma Region	185,458	48%	50%	0%	2%
Central	129,579	59%	38%	0%	3%
East	6,697	68%	31%	0%	1%
South	49,183	15%	84%	1%	0%
Yuma County	186,300	48%	50%	0%	2%
ARIZONA	6,120,900	73%	20%	2%	5%

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

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

	Population (ages 5 and older)	Speak English at home	Speak another language at home, and speak English "very well"	Speak another language at home, and do not speak English "very well"
Yuma Region	185,458	48%	29%	23%
Central	129,579	59%	26%	14%
East	6,697	68%	18%	14%
South	49,183	15%	38%	47%
Yuma County	186,300	48%	29%	23%
ARIZONA	6,120,900	73%	17%	9%

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

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

Table 13: English Language Learners in Kindergarten Through Third-Grade

	Number of students enrolled (K to 3)	Number of English Language Learners (ELL)	Percent of students who are ELL
Yuma Region Schools	10,698	2,805	26%
Crane Elementary District	2,633	408	15%
Gadsden Elementary District	2,002	1,189	59%
Hyder Elementary District	44	<10	18%
Mohawk Valley Elementary District	63	12	19%
Somerton Elementary District	1,228	484	39%
Wellton Elementary District	106	11	10%
Yuma Elementary District	3,242	432	13%
Yuma Region Charter Schools	1,380	261	19%
Yuma County Schools	10,940	2,868	26%
All Arizona Schools	342,307	34,256	10%

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

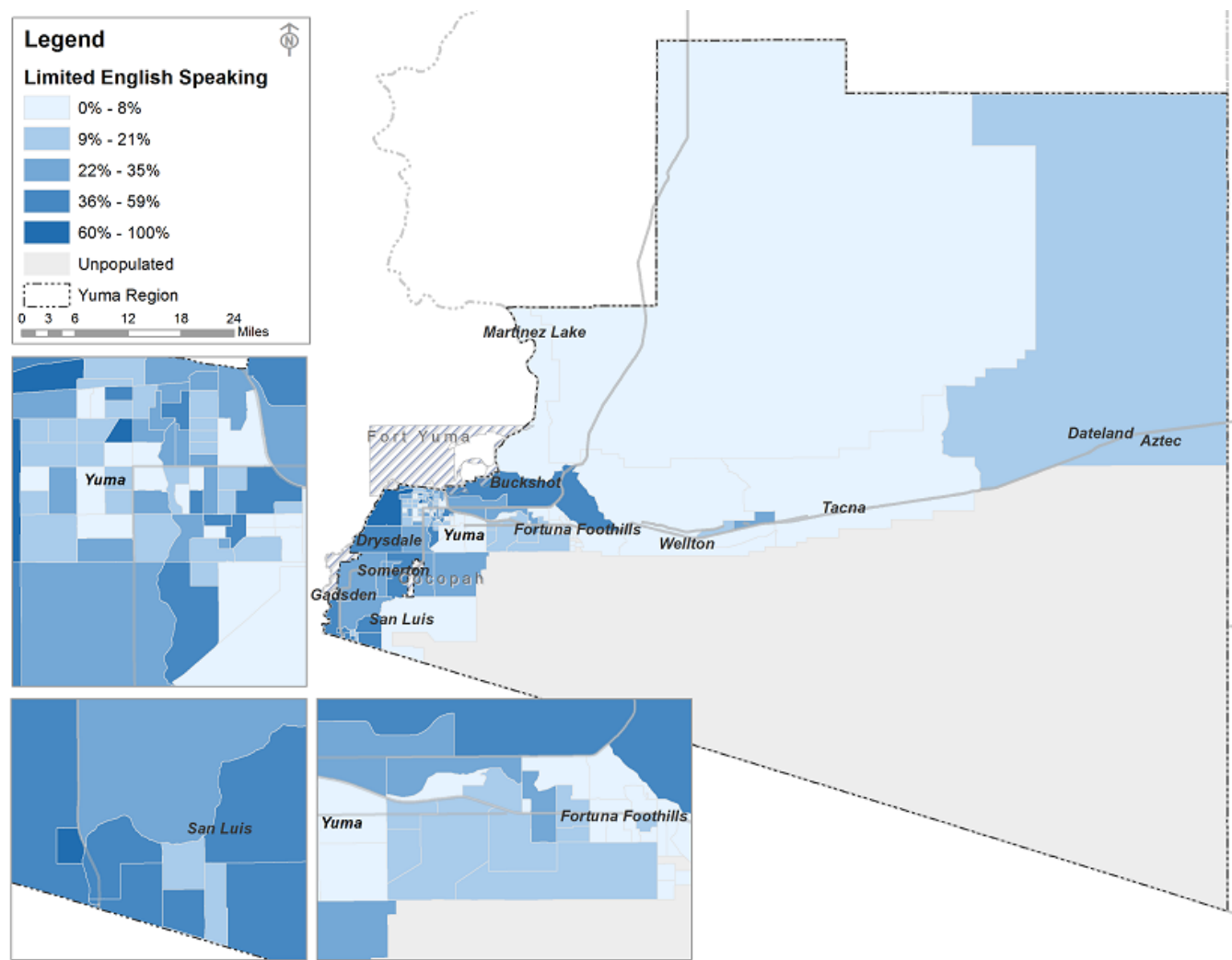
Note: The data for the districts and schools above is only for the schools that fall within the regional boundaries and thus may differ from the data for the district as a whole.

Table 14: Limited-English-Speaking Households

	Number of households	Households which speak a language other than English	Limited-English-speaking households (Total)	Limited-English-speaking households (Spanish)
Yuma Region	69,533	51%	13%	12%
Central	52,190	41%	7%	7%
East	2,703	33%	3%	3%
South	14,640	93%	35%	35%
Yuma County	69,915	51%	13%	12%
ARIZONA	2,387,246	27%	5%	4%

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

Figure 6: Map of Limited-English Speaking Households in the Yuma Region



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



## ECONOMIC CIRCUMSTANCES

## Why Economic Characteristics Matter

The economic well-being of a family is a powerful predictor of child well-being. Children raised in poverty are at a greater risk of adverse outcomes including low birth weight, lower school achievement, and poor health.<sup>16,17,18,19,20</sup> They are also more likely to remain poor later in life.<sup>21</sup> More than a quarter (26%) of Arizona's children lived in poverty in 2014, compared to just over a fifth (21%) six years earlier.<sup>22</sup>

Poverty rates alone do not tell the full story of economic vitality in a region. Income and unemployment rates are also important indicators. According to the National Center for Children in Poverty, families typically need an income of about twice the federal poverty level to meet basic needs.<sup>23</sup> As a benchmark, the 2015 Federal Poverty Guideline for a family of four was \$24,250; a typical family of four making less than \$48,500 is likely struggling to make ends meet. Under- and unemployment can affect a family's ability to meet the expenses of daily living, and their access to resources needed to support their children's well-being and healthy development. A parent's job loss can affect children's school performance, leading to poorer attendance, lower test scores, and higher risk of grade repetition, suspension or expulsion.<sup>24</sup> Unemployment can also put families at greater risk for stress, family conflict, and homelessness.<sup>25</sup>

Housing instability and homelessness can have deleterious effects on the physical, social-emotional, and cognitive development of young children.<sup>26</sup> Housing that requires more than 30 percent of a household's income is an indicator of a housing affordability problem in a region, leaving inadequate funds for other family necessities, such as food and utilities.<sup>27</sup> High housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition and homelessness.<sup>28</sup> Examining indicators related to housing quality, costs, and availability can reveal additional factors affecting the health and well-being of families in a region.

Public assistance programs are one way of counteracting the effects of poverty and providing supports to children and families in need. The Temporary Assistance for Needy Families (TANF) Cash Assistance program provides temporary cash benefits and supportive services to children and families. Eligibility is based on citizenship or qualified resident status, Arizona residency, and limits on resources and monthly income. In 2014, seven out of 10 TANF participants in Arizona were children, and the average monthly benefit was \$93.<sup>29</sup>

Other public assistance programs available in Arizona impact access to food. Food insecurity – a limited or uncertain availability of food – is negatively associated with many markers of health and well-being for children, including a heightened risk for developmental delays.<sup>30</sup> Food insecurity is also associated with overweight and obesity.<sup>31</sup> The Supplemental Nutrition Assistance Program (SNAP, also referred to as “Nutrition Assistance” and “food stamps”) has been shown to help reduce hunger and improve access to healthier food.<sup>32</sup> SNAP benefits support working families whose incomes simply do not provide for all their needs. For low-income working families, the additional income to access food from SNAP is substantial. For example, for a three-person family with one person whose wage is \$10 per hour, SNAP benefits boost take-home income by 10 to 20 percent.<sup>33</sup>

In addition to SNAP, food banks and school-based programs such as the National School Lunch Program<sup>34</sup> and Summer Food Service Program<sup>35</sup> are important resources aimed at addressing food insecurity by providing access to free and reduced-price food and meals in both community and school settings. The National School Lunch Program<sup>36</sup> provides free and reduced-price meals at school for students whose family incomes 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.<sup>37</sup> A growing body of research suggests CACFP has positive effects on young children's health and wellbeing. Children who attend care facilities that participate in CACFP have been found to have healthier diets<sup>38,39,40</sup> and decreased risk of under and overweight.<sup>41</sup>

Another food and nutrition resource, the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) program, is a federally funded program that serves economically disadvantaged pregnant, postpartum, and breastfeeding women, as well as infants and children under the age of five. The program offers supplemental nutritious food, breastfeeding and nutrition education, and referrals to health and social services.<sup>42</sup> In Arizona in 2015, half of all children aged birth through four were enrolled in WIC.<sup>43</sup> Participation in WIC is associated with healthier births, lower infant mortality, improved nutrition, decreased food insecurity, improved access to health care and improved cognitive development and academic achievement for children.<sup>44</sup>

## What the Data Tell Us

### Income

The median income for Yuma County families is \$44,317. The median income for families with married parents (husband-wife) and children under age 18 is about \$7,500 higher (\$51,895); single-parent families make substantially less. The median income for households run by a single female in the Yuma Region is \$20,354; households led by single males make about 58 percent more (\$35,231) (Table 15).

Table 15: 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
Yuma Region	N/A	N/A	N/A	N/A
Yuma County	\$44,317	\$51,895	\$35,231	\$20,354
ARIZONA	\$59,088	\$73,563	\$37,103	\$25,787

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

Note: Median family income is for all families, not just for those with children under 18.

## Poverty

Twenty-one percent of the total (all-age) population of the Yuma Region lives in poverty, which is slightly higher than in the state (18%) (Table 16). The percentage of the population aged birth to 5 in poverty in the Yuma Region (26%) is higher than the total (all-age) population in the region in poverty (21%), but lower than the population of children aged birth to 5 living in poverty across the state (29%). Sub-regional variation in the percentage of the all-age and young child populations living in poverty exists. In the South sub-region, both the total population (30%) and the young child population (32%) are more likely to live below the poverty level than for the region as a whole (21% and 26% respectively). Conversely, the percentage of those living in poverty in the Central and East sub-regions both fall below the regional and state percentages (Table 16). Figure 7 and Figure 8

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

Note: Census 2010 census block data were utilized for the population of children 0–5. The 2007–2011 American Community Survey (ACS) data were used to obtain poverty estimates and proportionally assign them to census blocks because these estimates align better with the Census 2010 population of children 0–5. To establish the assignment of each geographical area to one of the categories listed above, the region’s median number (children 0–5) for all census blocks was determined (census blocks with no children 0–5 were excluded from the analysis). Those census blocks with the number of children 0–5 below the median were assigned to the “low population” category, while census blocks with the number of children 0–5 above the median were assigned to the “high population” category. The same process was independently followed with the poverty indicator to arrive at the “low poverty” and “high poverty” categories (census blocks with “0 poverty” were excluded from the analysis). The combination of categories was ultimately used to assign a geographical area to one of the categories listed above.

Figure 8: Detailed Map of Poverty in the Yuma Region

illustrate the census blocks in the region with the highest concentration of children in poverty.

In addition to the families whose incomes fall below the federal poverty level, a proportion of households in the region and county are considered low-income (i.e., near but not below the federal poverty level (FPL)). More than half of families (58%) 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 higher than the 49 percent across the state (Table 17). Families with children in the East and South sub-regions are faring even worse, with 69 percent and 73 percent respectively living below 185 percent of the FPL.

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

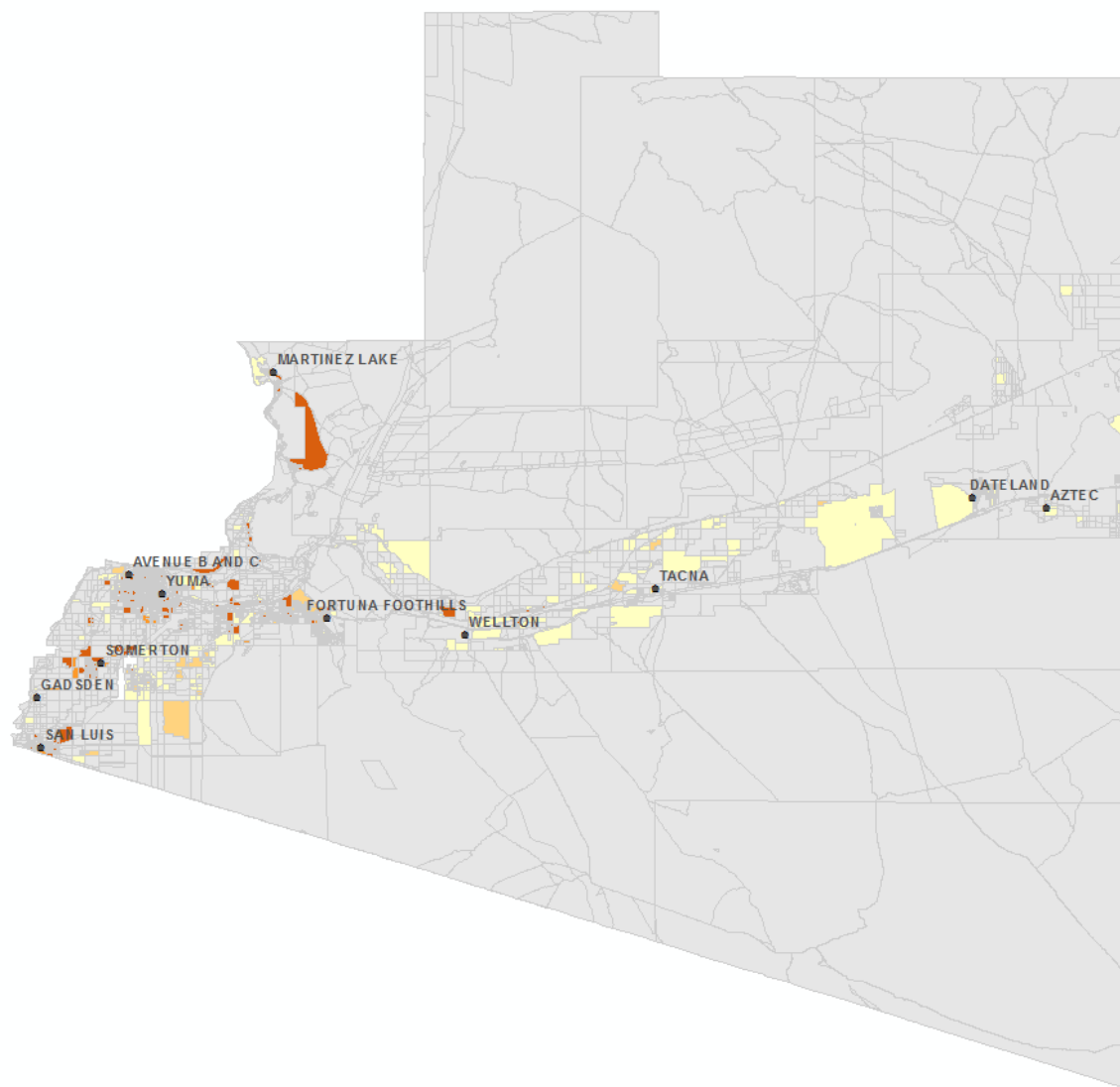
recent years, both in the Yuma Region and statewide (Table 18). Between 1996 and 2015, Arizona reduced TANF benefits more than any other state in the nation, and now ranks 42<sup>nd</sup> in the level of assistance to those participating in TANF.<sup>45</sup> In Arizona, TANF eligibility is capped at \$335 per month, or \$4020 annually for a family of four. Beginning in 2016, Arizona became the first and only state that limits a person's lifetime benefit to 12 months.<sup>46</sup> In addition, since 2009, a steadily decreasing percentage of Arizona TANF funds have been spent on three of the key assistance categories: cash assistance to meet basic needs, helping connect parents to employment opportunities, and child care. In 2013, Arizona ranked 51st, 47th, and 46th respectively in proportional spending in those categories across all states and the District of Columbia. Meanwhile, since 2009, an increasing percentage of Arizona TANF funds have been spent on other costs such as child protection, foster care, and adoption.<sup>47</sup>

Table 16: Persons Living in Poverty

	Number of persons (all ages) for whom poverty status is known	Persons (all ages) below poverty level	Number of young children (ages 0-5) for whom poverty status is known	Young children (ages 0-5) below poverty level	Number of older children (ages 6-17) for whom poverty status is known	Older children (ages 6-17) below poverty level
Yuma Region	192,847	21%	17,967	26%	35,325	31%
Central	135,936	17%	12,077	23%	22,475	25%
East	7,016	13%	387	9%	1,229	23%
South	49,895	30%	5,503	32%	11,621	43%
Yuma County	193,755	21%	18,042	26%	35,500	31%
ARIZONA	6,411,354	18%	522,513	29%	1,071,471	25%

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

Figure 7: Map of Poverty in the Yuma Region

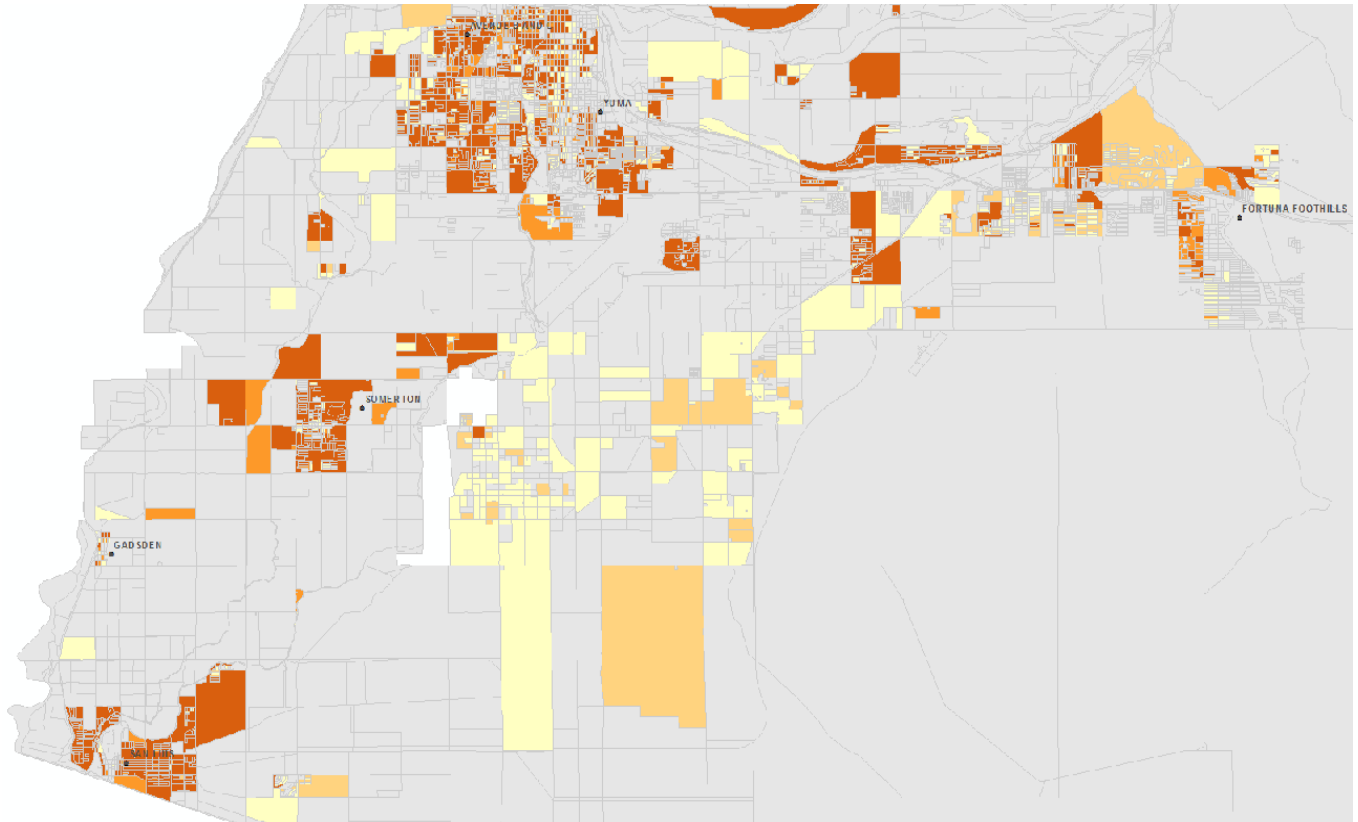


	Legend	# of Census Blocks	Poverty 0-5	Population 0-5	% Poverty
	High Poverty-High Population	944	3,809	12,575	30%
	High Poverty-Low Population	200	333	593	56%
	Low Poverty-High Population	272	139	1,910	7%
	Low Poverty-Low Population	873	322	1,627	20%
	No Poverty	6,991	0	1,278	0%
	<b>Total</b>	<b>9,280</b>	<b>4,603</b>	<b>17,983</b>	<b>26%</b>

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

Note: Census 2010 census block data were utilized for the population of children 0-5. The 2007-2011 American Community Survey (ACS) data were used to obtain poverty estimates and proportionally assign them to census blocks because these estimates align better with the Census 2010 population of children 0-5. To establish the assignment of each geographical area to one of the categories listed above, the region's median number (children 0-5) for all census blocks was determined (census blocks with no children 0-5 were excluded from the analysis). Those census blocks with the number of children 0-5 below the median were assigned to the "low population" category, while census blocks with the number of children 0-5 above the median were assigned to the "high population" category. The same process was independently followed with the poverty indicator to arrive at the "low poverty" and "high poverty" categories (census blocks with "0 poverty" were excluded from the analysis). The combination of categories was ultimately used to assign a geographical area to one of the categories listed above.

Figure 8: Detailed Map of Poverty in the Yuma Region



Legend	# of Census Blocks	Poverty 0-5	Population 0-5	% Poverty
High Poverty-High Population	944	3,809	12,575	30%
High Poverty-Low Population	200	333	593	56%
Low Poverty-High Population	272	139	1,910	7%
Low Poverty-Low Population	873	322	1,627	20%
No Poverty	6,991	0	1,278	0%
<b>Total</b>	<b>9,280</b>	<b>4,603</b>	<b>17,983</b>	<b>26%</b>

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

Note: Census 2010 census block data were utilized for the population of children 0-5. The 2007-2011 American Community Survey (ACS) data were used to obtain poverty estimates and proportionally assign them to census blocks because these estimates align better with the Census 2010 population of children 0-5. To establish the assignment of each geographical area to one of the categories listed above, the region's median number (children 0-5) for all census blocks was determined (census blocks with no children 0-5 were excluded from the analysis). Those census blocks with the number of children 0-5 below the median were assigned to the "low population" category, while census blocks with the number of children 0-5 above the median were assigned to the "high population" category. The same process was independently followed with the poverty indicator to arrive at the "low poverty" and "high poverty" categories (census blocks with "0 poverty" were excluded from the analysis). The combination of categories was ultimately used to assign a geographical area to one of the categories listed above.

Table 17: Ratio of Income to Federal Poverty Level (FPL) for Families with Young Children (Ages 0 to 4)

	Estimated number of families with children (ages 0-4)	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
Yuma Region	11,446	27%	40%	47%	58%
Central	7,728	24%	35%	42%	51%
East	223	8%	37%	69%	69%
South	3,495	35%	51%	59%	73%
Yuma County	11,496	27%	40%	48%	58%
ARIZONA	301,165	27%	35%	41%	49%

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

Note: Columns in this table are cumulative. In other words, the 27% of families that are below 100% of the FPL are also counted in the 58% of families that are below 185% of the FPL.

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

	CY 2012	CY 2013	CY 2014	CY 2015	Change from 2012 to 2015
Yuma Region	703	697	555	462	-34%
Yuma County	711	702	562	472	-34%
ARIZONA	26,827	24,889	19,884	16,336	-39%

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

## Employment and Unemployment

Unemployment rates have been dropping steadily in the state since 2010, and rates have also dropped overall in Yuma County, but with an uptick in 2013 (Table 19). Unemployment rates have been consistently higher in Yuma County compared to the state, perhaps due to the seasonality of the county's largest industry, agriculture.<sup>48</sup> In 2016, the unemployment rate in Yuma County was 18.6 percent compared to 5.3 percent for the state. Differences also exist by city, with the City of Yuma having a lower rate (11.7% in 2016) than Yuma County as a whole, while the City of San Luis (43% in 2016) and the Town of Wellton (47.8% in 2015) have higher rates compared to the county.

For young children living with both parents in the region, both parents are more likely to be in the labor force (32%) than just one parent (30%) (Table 20).<sup>ii</sup> This pattern is the same for the state. Twenty-seven percent of young children in the Yuma Region live with a single parent who is employed. Taken together, this means that over half (59%) of young children in the region live in a home where all the parents participate in the labor force. Families in this situation are likely to have a high need for child care. In addition to unemployment rates, the lack of child care, or the prohibitive cost of child care, can keep parents from participating in the labor force.<sup>49</sup> Notably, in the East sub-region, 61 percent of children aged birth to 5 are living with two parents with one in, and one out of the labor force. And in the South sub-region, 17 percent of young children are living with a single parent not in the labor force.

Table 19. Annual Unemployment Rates, 2009 to 2016

	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016
Yuma Region	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
City of San Luis	N/A	31.5%	47.7%	48.6%	51.7%	48.7%	47.5%	43.0%
City of Somerton	N/A	N/A	29.7%	29.3%	31.2%	28.2%	27.0%	N/A
Town of Wellton	N/A	N/A	51.3%	50.7%	52.9%	49.4%	47.8%	N/A
City of Yuma	N/A	22.7%	17.6%	16.6%	17.2%	15.0%	13.8%	11.7%
Yuma County	23.0%	25.1%	24.2%	23.9%	25.5%	22.9%	21.6%	18.6%
Arizona	9.9%	10.4%	9.5%	8.3%	7.7%	6.8%	6.0%	5.3%

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

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

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

Table 20: Parents of Young Children (Ages 0 to 5) Who Are or Are Not in the Labor Force

	Estimated number of children (ages 0-5) living with one or two parents	Children (ages 0-5) living with two parents who are both in the labor force	Children (ages 0-5) living with two parents, one in the labor force, and one not	Children (ages 0-5) living with two parents, neither in the labor force	Children (ages 0-5) living with a single parent who is in the labor force	Children (ages 0-5) living with a single parent who is not in the labor force
Yuma Region	17,587	32%	30%	1%	27%	10%
Central	11,909	33%	32%	1%	26%	8%
East	378	22%	61%	0%	14%	2%
South	5,300	29%	23%	2%	29%	17%
Yuma County	17,661	32%	30%	1%	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.<sup>50</sup> The USDA defines food insecurity as a “household-level economic and social condition of limited or uncertain access to adequate food.”<sup>51</sup> In Yuma County, 20 percent of the all age population is estimated to be food insecure, which is higher than across the state as a whole (17%) (Table 21). Thirty-six percent of children (those under 18 years old) are food insecure, again, higher than the state’s 27 percent. An estimated 86 percent of food insecure children in the region are likely to be income-eligible for federal nutrition assistance (Table 21).<sup>52,53</sup>

Families’ ability to promote the health of their children is influenced by the built environment of their communities. In Yuma County in 2012 (the most recent data available), there were 3.6 times as many fast-food restaurants as there were grocery stores (Table 22).<sup>iii</sup> In all of Yuma County, there were 10 fitness and recreation facilities in 2012,<sup>iv</sup> meaning that many families cannot reasonably access one of these facilities.

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

[https://www.ers.usda.gov/webdocs/DataFiles/Data\\_Access\\_and\\_Documentation\\_Downloads\\_\\_18030/documentation.pdf?v=42226](https://www.ers.usda.gov/webdocs/DataFiles/Data_Access_and_Documentation_Downloads__18030/documentation.pdf?v=42226)

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

[https://www.ers.usda.gov/webdocs/DataFiles/Data\\_Access\\_and\\_Documentation\\_Downloads\\_\\_18030/documentation.pdf?v=42226](https://www.ers.usda.gov/webdocs/DataFiles/Data_Access_and_Documentation_Downloads__18030/documentation.pdf?v=42226)

Other programs, such as the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and the National School Lunch Program are important for helping those at risk of hunger. Although the number of young children participating in SNAP has declined since 2012, this program still supports almost 10,000 children in the Yuma Region annually (Table 24). Figure 13 illustrate the proportion of households receiving SNAP across the region. WIC participation has also declined slightly in the region (Table 26) but still serves a considerable portion of the population of women and children (79% in 2015). Table 27 provides a single month snapshot of participation in the program; 86 percent of the infants and 73 percent of the children who were enrolled in WIC claimed their benefits that month (January 2015).

Schools are an important part of the nutrition assistance system, especially for children that may be food insecure. Three quarters (74-75%) of students in the Yuma Region have been eligible for free or reduced-price lunch since 2012 (Figure 10), although there is variability by school district (see Table 28). At the same time, the percent across the state has hovered at 57 percent. When school is not in session, schools, community centers, churches, and other community institutions in areas with at least 50 percent of children or more who are eligible for free or reduced-price lunch can receive funding through the Summer Food Service Program (SFSP)<sup>v</sup> to provide summer meals to children of all ages.<sup>54</sup> The number of meals provided by SFSP has increased by 22 percent in Yuma County, while that number has dropped by 10 percent across the state as a whole (Table 29; Figure 11).

In Yuma County in January 2015, there were 31 sites participating in the Child and Adult Care Food Program (CACFP), not counting adult care centers or emergency shelters. Most of these sites in the county were Head Start centers (n=19), in contrast to the state where most CACFP sites are child care centers and preschools (Table 30). The number of meals served increased substantially (+21%) between 2014 and 2015 in Yuma County, whereas the number of meals had a smaller increase statewide during the same period (+9%) (Table 32; Figure 12). All Head Start centers in the Yuma Region participate in CACFP, but 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 21: 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)
Yuma Region	N/A	N/A	N/A	N/A	N/A	N/A
Yuma County	201,453	20%	79%	54,302	36%	86%
ARIZONA	6,731,493	17%	67%	1,622,080	27%	68%

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

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

Table 22: 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
Yuma Region	N/A	N/A	N/A	N/A	N/A	N/A
Yuma County	32	0.16	114	0.57	10	0.05
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](http://www.ers.usda.gov/data-products/food-environment-atlas)

Table 23: 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
Yuma Region	117	60.0	23	11.8
Yuma County	118	60.3	23	11.7
ARIZONA	4,038	63.2	644	10.1

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

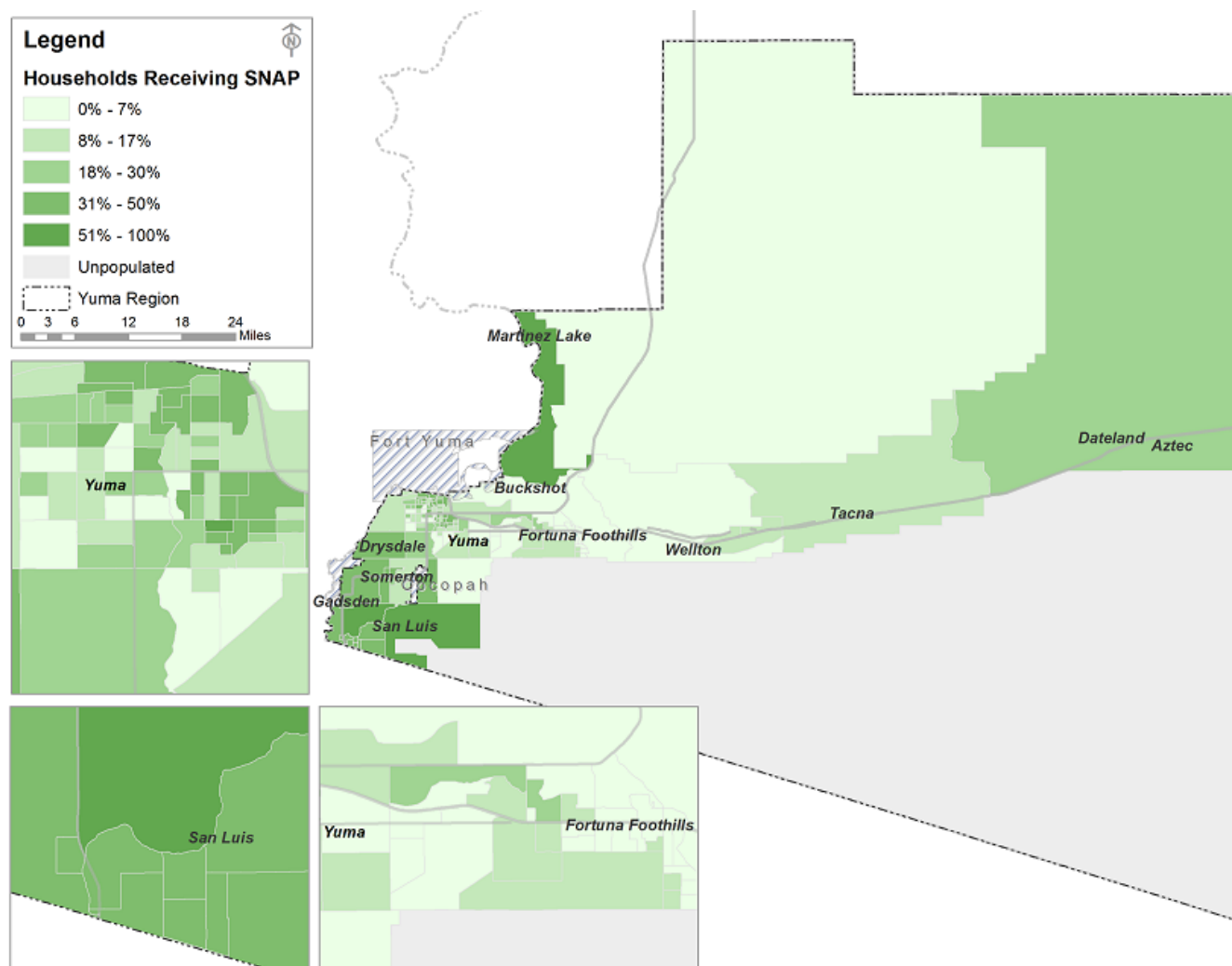
Notes: Per capita figures were calculated using the 2010 Census total population for each geography. SNAP and WIC retailers by geography account for the retailers falling within the geographic boundaries of a given area. WIC retailers account for retailers authorized through both the Arizona Department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

Table 24: Numbers of Young Children (Ages 0 to 5) Receiving SNAP Benefits, 2012 to 2015

	FY 2012	FY 2013	FY 2014	FY 2015	Change from 2012 to 2015
Yuma Region	10,889	10,810	10,667	9,917	-9%
Yuma County	10,939	10,876	10,742	9,995	-9%
ARIZONA	296,686	290,513	277,345	249,712	-16%

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

Figure 9: Map of Households Receiving SNAP in the Yuma Region



Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B22002. Map produced by CRED

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

	Total	Women	Infants	Children
Yuma Region	16,117	4,249	4,392	7,476
Yuma County	16,200	4,268	4,412	7,520
ARIZONA	310,181	82,860	87,836	139,485

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

Table 26: 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
Yuma Region	14,934	12,462	83%	12,266	82%	11,915	80%	11,868	79%	-5%
Yuma County	14,986	12,521	84%	12,322	82%	11,970	80%	11,932	80%	-5%
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 27: WIC Participation Rates During January 2015

	Total	Women	Infants	Children
Yuma Region	78%	81%	86%	73%
Yuma County	78%	81%	86%	73%
ARIZONA	79%	78%	84%	77%

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

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

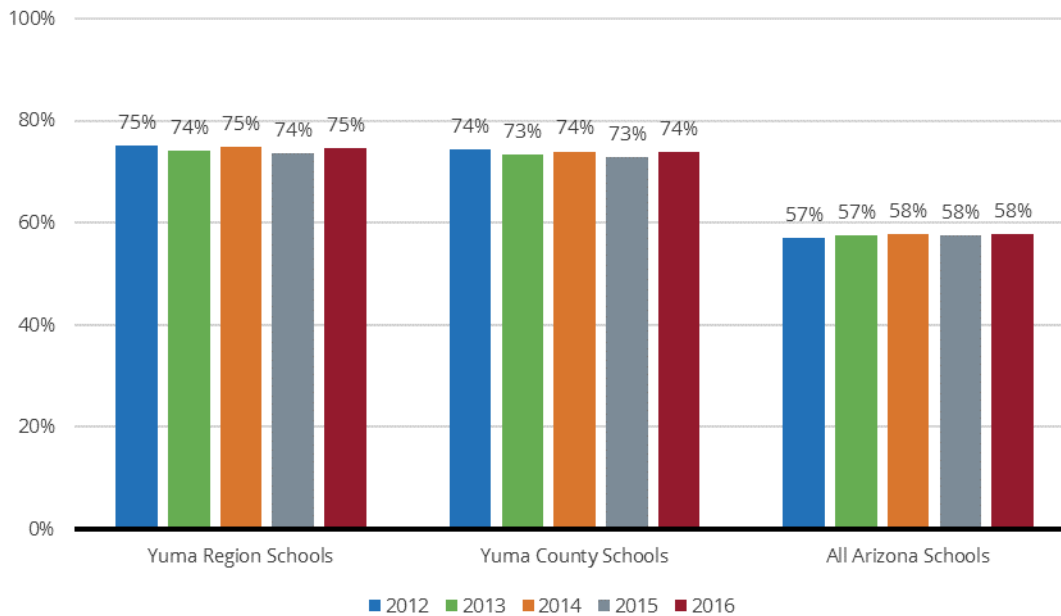
**Table 28: Proportion of Students (Pre-kindergarten Through Twelfth Grade) Eligible for Free or Reduced-Price Lunch, 2012 to 2016**

	2012	2013	2014	2015	2016
<b>Yuma Region Schools</b>	<b>75%</b>	<b>74%</b>	<b>75%</b>	<b>74%</b>	<b>75%</b>
Antelope Union High School District	76%	81%	80%	76%	85%
Arizona State Schools for the Deaf and Blind	N/A	N/A	N/A	N/A	N/A
Crane Elementary District	74%	69%	68%	68%	67%
Gadsden Elementary District	97%	97%	97%	93%	93%
Hyder Elementary District	89%	89%	89%	89%	89%
Mohawk Valley Elementary District	64%	75%	69%	63%	80%
Somerton Elementary District	84%	86%	86%	86%	86%
Wellton Elementary District	77%	80%	83%	84%	86%
Yuma Elementary District	68%	68%	68%	67%	70%
Yuma Union High School District	68%	64%	68%	67%	68%
Yuma Region Charter Schools	79%	83%	80%	80%	78%
Yuma County Schools	74%	73%	74%	73%	74%
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.

Figure 10: Proportion of Students (Pre-kindergarten Through Twelfth Grade) Eligible for Free or Reduced-Price Lunch, 2012 to 2016



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

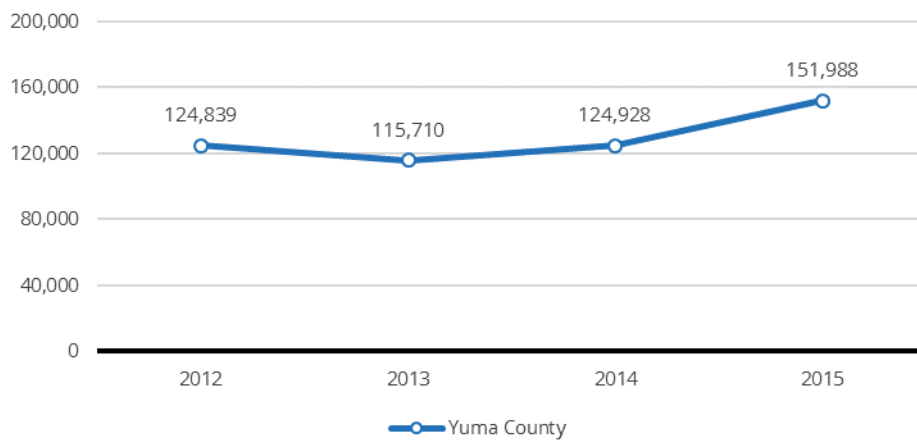
Table 29: The Summer Food Service Program (SFSP)

	Number of sites in Summer 2015	Number of free meals in Summer 2015	Change in the number of meals from 2012 to 2015
Yuma Region	N/A	N/A	N/A
Yuma County	120	151,988	22%
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 11: Number of Meals Served by the Summer Food Service Program (SFSP)



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

Table 30. Sites participating in CACFP by type, January 2015

	At-Risk Meal Service Center	Child Care Center or Preschool	Head Start Center	Outside School Hours Care Center
Yuma Region	N/A	N/A	N/A	N/A
Yuma County	0	12	19	0
Arizona	196	401	294	10

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

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

Table 31: Number of Children Served by the Child and Adult Care Food Program (CACFP) in January 2015

	Breakfast	Morning snack	Lunch	Afternoon snack	Supper	Evening snack
Yuma Region	N/A	N/A	N/A	N/A	N/A	N/A
Yuma County	2,068	391	2,068	2,065	457	407
Arizona	50,252	16,809	54,098	56,849	27,906	2,375

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

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

Table 32: Meals Served by the Child and Adult Care Food Program (CACFP), 2012 and 2015

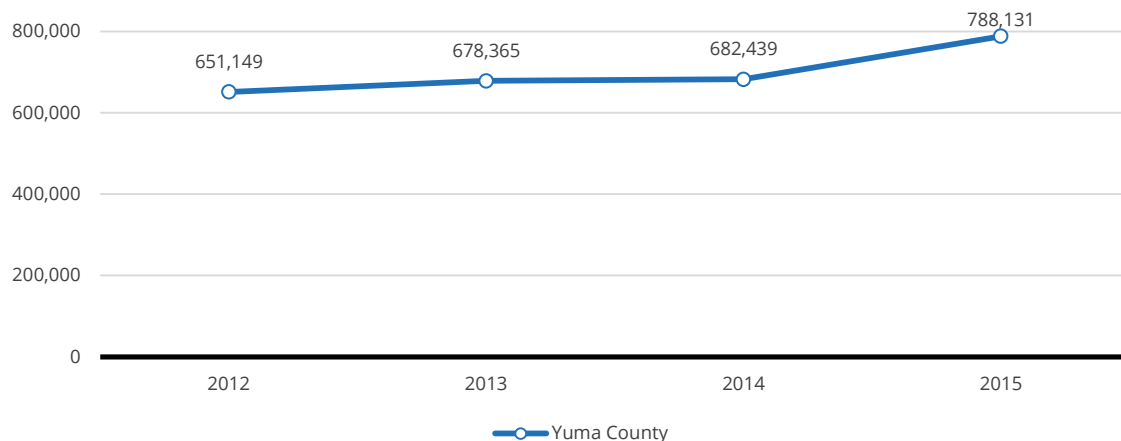
	Number of meals served in 2012	Number of meals served in 2015	Change from 2012 to 2015
Yuma Region	N/A	N/A	N/A
Yuma County	651,149	788,131	+21%
Arizona	19,923,277	21,773,052	+9%

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

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

Notes: Each year represents a federal fiscal year, i.e., October 1 through September 30.

Figure 12: Number of Meals Served by the Child and Adult Care Food Program (CACFP), 2012 and 2015



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

## Housing and Homelessness

Of the 69,533 occupied housing units in the Yuma Region, 69 percent are occupied by home-owners and 31 percent are occupied by renters (Table 33). Rates are roughly similar across the sub-regions, with the highest rate of home-ownership in the East sub-region (76%). Home-ownership across the region and all sub-regions is greater than elsewhere in the state (63%). The Yuma Region looks similar to the state as a whole with regard to the cost of housing: 33 percent of Yuma housing units require their residents to contribute more than 30 percent of their household income toward housing, compared to 34 percent statewide (Table 34). In the East sub-region, housing is relatively more affordable, with only 19 percent of units crossing the 30 percent cost threshold, whereas in the South sub-region, 43 percent do.

Table 33: Owner- and Renter-Occupied Housing Units

	Number of occupied housing units	Owner-occupied units	Renter-occupied units
Yuma Region	69,533	69%	31%
Central	52,190	68%	32%
East	2,703	76%	24%
South	14,640	73%	27%
Yuma County	69,915	69%	31%
ARIZONA	2,387,246	63%	37%

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

Table 34: The Cost of Housing, Relative to Household Income

	Number of occupied housing units	Occupied housing units which cost 30% of household income, or more
Yuma Region	69,533	33%
Central	52,190	31%
East	2,703	19%
South	14,640	43%
Yuma County	69,915	33%
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.<sup>55,56,57,58</sup> Starting in kindergarten, poor school attendance can cause children to fall behind, leading to lowered proficiency in reading and math, and increased grade-retention.<sup>59</sup>

Early education is laying an important foundation for the future. Students who are at or above grade level reading in third grade are more likely to graduate high school and attend college.<sup>60</sup> A family's economic circumstances can multiply this effect: more than one-fourth (26%) of children who were both not reading proficiently in third grade and living in poverty for at least a year do not finish high school – that is more than six times the drop-out rate for proficient readers.<sup>61</sup>

In 2010, the Arizona legislature, recognizing the importance of early reading proficiency, enacted *Move on When Reading* legislation to support building literacy skills in the early grades. Part of the legislation is Arizona Revised Statute §15-701, which states that, as of school year 2013-14, a student shall not be promoted from the third grade if the student obtains a reading score that falls far below the third-grade level as established by the State Board of Education.<sup>62</sup> Exceptions exist for students identified with or being evaluated for learning disabilities, English language learners, and those with reading impairments.

From 2000-2014, the primary in-school performance measure of students in public elementary schools in the state was the Arizona's Instrument to Measure Standards (AIMS).<sup>63</sup> In 2014, the statewide assessment tool for English language arts (ELA) (including reading and writing) and mathematics changed from AIMS to AzMERIT (Arizona's Measurement of Educational Readiness to Inform Teaching), and the first AzMERIT testing began in the 2015 school year.<sup>64</sup> AzMERIT scores are now used to determine promotion from the third grade in accordance with the *Move on When Reading* law. New proficiency cut points were determined by grade level,<sup>65</sup> and earning a score of "proficient" or "highly proficient" indicates that a student is prepared for the next grade without requiring additional support.<sup>66</sup> Students who score as either "minimally" or "partially proficient" are likely to need support to be ready to move on to the next grade.<sup>67</sup> In order for children to be prepared to succeed on tests such as AzMERIT, research shows that early reading experiences, opportunities to build vocabularies, and literacy-rich environments are the most effective ways to support the literacy development of young children.<sup>68</sup>

Beyond the direct connections between caregivers' education and their own literacy, the ability to read to, share with, and teach young children in the home is influenced by parental and familial stress levels, income levels, and educational levels. Families in poverty are often grappling with issues of day-to-day survival which may limit time spent in developmentally enriching activities. Parents with higher educational attainment may be less vulnerable to these issues and are more likely to have children with

positive outcomes related to school readiness and educational achievement, as well improved health, social and economic outcomes.<sup>69</sup> Higher levels of parental education are also associated with better housing, more secure neighborhoods, and stable working conditions, all of which are important for the health and well-being of children.<sup>70,71</sup>

## What the Data Tell Us

### Standardized Test Scores

District boundaries are shown in Figure 13.<sup>vi</sup> 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 33 percent of Yuma Region students attained these scores on the third grade math assessment, which was a lower passing rate than across Arizona as a whole (41%) (Figure 14). Performance on the English language arts (ELA) test was similar, with 29 percent of Yuma students demonstrating proficiency, compared to 40 percent across the state (Figure 15). A portion of the 55 percent of Yuma 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.<sup>vii</sup>

The highest achieving districts in the region in math were the Hyder Elementary District (45% passing math), Crane Elementary District (43% passing math), Yuma Region Charter Schools (40% passing math), and Yuma Elementary District (38% passing math) (Table 35). Only two districts had more than one-third of third-grade students passing English language arts; Yuma Region Charter Schools (38% passing ELA), and Crane Elementary District (36% passing ELA) (Table 36). The districts with the lowest proficiency rates in Math were Gadsden Elementary District (16% passing math), and Mowhawk Valley and Somerton Elementary Districts (both 17% passing math) (Table 35). In ELA, Mowhawk Valley and Wellton Elementary Districts (both 11% passing ELA), Somerton Elementary District (17% passing ELA) and Hyder Elementary District (18% passing ELA) had the lowest proficiency rates (Table 36).

A sample of students in Arizona grades 4, 8 and 12 also take the National Assessment of Educational Progress (NAEP), a nationally-administered achievement test that allows for comparisons between states. Thirty percent of Arizona fourth graders scored at the proficient or advanced level in reading in 2015, compared with 35 percent of fourth graders nationally. Scores have been improving steadily, both in the state and nationally, since testing began in 1998.<sup>72</sup>

Strong disparities 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-

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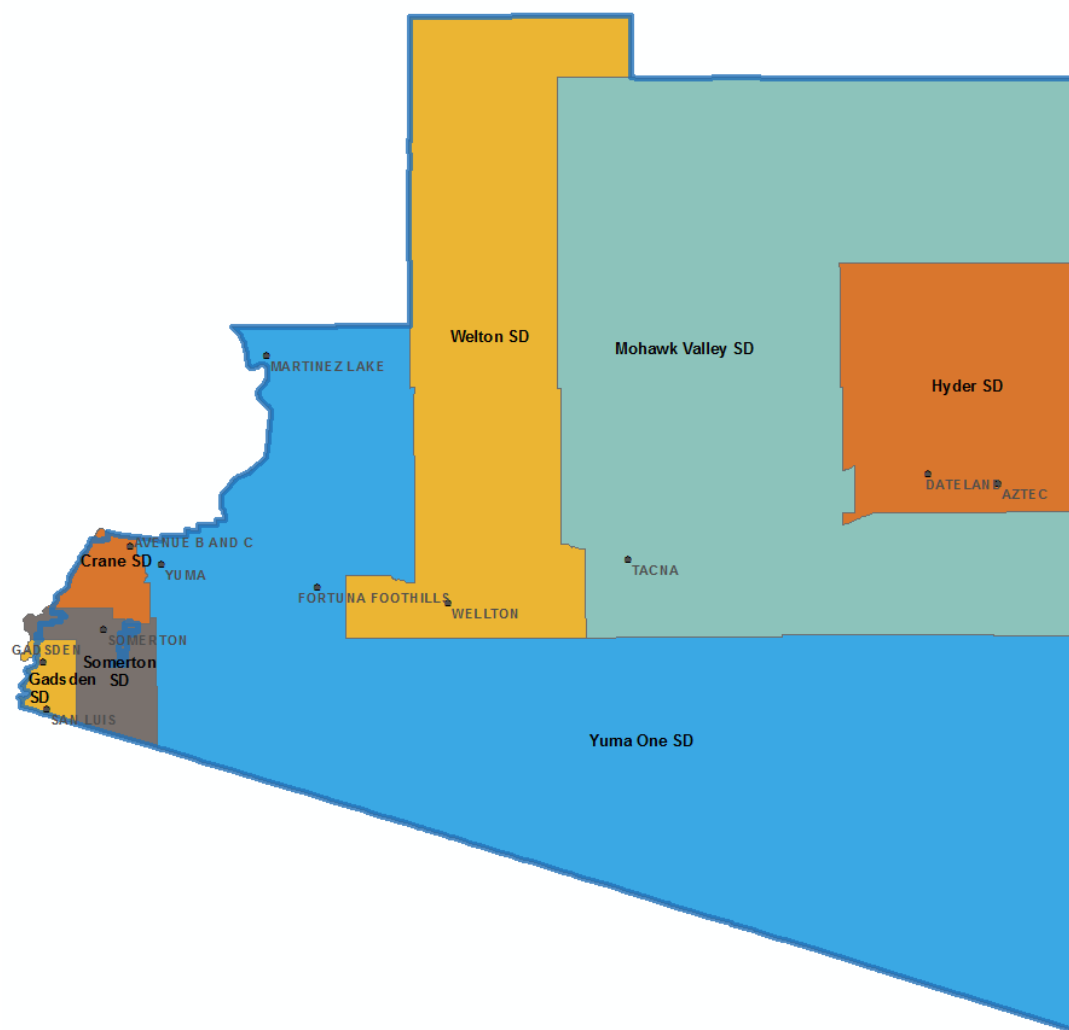
<sup>vi</sup> Information on individual schools is available through the Arizona Department of Education's website: <http://www.azed.gov/research-evaluation/aims-assessment-results/>.

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

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.

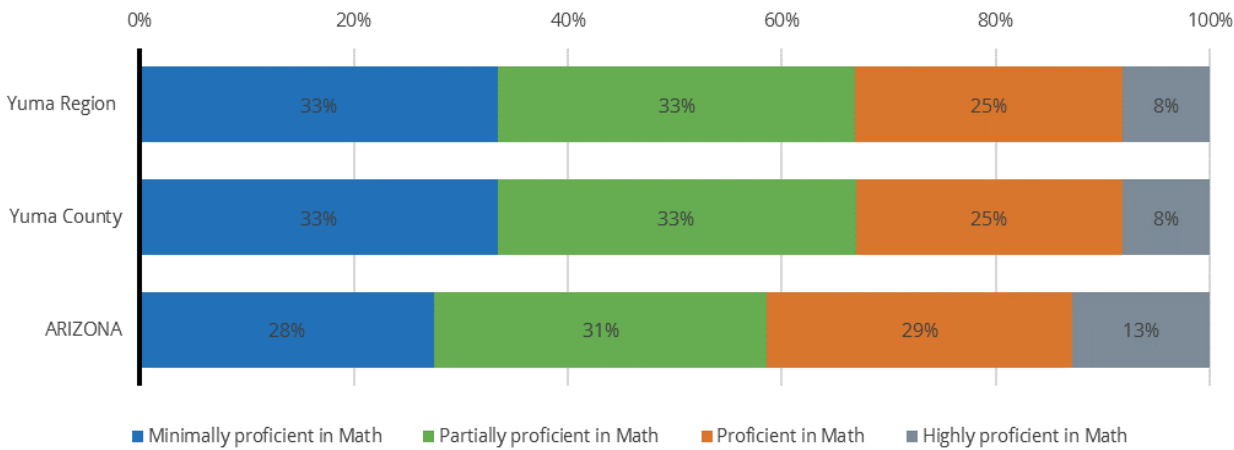
Student performance in the Yuma Region, and statewide, suggests that there is much work to be done to support early literacy and to strengthen scholastic achievement, particularly among young children of color and children in poverty.

Figure 13. School Districts of the Yuma Region



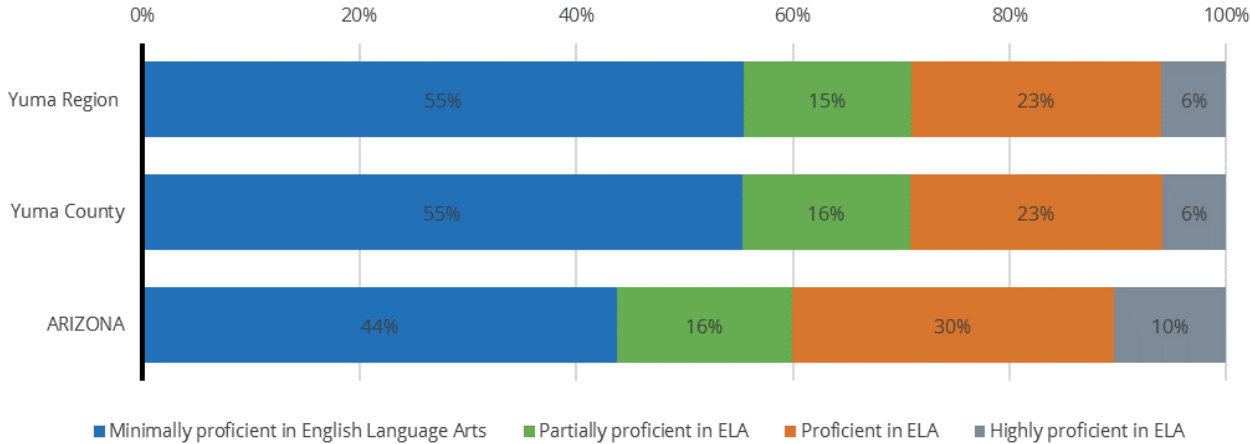
Source: First Things First (2016). Map produced by First Things First.

Figure 14: AzMERIT Math Test Results for Third-Graders in the 2014-2015 School Year



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

Figure 15: AzMERIT English Language Arts Test Results for Third-Graders in the 2014-2015 School Year



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

Table 35: 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)
Yuma Region Schools	33%	33%	25%	8%	33%
Crane Elementary District	25%	31%	31%	12%	43%
Gadsden Elementary District	51%	33%	13%	3%	16%
Hyder Elementary District	36%	18%	45%	0%	45%
Mohawk Valley Elementary District	39%	44%	17%	0%	17%
Somerton Elementary District	52%	31%	15%	2%	17%
Wellton Elementary District	43%	32%	21%	4%	25%
Yuma Elementary District	26%	36%	28%	10%	38%
Yuma Region Charter Schools	25%	35%	31%	9%	40%
Yuma County Schools	33%	33%	25%	8%	33%
All Arizona Schools	28%	31%	29%	13%	41%

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

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

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

Table 36: 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)
Yuma Region Schools	55%	15%	23%	6%	29%
Crane Elementary District	47%	17%	26%	10%	36%
Gadsden Elementary District	63%	14%	19%	3%	23%

Hyder Elementary District	55%	27%	18%	0%	18%
Mohawk Valley Elementary District	72%	17%	11%	0%	11%
Somerton Elementary District	69%	14%	15%	2%	17%
Wellton Elementary District	74%	15%	11%	0%	11%
Yuma Elementary District	56%	14%	25%	5%	30%
Yuma Region Charter Schools	43%	19%	28%	10%	38%
Yuma County Schools	55%	16%	23%	6%	29%
All Arizona Schools	44%	16%	30%	10%	40%

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

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

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

## Educational Attainment

The Arizona Department of Education tracks the percent of students who are chronically absent, meaning they have missed more than 10 days of school in a school year. Table 37 shows these percentages for elementary school districts in the region. The percentage of elementary school students in grades one through three who were chronically absent remained unchanged from 2014 to 2015 in the Yuma Region (38%), but were slightly higher than those percentages across the state (34% in 2014 and 36% in 2015). Some variability existed across school districts, with Wellton and Crane Elementary Districts having over 40 percent of students chronically absent in 2015 (43% and 42% respectively). Identifying and addressing the reasons behind chronic absenteeism is important to ameliorate later effects on educational achievement and graduation rates.<sup>73</sup>

The high school drop-out rate in Yuma Region fell slightly to four percent in 2015, from a high of five percent in 2012 (Table 37). The rate in the Yuma Region has been similar to the county and state rate over time (Table 37). Of note, Yuma Region Charter Schools had drop-out rates that were more than three times that of the region overall from 2012 through 2015. The four-year graduation rate in the Yuma Region (76%) was the same as Arizona as whole (76%), and has been similar across previous years (Figure 16). Yuma Union High School District stands out as a high-performer: 82 percent of students graduate in four years. Again, Yuma Region Charter Schools stood out for the opposite reason: in 2014 only 36 percent of students there graduated in four years (Table 38).

Educational attainment of adults aged 25 and older in the Yuma Region lags substantially behind the state as a whole. In the Yuma Region, over a quarter of the population 25 and older (28%) did not complete high school, and in the South sub-region, half of adults did not complete high school (Table 39). This is twice and over three times the state rate (14%). Adults in the region are also less likely to have a bachelor's or higher degree (14%) than adults across Arizona (27%), and somewhat less likely to have had some college or professional training (32% compared to 34% for the state). In 2015, unemployment rates for those with less than a high school diploma (8%) were over twice that of those

with an associate's degree (3.8%) and Bachelor's degree (2.8%, decreasing for higher degrees) nationally.<sup>74</sup> The relation between unemployment and education may be complicated in areas with the highest unemployment, such as some areas of the region, with the lack of job opportunities leaving residents with little incentive to pursue higher education.<sup>75</sup>

Table 37: 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
Yuma Region Schools	38	9,426	3,551	38%	9,334	3,586	38%
Crane Elementary District	9	2,303	940	41%	2,255	957	42%
Gadsden Elementary District	6	1,647	601	36%	1,677	618	37%
Hyder Elementary District	1	36	9	25%	36	14	39%
Mohawk Valley Elementary District	1	52	23	44%	57	19	33%
Somerton Elementary District	3	1,007	357	35%	993	303	31%
Wellton Elementary District	1	108	43	40%	92	40	43%
Yuma Elementary District	12	3,340	1,278	38%	3,236	1,272	39%
Yuma Region Charter Schools	5	933	300	32%	988	363	37%
Yuma County Schools	39	9,426	3,551	38%	9,393	3,605	38%
All Arizona Schools	1,185	278,142	93,719	34%	283,147	103,078	36%

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

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

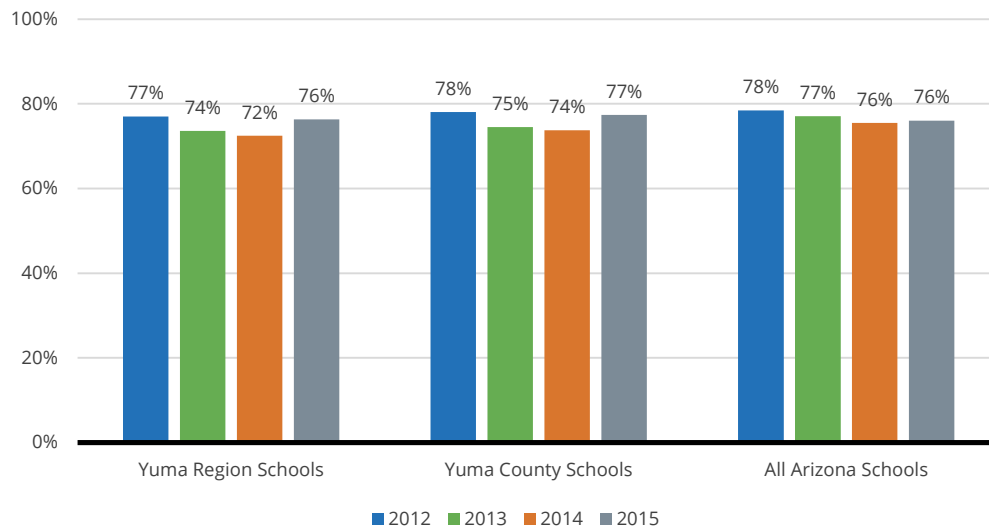
Table 38: High School Drop-Out and Graduation Rates, 2012 to 2015

	Total number of high schools and alternative schools	Drop-out rate, 2012	Drop-out rate, 2013	Drop-out rate, 2014	Drop-out rate, 2015	Four-year graduation rate, 2011	Four-year graduation rate, 2012	Four-year graduation rate, 2013	Four-year graduation rate, 2014
Yuma Region Schools	14	5%	4%	4%	4%	77%	74%	72%	76%
Antelope Union High School District	1	DS	5%	3%	DS	79%	73%	75%	69%
Yuma Union High School District	7	4%	2%	3%	3%	81%	78%	78%	82%
Yuma Region Charter Schools	6	17%	17%	15%	14%	40%	40%	34%	36%
Yuma County Schools	13	4%	3%	3%	3%	78%	75%	74%	78%
All Arizona Schools	836	4%	3%	3%	4%	78%	77%	76%	76%

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

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

Figure 16: High School Graduation Rates, 2012 to 2015



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

Table 39: Level of Education for the Adult Population (Ages 25 and Older)

	Estimated population (ages 25 and older)	Less than high school	High school or GED	Some college or professional education	Bachelor's degree or more
Yuma Region	123,230	28%	25%	32%	14%
Central	88,661	21%	27%	35%	16%
East	5,095	22%	36%	31%	11%
South	29,474	50%	18%	24%	8%
Yuma County	123,759	28%	25%	32%	14%
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.<sup>76</sup> Gaps in language development between children from disadvantaged backgrounds and their more advantaged peers are already evident by 18 months of age;<sup>77</sup> those disparities that persist until kindergarten are predictive of later academic problems.<sup>78</sup>

Families play a tremendous role in fostering development. Research shows that children's health, socio-emotional, and cognitive development also benefit greatly from high quality early learning.<sup>79,80</sup> This is particularly true for children from disadvantaged backgrounds.<sup>81</sup> Children whose education begins in high quality preschool programs repeat grades less frequently, obtain higher scores on standardized tests, experience fewer behavior problems, and are more likely to graduate high school.<sup>82</sup>

Investment in children during the crucial first five years not only provides the necessary foundation for later achievement, but also produces a positive return on investment to society through increased educational achievement and employment, reduction in crime, and better overall health of those children as they mature into adults.<sup>83,84,85</sup> Experts estimate that investments in quality early learning initiatives can offer returns as high as \$16 per dollar spent.<sup>86,87</sup> In other words, the costs of these programs are ultimately repaid several times over and the investment in early childhood is potentially one of the most lucrative ones that a community can make.

The ability of families to access quality, affordable early care and education opportunities, however, can be limited. Nearly one-third (32%) of parents of young children responding to a national survey regarding child care reported it was very or somewhat difficult to find care for their child, with cost being the most often cited challenge. More than two-thirds (69%) of parents surveyed reported having to pay in order to secure child care, and almost a third (31%) of those parents reported that this cost has caused a financial problem for the household.<sup>88</sup> According to the U.S. Department of Education, only 19 percent of four-year-olds in Arizona are enrolled in publically funded preschool or Head Start programs, compared to 41 percent nationally.<sup>89</sup> If not enrolled in publically-funded programs, which are often free or reduced cost, the annual cost of full-time center-based care for a young child in Arizona is nearly equal to the cost of a year at a public college (\$9,166).<sup>90</sup>

Child care subsidies can be a support for families who have financial barriers to accessing early learning services.<sup>91</sup> The number of subsidies to families in Arizona through the Child Care and Development Fund (CCDF) has increased recently. In 2015, 38,855 children aged birth to 5 (about 7% of Arizona's children in this age range) received CCDF vouchers, up from 26,685 (about 5% of children aged 0-5) in 2014. With half of young children in Arizona living below the federal poverty level, the number in need of these subsidies is likely much higher than those receiving them.

In addition to prohibitive costs, the availability of suitable child care cannot be taken for granted. An inadequate child care supply, known as a “child care desert,” has been defined as a zip code with at least 30 children under five years of age and either no or very limited center-based early care and education programs (i.e., there are more than three times as many children under age five as there are spaces in the child care settings.)<sup>92</sup> Living in a child care desert disproportionately affects rural populations, and given the many rural counties in Arizona, this is likely a common phenomenon in many regions.

Beyond basic issues of access and affordability, quality is 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.<sup>93</sup> 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.<sup>94</sup>

Arizona was one of five states to receive a federal Preschool Development Block Grant (PDG) in 2015, with funding totaling \$80 million over fiscal years 2017–2020. A main goal of this funding is to expand the number of quality preschools enrolled in Quality First in underserved areas through a partnership between First Things First and the Arizona Department of Education. The grant will also support early childhood infrastructure development, early-learning provider partnerships, and coordination of early childhood funding.<sup>95</sup>

The presence of qualified, well-trained, caring professionals is essential to providing quality child care and early education experiences for children. In Arizona, the number of early childhood professionals receiving a credential or degree has increased from 2007 (21%) to 2012 (29%). However, one incentive for attaining these credentials – increased wages – shows an opposite pattern. Wages for assistant teachers, teachers, and administrative directors working across all types of licensed child care and education settings in Arizona decreased between 2007 and 2012, after adjusting for inflation. In addition, average annual wages for early education professionals in Arizona are about half that of kindergarten and elementary teachers, which may affect retention of those in early education settings, particularly after degree attainment.<sup>96</sup>

In addition to formal education, there are additional professional development opportunities available for early childhood professionals in Arizona. The Arizona Early Childhood Career and Professional Development Network, supported by First Things First, hosts a professional development website, [AZEaryChildhood.org](http://AZEaryChildhood.org), that provides early childhood professionals with resources and information on

professional development opportunities, career and job advancement, and networking in the early childhood field.<sup>97,98</sup>

The availability of early learning opportunities and services for young children with special needs is an ongoing concern across the state, particularly in the more geographically remote communities. Children with special health care needs (CSHCN) are defined as “those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.”<sup>99</sup> According to the National Survey of Children’s Health, children with special health care needs are more likely to experience more adverse childhood experiences than typically developing children,<sup>100</sup> and are at an increased risk for maltreatment and neglect.<sup>101,102</sup> Almost half (46%) of families with a child with special needs in Arizona have incomes below 200 percent of the federal poverty level.<sup>103</sup>

Ensuring all families have access to timely and appropriate screenings for children who may benefit from early identification of special needs is paramount to improving outcomes for these children and their families. Timely intervention can help young children with, or at risk for, developmental delays improve language, cognitive, and socio-emotional development. It also reduces educational costs by decreasing the need for special education.<sup>104,105,106</sup> In Arizona, the services available to families with children with special needs include early intervention screening and intervention services provided through the Arizona Department of Education AZ FIND (Child Find),<sup>107</sup> the Arizona Early Intervention Program (AzEIP),<sup>108</sup> and the Division of Developmental Disabilities (DDD).<sup>109</sup>

## What the Data Tell Us

### Child Care and Preschool

According to data from the American Community Survey, 41 percent of children in the Yuma Region aged 3 and 4 were enrolled in nursery school, preschool, or kindergarten, meaning that slightly more participate compared to children statewide (36%) (Figure 17). The lowest rates of participation in school occur in the East sub-region, likely due to the distance from available early education settings.

Enrollment in early care and education is influenced by the availability of child care in the region. According to the most recent data available in 2015 and 2016, there were 150 registered child care providers approved to serve up to 4,945 children in the Yuma Region (Table 40). The Arizona Department of Economic Security’s 2014 Market Rate Survey<sup>110</sup>, which surveyed a total of 3,717 child care providers (1,756 licensed centers, 1,552 approved family homes, 280 certified group homes, and 129 unregulated homes listed with CCR&R), found that providers typically provided care to about 58 percent of their approved capacity. This suggests that the actual availability of child care slots in the region may be closer to 2,900. With a population of young children of about 18,000 in the region (see Table 1), there are likely to be between four and seven young children for each available child care slot in the region.<sup>viii</sup> Keeping in mind the definition of a child care desert, that there are more than three times as many children under age five as there are spaces available in the child care settings,<sup>111</sup> it seems

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<sup>viii</sup> 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.

likely that parts of the Yuma Region fall within this definition. In particular, the South sub-region has a population of 5,258 children aged birth to 5, but total capacity to serve just 751 children. Figure 18 presents a map of early education and child care providers located throughout the Yuma Region.

Of the 150 known child care providers, about one-quarter (n=37) are participating in the Quality First program. Nineteen sites in the Yuma Region are Head Start programs, an additional 10 operate at a public school, and 84 are other providers listed with Child Care Resource & Referral (CCR&R) (Table 40). CCR&R maintains a database of child care providers serving children in Arizona through a partnership between the Arizona Department of Economic Security (DES) and Child & Family Resources, Inc. Providers listed in this database are licensed, certified, regulated, or registered through the DES, Arizona Department of Health Services (ADHS), Arizona Department of Education (ADE), CCR&R, or a Military or Tribal Authority. The 84 CCR&R providers<sup>ix</sup> in the region have a capacity to serve 2,452 children (Table 43). Most of these providers are family child care providers (58 sites, capacity to serve 294) or child care centers (25 sites, capacity to serve 2,154). The South sub-region has only home-based providers registered with CCR&R, while in the East sub-region, only a handful (4) of center-based providers are listed in the CCR&R database.

Of the 37 programs that participate in the Quality First program in the Yuma Region, 26 have achieved the 3-, 4- or 5- star ratings, indicating they are meeting or exceeding quality standards. This represents 70 percent of all Quality First sites in the region, much higher than the equivalent across the state (48% of Quality First sites across the state have a 3-star rating or higher). Most Quality First sites in the Yuma Region are home-based providers (n=20), but these providers serve fewer children (133), compared to the 17 Quality First centers in the region with the capacity to serve 1,146 (Table 43).

The Western Association Council of Governments (WACOG) operates 11 Head Start sites in Yuma County.<sup>x</sup> These WACOG programs served 712 children in the Yuma Region in the 2014-2015 school year, and slightly fewer, 672 in the 2015-2016 school year (Table 44). The number of children on waitlists also decreased from 383 in 2014-2015 to 283 the following school year. Over three-quarters of children enrolled at all WACOG Head Start sites in the region in the 2015-2016 school year were Hispanic or Latino, mirroring the ethnicity of children aged birth to 5 in the region (Table 45). Chicanos Por La Causa also operates Head Start and Early Head Start programs in the region.

According to key informants,<sup>xi</sup> new early education resources have been developed in the region in the past two years. These include new preschools made possible by the Preschool Development Grant, a new preschool at Pecan Grove made possible through collaboration between WACOG and Yuma District 1, and a new Early Head Start program that has grown to two classrooms. In Fiscal Year 2017, an additional 11 full participation Quality First centers and homes were added in the region. In addition, 416 full time slots and 20 part time slots were added to increase access to high quality preschool. The majority of these centers, homes and slots are designated for South County Yuma.

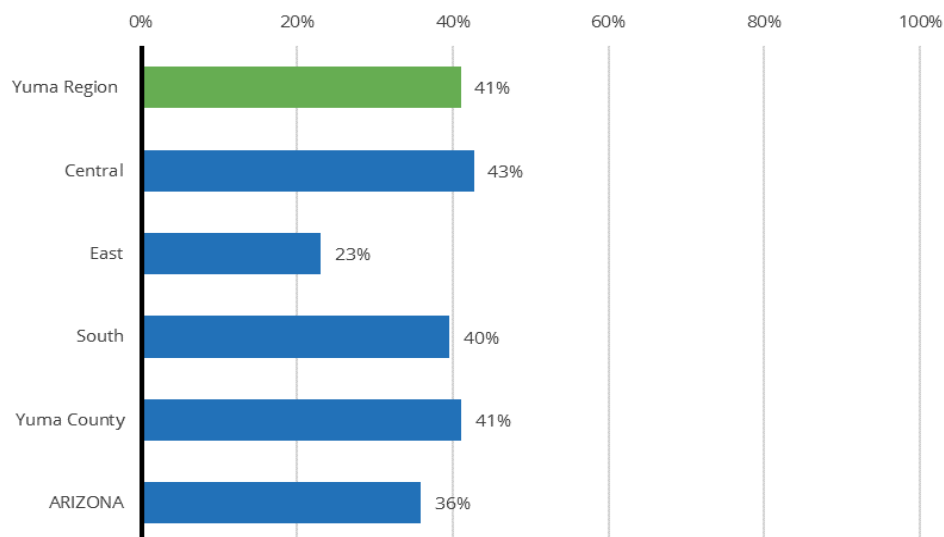
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<sup>ix</sup> This does not include any providers that are Quality First Providers, Head Start programs, or public school preschools.

<sup>x</sup> Data was not available from Chicanos Por la Causa that operates additional Head Start sites in the region.

<sup>xi</sup> In attendance at the October 12, 2016 Data Interpretation Session, and via personal correspondence.

Figure 17: 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 40: Childcare Capacity, by Type of Site

	Total number and total capacity of all childcare 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 childcare providers	
Yuma Region	150	4,945	37	1,279	19	672	10	542	84	2,452
Central	100	3,656	29	1,160	9	503	4	145	58	1,848
East	6	538	0	0	1	18	1	16	4	504
South	44	751	8	119	9	151	5	381	22	100
Yuma County	152	4,965	38	1,299	19	652	10	542	85	2,472
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; First Things First (2016). Quality First, a Signature Program of First Things First. Retrieved from [www.qualityfirstaz.com](http://www.qualityfirstaz.com); Western Arizona Council of Governments. [Head Start Enrollment]. Unpublished data; Arizona Department of Education. [School Enrollment]. Unpublished data.

Note: Head Start enrollment numbers for Yuma County do not include enrollment data for tribal or migrant head start programs.

Table 41: CCR&R Child Care Provider Types

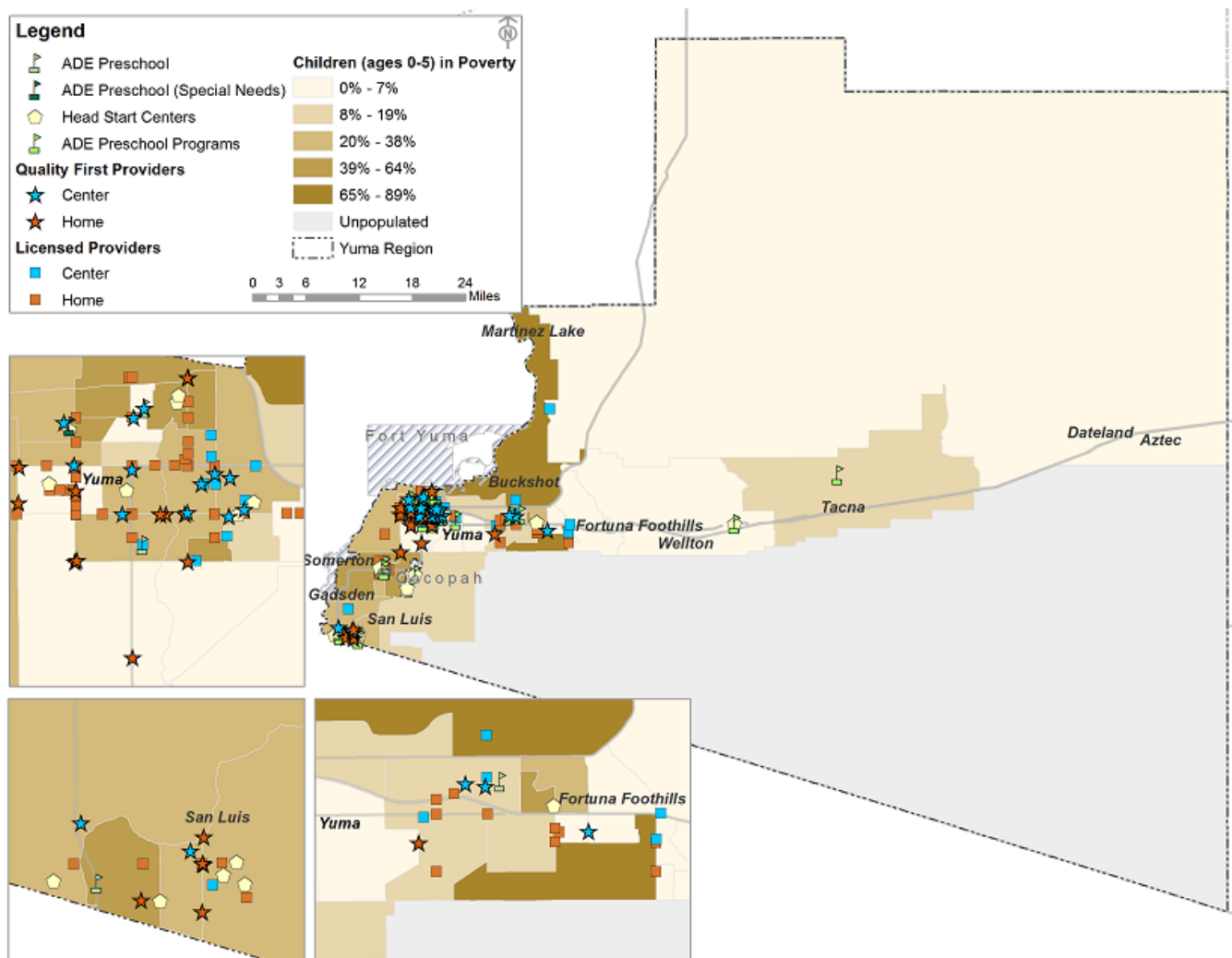
	Nanny / Individual		Family Child Care		Child Care Center		Total	
Yuma Region	1	4	58	294	25	2,154	84	2,452
Central	0	0	37	198	21	1,650	58	1,848
East	0	0	0	0	4	504	4	504
South	1	4	21	96	0	0	22	100
Yuma County	1	4	58	294	26	2,174	85	2,472
Arizona	50	191	903	4,729	670	68,528	1,623	73,448

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

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

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

Figure 18. Map of Early Education and Child Care Providers in the Yuma Region



Source: Arizona Department of Economic Security (2016). [Child Care Resource & Referral dataset]. Unpublished data; First Things First (2016). Quality First, a Signature Program of First Things First. Retrieved from [www.qualityfirstaz.com](http://www.qualityfirstaz.com); Western Arizona Council of Governments. [Head Start Enrollment]. Unpublished data; Arizona Department of Education. [School Enrollment]. Unpublished data; U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B17001. Map produced by CRED

Table 42: 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	
Yuma Region	0	0	5	290	16	503	7	97	3	62	6	327	37	1,279
Yuma County	0	0	6	310	16	503	7	97	3	62	6	327	38	1,299
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](http://www.qualityfirstaz.com)

Table 43: Quality First Providers by Type

	Number and capacity of QF Centers		Number and capacity of QF Head Starts		Number and capacity of QF Home-based providers		Total	
Yuma Region	17	1,146	0	0	20	133	37	1,279
Central	15	1,071	0	0	14	89	29	1,160
East	0	0	0	0	0	0	0	0
South	2	75	0	0	6	44	8	119
Yuma County	17	1,146	1	20	20	133	38	1,299
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](http://www.qualityfirstaz.com);

**Table 44: WACOG Head Start Enrollment and Waitlist for the 2014-2015 and 2015-2016 School Years**

<b>Head Start Center</b>	<b>2014-2015 Enrollment</b>	<b>2014-2015 Waitlist</b>	<b>2015-2016 Enrollment</b>	<b>2015-2016 Waitlist</b>
24th Street	68	39	68	26
Carlisle	40	44	40	34
Carver	60	15	72	12
Foothills	83	29	57	43
Helping Hand	81	19	72	9
Orange Grove	20	14	20	8
Rancho Viejo	120	44	114	51
San Luis	100	109	91	43
Wellton	20	14	18	1
Yuma East	40	19	40	18
Yuma West	80	37	80	38
Yuma County	712	383	672	283

*Source: WACOG data received through personal correspondence.*

Table 45: WACOG Head Start: Race/Ethnicity of Children Enrolled in the 2015-2016 School Year

Head Start Center	Total Enrollment	White	Hispanic/Latino	Black	American Indian or Alaskan Native	Asian	% Hispanic/Latino
24th Street	68	56	52	1	4	0	76%
Carlisle	40	39	39	1	0	0	98%
Carver	69	67	67	1	0	0	97%
Foothills	55	51	44	1	0	0	80%
Helping Hand	71	68	58	1	0	0	82%
Orange Grove	20	20	20	0	0	0	100%
Rancho Viejo	114	104	106	3	1	1	93%
San Luis	66	66	66	0	0	0	100%
Wellton	18	16	17	0	0	0	94%
Yuma East	39	33	34	0	0	0	87%
Yuma West	76	63	64	5	2	1	84%
Yuma County	636	583	567	13	7	2	89%

Source: WACOG 2015-2016 data received through personal correspondence.

Note: Hispanic or Latino ethnicity was identified separately from race; therefore, those who indicated Hispanic or Latino ethnicity may also be reflected in race categories.

## Cost of Care

The cost of care in Yuma County varies by the type of care and the age of the child receiving care; however the median cost in the county relative to the cost of similar care across the state is almost always lower. For example, residents in Yuma County pay lower prices for child care centers (e.g., \$26 per day for infant care vs. \$42), approved family homes (e.g., \$20 per day for infant care vs. \$22), and certified group homes (e.g., \$25 vs. \$27) than parents statewide. Within the region, care in all types of settings is most expensive for infants, with care for infants in licensed child care centers highest (\$26) (Table 46), followed by certified group homes (\$25) (Table 48), and approved family homes (\$20) (Table 47). This is not surprising given that typically, the lower teacher-to-child ratio needed for infant care necessitates a higher cost of care.

Families in the Yuma Region are paying a slightly lower proportion (12-14%, depending on the child's age) of their overall income for a child care slot as other families statewide (Table 49). 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.<sup>112</sup> Families in the Yuma Region, while paying less than across the state, are still paying more than the recommended 10 percent. Also,

these percentages reflect the burden for families with only one young child in need of full-time care. Families with more children would spend a greater proportion of their income on child care. Additionally, these proportions were calculated based on the median income for all families. Single parent homes, particularly those with a single female householder, have a lower median income (see Table 15), 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. The number of children receiving a subsidy increased from 596 in 2014 to 974 in 2015. More than one in five of those children who received subsidies in 2015 were involved with DCS; 91 percent of DCS-involved children received a subsidy, suggesting that this is an important support for children in the child welfare system (Table 51).

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.<sup>113</sup> The number of children on the waitlist in the Yuma Region has decreased slightly each year since 2013; the most recent data, from 2015, show 195 children whose families were hoping to receive support (Table 50).

Table 46: 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
Yuma Region	N/A	N/A	N/A
Yuma County	\$26.00	\$24.00	\$23.00
ARIZONA	\$42.00	\$38.00	\$33.00

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

Table 47: 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
Yuma Region	N/A	N/A	N/A
Yuma County	\$20.00	\$20.00	\$18.00
ARIZONA	\$22.00	\$20.00	\$20.00

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

Table 48: 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
Yuma Region	N/A	N/A	N/A
Yuma County	\$25.00	\$24.00	\$23.00
ARIZONA	\$27.00	\$25.00	\$25.00

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

Table 49: Charge for Full-Time Child Care in Licensed Child Care Centers, as a Percentage of Median Annual Income

	For one infant	For one child, 1 or 2 years old	For one child, 3 to 5 years old
Yuma Region	N/A	N/A	N/A
Yuma County	14%	13%	12%
ARIZONA	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 50: Department of Economic Security (DES) Child Care Subsidies for Children (Ages 0 to 5), 2013 to 2015

	Children eligible for subsidy during 2013	Children eligible for subsidy during 2014	Children eligible for subsidy during 2015	Children receiving subsidy during 2013	Children receiving subsidy during 2014	Children receiving subsidy during 2015	Children on waiting list during 2013	Children on waiting list during 2014	Children on waiting list during 2015
Yuma Region	625	633	1,076	611	596	974	230	221	195
Yuma County	631	637	1,077	615	600	974	230	221	195
ARIZONA	28,429	29,180	43,860	27,041	26,685	38,855	5,094	5,195	5,140

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

Table 51: 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
Yuma Region	245	222	91%
Yuma County	246	222	90%
ARIZONA	18,417	15,785	86%

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

## Child Care Professionals

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

The issues of staff retention and wages face all early care and education providers. According to the 2012 *Early Care and Education Workforce Survey*, the early care and education teacher turnover rate is the highest in the education field, averaging 30 percent across the nation<sup>114</sup>. In spite of increasing numbers of teachers and assistant teachers obtaining a credential or college degree, early care and education teachers in Arizona in 2012 earned about half of the annual earnings for kindergarten and

elementary school teachers, which translates into an hourly rate similar to that of the average high school graduate (\$9.45).<sup>115</sup>

Four colleges or universities offer degree or certification programs for early learning and child care professionals in the Yuma Region. The University of Phoenix offers courses solely on-line, Northern Arizona University - Yuma Campus offers both on-line and in-person coursework, and Arizona Western College and University of Arizona South offer online coursework. Campuses and degrees/certification offered can be found in Table 52.

Other early childhood education professional development opportunities are available in the region. The Yuma Regional Partnership Council in collaboration with Eight-Arizona PBS offers Community Based Professional Development through training events offered monthly and an annual conference.<sup>116</sup> These workshops are open to all early childhood educators in Yuma County and registration is available through the Arizona Early Childhood Workforce Registry.<sup>117</sup> The Registry is also a resource to explore available professional development opportunities in the Yuma Region, as well as FTF College Scholarships for classes taken towards a degree or credential in early childhood. Arizona Childcare Resource and Referral also publishes a quarterly newsletter on early childhood training opportunities, including those in Yuma County<sup>118</sup>. The most recent newsletter<sup>119</sup> listed over twenty trainings in Yuma County, in both English and Spanish. The Arizona Department of Education also offers professional development opportunities in early childhood education, often via webinars, on topics such as early learning standards and infant and toddler development.<sup>120</sup>

Table 52: Availability of Certification or Degree Programs

College	Locations in...	Degree Offered
University of Phoenix	Yuma Learning Center	BS: Education/Early Childhood Education (online)
		MA: Education/Elementary Teacher Education (online)
Arizona Western College	Yuma Main Campus	Certificate: Early Childhood Education
		AAS: Early Childhood Education
		AA: Education, Elementary with Early Childhood Education Emphasis
Northern Arizona University	Yuma Campus	Undergraduate Certificate: Early Childhood Education (blended)
		BA: Interdisciplinary Studies-Early Childhood (online)
		MA: Early Childhood Education (online/blended)
University of Arizona South	UA South Yuma	B.A.S.: Early Childhood Education

Source: <http://www.phoenix.edu/campus-locations/az/southern-arizona-campus/yuma-learning-center.html>

<https://www.azwestern.edu/academics/degrees-and-certificates>

<http://yuma.nau.edu/DegreeSearch.aspx#Keyword=early+childhood+education>

<https://uas.arizona.edu/early-childhood-education>

Key Informant input provided during Data Interpretation Session, October 12, 2016

Note: NAU also offers online degree programs. See <http://yuma.nau.edu> for more information.

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

The Individuals with Disabilities Education Act (IDEA), mandates that all children with disabilities have a free, appropriate, public education (FAPE).<sup>121</sup> 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.<sup>122</sup> Due to the plasticity of neural circuits in the first three years of life, both positive and negative experiences have a strong impact on the developing brain in the early years. Because of this, intervention is likely to be more effective and less costly if provided earlier in life.<sup>123</sup> The National Survey of Children with Special Health Care Needs estimated that 7.6 percent of children from birth to five (and about 17% of school-aged children) in Arizona have special health care needs.<sup>xii,124</sup> 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).

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

<sup>xii</sup> 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.”

developmental delay. In the Yuma Region and across Arizona, more children were referred to and served by AzEIP in FY2015 than in either of the two years prior (Table 53). In 2015, 188 children ages 0 to 2 were served through the AzEIP program in the Yuma Region. Based on the 2010 population estimates for children 0 to 2 (see Table 1), this means that AzEIP services to prevent and address developmental delay are provided to approximately two percent of children aged birth through two years in the Yuma Region, compared to about four percent statewide. Research suggests that about 13 percent of children would typically qualify for early intervention services,<sup>125</sup> or about 1160 children in the region. This suggests that nearly a thousand Yuma children who would benefit from early intervention services are not receiving them.

A small number of children in the region were served by the Department of Economic Security Division of Developmental Disabilities (DDD) in FY2015 (the most recent year of data). To qualify for DDD services an individual must have a cognitive disability, cerebral palsy, autism, epilepsy or be at risk for a developmental disability. Children aged birth to five are eligible if they show significant delays in one or more of these areas of development: physical, cognitive, communication, social emotional or self-help.

In FY 2015, 47 children aged 0 to 2, and 58 children aged 3 to 5 were served by DDD in the Yuma Region (Table 56). Although the number of children referred to DDD has increased between FY2012 and FY2015 for both age groups, the number of children aged 0 to 2 served by DDD decreased from 49 in FY2012 to 47 in FY2015, whereas the number of older children (aged 3-5) served increased slightly during the same period (from 53 to 58). The pattern of service visits is also inconsistent between the two age groups, with service visits for the youngest children decreasing from 3,876 in FY2012 to 2,265 in FY2015, and service visits increasing for children aged 3 to from 7,255 to 7,781. In FY2015, for children ages 0-2, with a reported 47 children served, this works out to about 48 visits per child. For children ages 3 to 5, with 58 children reported served, this equals about 134 visits per child. It is unclear why the number of young children (aged 0-2) referred increased during the same period that the number served decreased, and why service visits for children aged 0 to 2 decreased from 79 visits per child in FY2012 to 48 in FY2015. Key informants<sup>xiii</sup> suggested that waitlists for speech language and occupational therapies are increasing because of a lack of providers to meet the needs of the region, which may also be a reason behind the decrease in the number served and service visit per child for those youngest children.

The Head Start, Early Head Start, and public preschool programs are also supporting children who have disabilities. WACOG Head Start provided data on the proportion of students enrolled who have an IEP or IFSP and the most common types of disabilities these students have.<sup>xiv</sup> All but one of the 11 WACOG sites had less than 15 percent of students enrolled with an IEP or IFSP; the Wellton site had 28 percent of enrolled students with an IEP. Developmental delays or speech language impairments were the most common reported disabilities, with few reporting hearing impairment (Table 57). The number of preschoolers in special education in ADE schools has decreased slightly between 2012 (n=277) to 2015 (n=269) (Table 59). In October 2015, 174 preschool students were enrolled in special education preschool in the region, which represented 39 percent of students enrolled in preschool (Table 60).

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<sup>xiii</sup> In attendance at the October 12, 2016 Data Interpretation Session.

<sup>xiv</sup> Data was not available from Chicanos Por la Causa that operates additional Head Start sites in the region.

Among children who are in special education programs in public preschools in the Yuma Region, the majority of children have either a developmental disability (49%) or speech or language impairment (45%) (Figure 19). There are very few children in regional schools with hearing impairments or vision impairments. This may be because hearing impairments are frequently diagnosed as speech or language impairments in the preschool age group. For older children in the region, of the 10,698 children enrolled in kindergarten through third grade in October 2015, nine percent were enrolled in special education services in school (Table 62). Given that this is about three times the rate of children birth to 2 in the region being served by early intervention services (AzEIP and DDD), it may be that children with delays are being identified and diagnosed when they are older, missing the earlier years when intervention can be more effective and less costly.

Raising Special Kids held family forums in Yuma in the spring of 2015. Forums, held in English and Spanish, gathered information from 21 parents about their experiences with developmental screening and follow-up care for their children. Many respondents reported frustration with the referral process for developmental screening citing physicians' lack of time or interest to address the issue and long delays before screening appointments could be obtained. If screenings indicated the need for developmental services, parents cited difficulties receiving referrals to specialists in the region, obtaining appointments at specialists in the region, long wait times until available appointments, and an overall lack of developmental specialists in the region. Transportation and travel expenses due to the need to travel long distances, particularly to other counties in the state or out-of-state were also cited as barriers obtaining developmental services for their children.<sup>xv</sup>

Table 53: Arizona Early Intervention Program (AzEIP) Referrals and Services for Children (Ages 0 to 2), 2013 to 2015

	Children (ages 0-2) referred to AzEIP during FY 2013	Children (ages 0-2) referred to AzEIP during FY 2014	Children (ages 0-2) referred to AzEIP during FY 2015	Children (ages 0-2) served by AzEIP during FY 2013	Children (ages 0-2) served by AzEIP during FY 2014	Children (ages 0-2) served by AzEIP during FY 2015
Yuma Region	294	325	426	71 to 79	95	188
Yuma County	298	331	426	72 to 80	95	188
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.

<sup>xv</sup> From Raising Special Kids forum summaries obtained from a key informant.

Table 54: Children (Ages 0 to 5) Referred to the Division of Developmental Disabilities (DDD), 2012 to 2015

	Number of children (ages 0-2) referred in FY2012	Number of children (ages 0-2) referred in FY2013	Number of children (ages 0-2) referred in FY2014	Number of children (ages 0-2) referred in FY2015	Number of children (ages 3-5) referred in FY2012	Number of children (ages 3-5) referred in FY2013	Number of children (ages 3-5) referred in FY2014	Number of children (ages 3-5) referred in FY2015
Yuma Region	33	44	51	49	33	32	37	49
Yuma County	33	44	51	49	33	32	37	49
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 55: Children (Ages 0 to 5) Evaluated by the Division of Developmental Disabilities (DDD), 2012 to 2015

	Number of children (ages 0-2) screened in FY2012	Number of children (ages 0-2) screened in FY2013	Number of children (ages 0-2) screened in FY2014	Number of children (ages 0-2) screened in FY2015	Number of children (ages 3-5) screened in FY2012	Number of children (ages 3-5) screened in FY2013	Number of children (ages 3-5) screened in FY2014	Number of children (ages 3-5) screened in FY2015
Yuma Region	29	<25	<25	<25	<25	<25	27	27
Yuma County	29	<25	<25	<25	<25	<25	27	27
ARIZONA	732	314	216	238	669	731	727	958

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

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

Table 56: Children (Ages 0 to 5) Served by the Division of Developmental Disabilities (DDD), 2012 to 2015

	Number of children (ages 0-2) served in FY2012	Number of children (ages 0-2) served in FY2013	Number of children (ages 0-2) served in FY2014	Number of children (ages 0-2) served in FY2015	Number of children (ages 3-5) served in FY2012	Number of children (ages 3-5) served in FY2013	Number of children (ages 3-5) served in FY2014	Number of children (ages 3-5) served in FY2015
Yuma Region	49	49	50	47	53	54	55	58
Yuma County	49	49	50	47	53	54	55	58
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 57: Division of Developmental Disabilities (DDD) Service Visits for Children (Ages 0 to 5), 2012 to 2015

	Number of service visits (ages 0-2) in FY2012	Number of service visits (ages 0-2) in FY2013	Number of service visits (ages 0-2) in FY2014	Number of service visits (ages 0-2) in FY2015	Number of service visits (ages 3-5) in FY2012	Number of service visits (ages 3-5) in FY2013	Number of service visits (ages 3-5) in FY2014	Number of service visits (ages 3-5) in FY2015
Yuma Region	3,876	2,698	2,828	2,265	7,255	7,064	6,665	7,781
Yuma County	3,876	2,698	2,828	2,265	7,255	7,064	6,665	7,781
ARIZONA	168,992	158,496	130,486	120,519	363,468	374,440	367,590	358,322

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

Table 58: Percent of Students Enrolled in WACOG Head Start in 2015-2016 with IEP and Type of Disability

Head Start Center	% with IEP or IFSP	% w/ Speech or language impairment	% w/ Non-categorical/developmental delay	% w/ Hearing impairment, including deafness
24th Street	6%	25%	75%	0
Carlisle	13%	80%	20%	0
Carver	11%	50%	38%	12%
Foothills	14%	38%	62%	0
Helping Hand	8%	17%	83%	0
Orange Grove	10%	50%	50%	0
Rancho Viejo	11%	31%	69%	0
San Luis	12%	64%	36%	0
Wellton	28%	40%	60%	0
Yuma East	8%	66%	34%	0
Yuma West	13%	20%	80%	0
Yuma County	11%	41%	57%	2%

Source: WACOG 2015-2016 data received through personal correspondence.

Table 59: Number of Preschoolers in Special Education, 2012 to 2015

	Total ADE schools with special needs preschools	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
Yuma Region Schools	16	277	258	274	269
Arizona State Schools for the Deaf and Blind	1	<25	<25	<25	0
Crane Elementary District	7	57	44	48	48
Gadsden Elementary District	1	38	56	60	60
Hyder Elementary District	0	0	0	0	0
Mohawk Valley Elementary District	0	0	0	0	0
Somerton Elementary District	1	57	41	44	44
Wellton Elementary District	1	<25	0	0	0
Yuma Elementary District	5	119	110	117	117
Yuma Region Charter Schools	0	0	0	0	0
Yuma County Schools	16	282	254	269	269
All Arizona Schools	550	9,173	9,203	8,845	8,702

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

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

Table 60: Pre-Kindergarten Students Enrolled in Special Education, October 2015

	Number of schools with pre-kindergarten	Number of students enrolled	Number of students in special education	Percent of students in special education
Yuma Region Schools	11	610	174	29%
Crane Elementary District	2	106	34	32%
Gadsden Elementary District	1	266	40	15%
Hyder Elementary District	0	<25	<25	<25
Mohawk Valley Elementary District	0	<25	<25	<25
Somerton Elementary District	4	115	47	41%
Wellton Elementary District	1	16	<25	DS
Yuma Elementary District	3	107	51	48%
Yuma County Schools	10	669	194	29%
All Arizona Schools	445	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 which are partially outside of the region, the data for the complete district is likely to vary from the percentages reported here.

Table 61: Types of Disabilities Among Preschoolers in Special Education, 2015

	Developmental Disability	Hearing Impairment	Severe Delay	Speech Or Language Impairment	Vision Impairment
Yuma Region Schools	49%	0%	6%	45%	0%
Crane Elementary District	69%	0%	0%	31%	0%
Gadsden Elementary District	35%	0%	5%	60%	0%
Somerton Elementary District	45%	0%	9%	45%	0%
Yuma Elementary District	49%	0%	9%	43%	0%
Yuma County Schools	49%	0%	6%	45%	0%
All Arizona Schools	41%	1%	21%	36%	1%

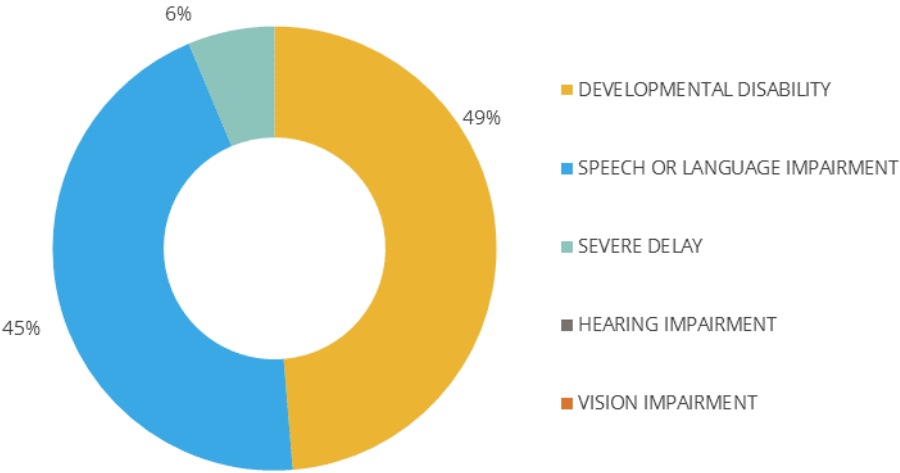
Source: Arizona Department of Education (2016). [Education dataset]. Unpublished data.

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

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

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

Figure 19: Types of Disabilities Among Preschoolers in Special Education, 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).

Table 62: Kindergarten Through Third-Grade Students Enrolled in Special Education, October 2015

	Number of students enrolled (K to 3)	Number of students in special education	Percent of students in special education
Yuma Region Schools	10,698	930	9%
Crane Elementary District	2,633	195	7%
Gadsden Elementary District	2,002	193	10%
Hyder Elementary District	44	<25	7%
Mohawk Valley Elementary District	63	<25	11%
Somerton Elementary District	1,228	122	10%
Wellton Elementary District	106	<25	12%
Yuma Elementary District	3,242	325	10%
Yuma Region Charter Schools	1,380	72	5%
Yuma County Schools	10,940	955	9%
All Arizona Schools	342,307	33,269	10%

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

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



## CHILD HEALTH

## Why Child Health Matters

Health encompasses not only physical health, but also mental, intellectual, social and emotional 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.<sup>126</sup> 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.<sup>127,128</sup> 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.<sup>129,130,131</sup>

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.<sup>132</sup> Families without health insurance are more likely to skip these visits, and so are less likely to receive preventive care for their children, or to receive care for health conditions and chronic diseases.<sup>133,134</sup> Children who lack health insurance are also more likely to be hospitalized and to miss school.<sup>135</sup>

Low income children in Arizona are covered by the Arizona Health Care Cost Containment System (AHCCCS), Arizona's Medicaid. AHCCCS coverage is available for children in families with income up to 147 percent of the Federal Poverty Level (FPL) for those under age 1, and up to 141 percent of FPL for those ages 1 to 5 (and 133% for those from 6-19 years). Across the nation, state-run Children's Health Insurance Programs (CHIP) have provided health insurance to children up to age 19 in families with incomes too high to qualify them for Medicaid (AHCCCS). Enrollment in the Arizona version of CHIP, KidsCare, was suspended as of January 1, 2010, a particularly vulnerable time for families, following on the heels of the Great Recession.<sup>136</sup> Arizona became the only state without an active CHIP program. However, in May 2016, the Arizona legislature voted to lift the freeze on KidsCare,<sup>137</sup> and in July 2016 applications began to be accepted for the first time in six years, with coverage beginning September 1, 2016.<sup>138</sup> Expanding health insurance availability for lower-income children can lead to health improvements, and to longer-term benefits such as increased high school and college graduation rates and higher lifetime earnings.<sup>139</sup>

Because a number of factors influence the health of a child before conception and in utero, the characteristics of women giving birth can have a substantial impact on the birth and developmental outcomes for their children. For instance, pregnancy during the teen years is associated with a number

of health concerns for infants, including neonatal death, sudden infant death syndrome, and child abuse and neglect.<sup>140</sup> Teenaged mothers (and fathers) themselves are less likely to complete high school or college, and more likely to require public assistance and to live in poverty than their peers who are not parents.<sup>141,142,143</sup>

A mother's weight status can also influence her child's health. Women who are obese before they become pregnant have pregnancies with a higher risk of birth complications and neonatal and infant mortality.<sup>144,145</sup> Babies born to obese women are at risk for chronic conditions in later life such as diabetes and heart disease.<sup>146</sup> Maternal smoking is another factor that can greatly affect child outcomes. Babies born to mothers who smoke are more likely to be born early (pre-term), be low birth weight, die from sudden infant death syndrome (SIDS) and have weaker lungs than other babies.<sup>147</sup>

One potentially harmful birth outcome that can have long-lasting effects are preterm births – births before 37 weeks of gestation. Preterm birth, in addition to being associated with higher infant and child mortality, often results in longer hospitalization, increased health care costs, and longer-term impacts such as physical and developmental impairments. Babies born at a low-birth weight (less than 2,500 grams or 5 pounds, 8 ounces) are also at increased risk of infant mortality and longer-term health problems such as diabetes, hypertension and cardiac disease.<sup>148</sup> Quality preconception counseling and early-onset prenatal care can help reduce some of these risks for poor birth outcomes by providing information and supporting an expectant mother's health and nutrition.

After birth, a number of factors have been associated with improved health outcomes for infants and young children. One factor is breastfeeding, which has been shown to reduce the risk of ear, respiratory and gastrointestinal infections, SIDS, overweight, and type 2 diabetes.<sup>149</sup> The American Academy of Pediatrics recommends exclusive breastfeeding for about 6 months, and continuing to breastfeed as new foods are introduced for 1 year or longer.<sup>150</sup> Healthy People 2020 aims to increase the proportion of infants who were ever breastfed to 81.9 percent.<sup>151</sup>

Immunization against preventable diseases is another factor that protects children from illness and potentially death. In order to assure community immunity (also known as “herd immunity”), which helps to protect unvaccinated children and adults from contracting vaccine- preventable diseases, rates of vaccination in a community need to remain high.<sup>152</sup> Research shows that higher exemption rates from vaccines at the school-level have been associated with school-based outbreaks of preventable diseases such as measles and pertussis.<sup>153</sup>

Oral health and good oral hygiene practices are also very important to children's overall health. According to the National Survey of Children's Health, the percentage of children in Arizona with excellent or very good oral health (65.7%) falls below the national level of 71.3 percent.<sup>154</sup> Tooth decay and early childhood caries can have short and long-term consequences including pain, poor appetite, disturbed sleep, lost school days, and reduced ability to learn and concentrate.<sup>155</sup> More children in kindergarten in Arizona (52%) have tooth decay compared to children across the nation (36%). Within Arizona, American Indian (76%) and Hispanic children (56%) are more likely to experience tooth decay than white children (34%).<sup>156</sup>

In early childhood, illness and injury can cause not only trauma to a child but added stress for a family. Non-fatal unintentional injuries substantially affect the well-being of children,<sup>157</sup> and injuries are the leading cause of death in children in the United States.<sup>158</sup> Common causes of visits to the emergency department for children 0-5 in Arizona include falls (particularly from furniture), collisions with an object, and natural events like bites and stings. Common causes for hospitalization of young children in Arizona include falls, poisoning, and assault/abuse.<sup>159</sup> Many of these injuries are preventable, prompting the Centers for Disease Control and Prevention to produce a National Action Plan for Child Injury Prevention, which outlines evidence-based strategies for addressing the challenge of keeping children safe.<sup>160</sup> The Arizona Department of Health Services has recognized the need to focus on reducing childhood injuries in Arizona, and identified that as one of their priorities in the Bureau of Women's and Children's Health Strategic Plan<sup>161</sup>, as well as included it as part of their Arizona Injury Prevention Plan.<sup>162</sup>

A child's weight status can have long-term impacts on health and well-being; in the United States, areas of concern tend to center around malnutrition and obesity, rather than undernutrition and underweight. Nationwide, it is estimated that about 3.8 percent of children ages 2-19 are underweight, 16.2 percent are overweight, and 17.2 percent are obese.<sup>163,164</sup> Obesity can have negative consequences on physical, social, and psychological well-being that begin in childhood and continue into and throughout adulthood.<sup>165</sup> The first two years of life are seen as critical to the development of childhood obesity and its resultant negative consequences. Higher birth weight and higher infancy weight, as well as lower-socioeconomic status and low-quality mother-child relationships have all been shown to be related to higher childhood weight.<sup>166</sup> One component of establishing a healthy weight – physical activity – also promotes improved visual-motor integration skills and object manipulation skills that in turn lead to improved executive function, social behaviors and ultimately school readiness for young children.<sup>167</sup> The availability and accessibility of recreational facilities and resources that promote physical fitness can affect the ability of both child and adult community members to reap the benefits of physical activity.

## What the Data Tell Us

### Access to Care

A key factor in health care is health insurance, and 12 percent of young children in the region were estimated to be uninsured, along with 20 percent of the total population in the Yuma Region (Table 63). These proportions varied somewhat among the sub-regions. Although children in the East sub-region had the lowest poverty rate (9%) (Table 16) for children aged birth to five, they have the highest uninsured rate (25%), twice the rate of the other sub-regions and of the state as a whole.

One way that children in Arizona have had access to health insurance is through the Affordable Care Act (ACA). As of February 2016, 46,700 children under 18 in Arizona were enrolled in federally facilitated marketplace plans through the ACA, representing 23 percent of those enrolled under ACA across the state. This is the highest proportion of young people enrolled in any state (tied with North Dakota and Utah); the national rate is nine percent.<sup>168</sup>

For the total (all ages) population, the South sub-region had the highest proportion of the population uninsured (28%), compared to the Central (18%) and East (17%) sub-regions (Table 63). For the Central and South sub-regions, the total population was more likely to lack insurance than the young child population, but for the East sub-region the opposite was true. The proportion of children ages birth to 5 lacking insurance (25%) was higher than that for the all ages population (17%).

Table 63: 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
Yuma Region	18,176	12%	192,364	20%
Central	12,221	12%	135,242	18%
East	387	25%	6,996	17%
South	5,568	13%	50,126	28%
Yuma County	18,251	12%	193,273	20%
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, 3,048 Yuma Region residents gave birth (Table 64). This represented 3.5 percent of the births statewide. Given that Yuma Region residents make up about three percent of the state population (see Table 3), this was a slightly higher number of births than would be expected based on the size of the region's population. In keeping with the projected population growth in Yuma, the number of births in the county is expected to increase steadily through 2040 (Table 65).

Table 64: Live Births During Calendar Year 2014, by Mother's Place of Residence

	Total number of births to Arizona-resident mothers in 2014
Yuma Region	3,048
Yuma County	3,058
ARIZONA	86,648

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

Table 65: Projected Number of Births Per Year, 2015 to 2040

	2015	2020	2025	2030	2035	2040
Yuma Region	N/A	N/A	N/A	N/A	N/A	N/A
Yuma County	3,015	3,437	3,685	3,852	3,985	4,130
ARIZONA	86,475	94,177	102,207	108,600	112,982	116,633

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

## Maternal Characteristics

Of the 3,048 mothers who gave birth in the Yuma Region in 2014, the majority (73%) were Hispanic or Latina (Figure 20). Less than one-quarter (23%) of births were to White, non-Hispanic mothers, and three percent were to mothers who identified as American Indian (1%), Black or African American (1%), or Asian or Pacific Islander (1%). Compared to the state as a whole, mothers in the Yuma Region were much more likely to be Latina, and less likely to be White. New mothers in the Yuma Region had somewhat lower educational attainment than mothers statewide; 24 percent had a high school education or less (20% statewide), and 15 percent had attained a bachelor's degree or more (23% statewide). The greatest proportion of new mothers in the Yuma Region (32%) had some college or professional education, similar to the proportion across the state as a whole (31%) (Table 66).

The population of new mothers in the Yuma Region was similar to those statewide on other attributes. Just under half (43%) of mothers were not married in the region (45% statewide) and 10 percent were in their teens (8% statewide) (Table 67). In Yuma, over half of births (60%) were to mothers relying on AHCCCS or Indian Health Service (IHS) coverage, which was slightly higher than the statewide proportion of 55 percent. A lower proportion of mothers in the Yuma Region reported smoking (2.4%) than across the state (4.6%), though both areas fall above the Healthy People 2020 goal of 1.4 percent.

In Arizona, the percent of expectant mothers who reported smoking during pregnancy has remained relatively stable from 2009 to 2013 at just over four percent. However, there is evidence of disparities. In Arizona in 2013, expectant mothers insured by AHCCCS were more likely to report smoking (6.4%) compared to those with private insurance (1.8%). Race/ethnicity also affects reports of smoking during pregnancy with White, non-Hispanic (7%) and African-American (6.5%) expectant moms more likely to report smoking than expectant moms who were Alaska native (2.9%), Hispanic/Latina (1.8%), or Asian or Pacific Islander (1.1%).<sup>169</sup>

Another aspect of maternal health that is linked to both birth outcomes and a child's subsequent health is maternal obesity. Among Arizonan women overall, about 51 percent were overweight or obese before pregnancy in 2014.<sup>170</sup> Among women who participate in WIC, this rate was higher – 58 percent, which is to be expected given that low-income women are more likely to be obese in the United States.<sup>171</sup> In the Yuma Region, this rate was slightly higher still; 27 percent of women participating in WIC were overweight, and 36 percent were obese, for a total of 63 percent who were overweight or obese before becoming pregnant (Figure 21). The rate of pre-pregnancy obesity in the region and the state has increased slightly but steadily since 2012 (see Figure 22); this mirrors national trends as well.<sup>172</sup>

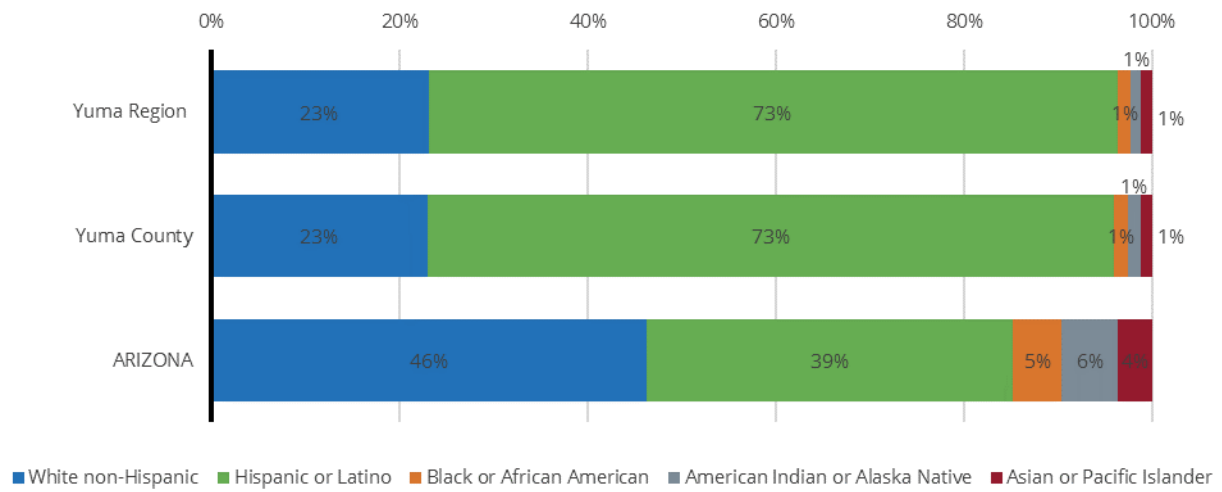
Table 66: Live Births During Calendar Year 2014, by Mother's Educational Attainment

	Less than high school	High school or GED	Some college or professional education	Bachelor's degree or more
Yuma Region	24%	29%	32%	15%
Yuma County	24%	29%	32%	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 20: Race and Ethnicity of Mothers Giving Birth in 2014



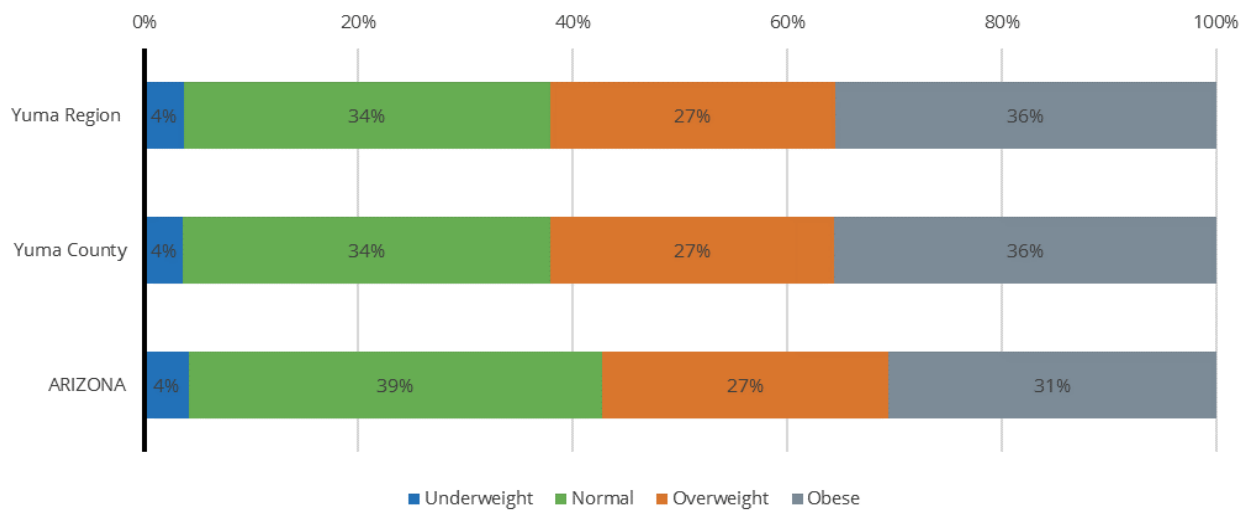
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Table 67: 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	Tobacco use during pregnancy
Yuma Region	43.5%	9.6%	2.6%	60.3%	2.4%
Yuma County	43.6%	9.6%	2.6%	60.4%	2.4%
ARIZONA	44.7%	7.6%	2.1%	54.5%	4.6%

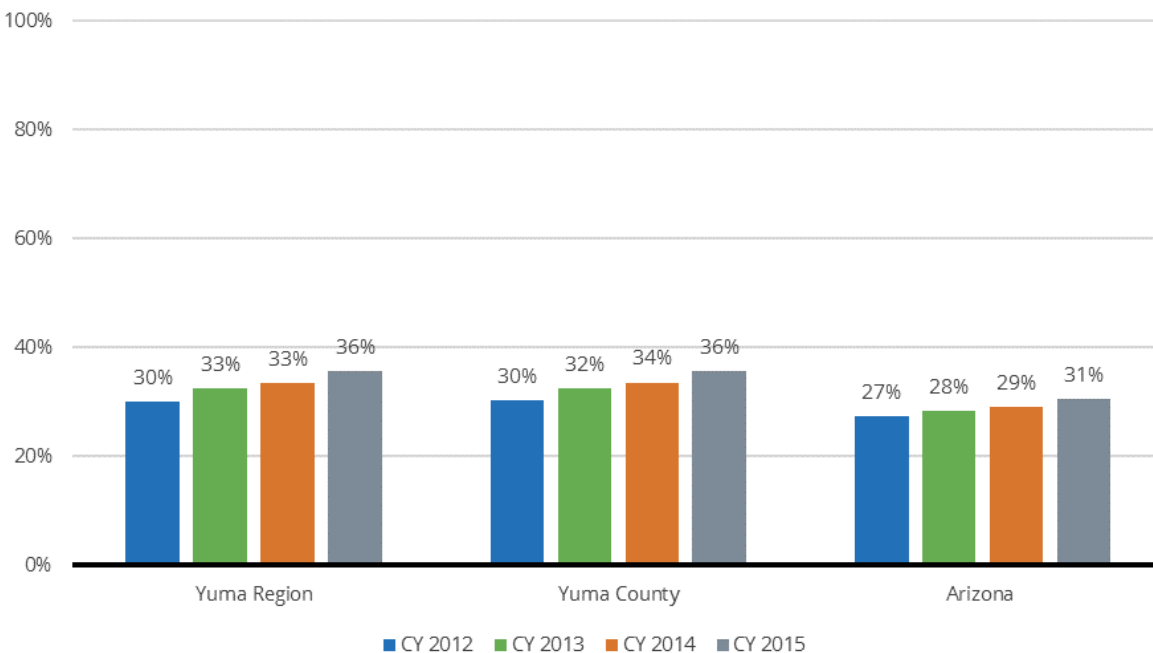
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 21: Pre-Pregnancy Weight Status for WIC Women, 2015



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

Figure 22: Pre-Pregnancy Obesity Rates for WIC Women, 2012 to 2015



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. Between 2011 and 2013, the proportion of pregnant women beginning prenatal care in the first trimester in the Yuma Region hovered between 63 and 66 percent (Figure 23). 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 (4.9% in the Yuma Region). In the Yuma Region in 2014, only 59.5 percent of mothers obtained prenatal care during the first trimester, meaning that the Healthy People 2020 goal was not met (Table 68). While the reason for the decline in timely prenatal care may be an artifact of the new reporting system, the data for 2014 indicate that not as many women as previously thought are obtaining prenatal care in the first trimester, which could have serious repercussions for child well-being. Particularly concerning is that there is a similar 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 (that is, discussed preconception health). Statewide, this rate has fallen from 47 percent in 2011, to 35 percent in 2014; in the Western Region, which include Mohave, La Paz and Yuma Counties, the rate in 2014 was 36 percent.<sup>173</sup>

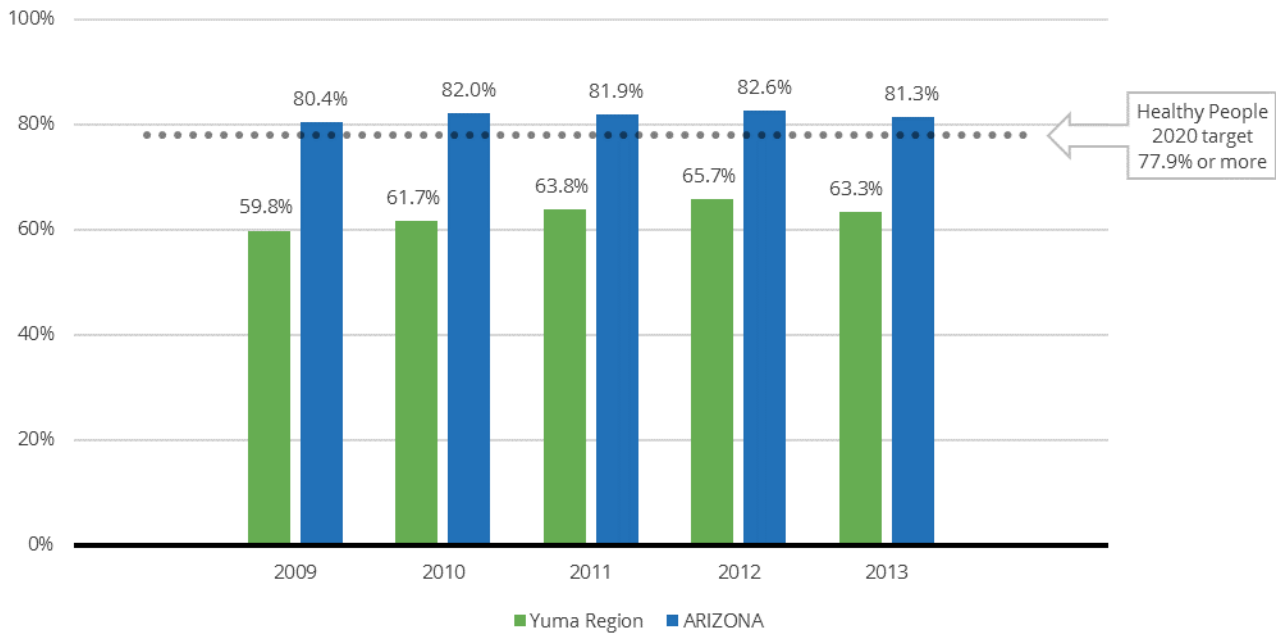
On a more positive note, most mothers are receiving at least some form of prenatal care; only 13 percent of babies in the Yuma Region were born to mothers who had had fewer than five prenatal care visits (Table 68). However, the Yuma Region had twice the proportion of mothers with few prenatal visits compared to the state (6.5%).

Table 68: Live Births During Calendar Year 2014, by Number of Prenatal Visits

	No visits	1 to 4 visits	5 to 8 visits	9 to 12 visits	13 or more visits	Percent of births with fewer than five prenatal care visits	Percent of births with prenatal care begun in first trimester
Yuma Region	5.3%	7.7%	18.2%	39.8%	28.3%	13.0%	59.5%
Yuma County	5.3%	7.7%	18.3%	39.8%	28.3%	13.0%	59.5%
ARIZONA	2.1%	4.4%	14.5%	46.9%	30.7%	6.5%	71.7%

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

Figure 23: Percent of Births With Prenatal Care Begun in First Trimester



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

Note: 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

## Birth Outcomes

With regard to perinatal health, babies in the Yuma Region were doing slightly better than babies born statewide. In the region in 2014, 5.9 percent of babies were low birth weight, compared to seven percent across the state. The percent of premature births was more similar, with 8.1 percent in the region, and nine percent across the state falling into this category (Table 69). 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 Yuma Region has achieved both Healthy People 2020 goals (Figure 24; Figure 25). A slightly higher proportion (7.3%) of newborns in the region were admitted to an ICU than across the state (6.7%).

Infants participating in WIC in the Yuma Region being breastfed (2015: 73.8%) lag behind the Healthy People 2020 goal of 81.9 percent of babies ever being breastfed but above the rates of those ever breastfed across the state Arizona (71.2%) (Figure 26); data on the complete (i.e., including those not participating in WIC) Yuma Region infant population are unavailable. However, data from the National Immunization Survey on children born in 2013 estimated the Arizona statewide rate of infants ever-breastfed was 85.0 percent, suggesting that WIC participants are less likely to be breastfed than other infants.<sup>xvi</sup> Thus, it is possible that the region overall does currently approach or meet the Healthy

<sup>xvi</sup> 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](https://www.cdc.gov/breastfeeding/data/nis_data/rates-any-exclusive-bf-state-2013.htm)

People 2020 goal. Additionally, although the rate among WIC participants (73.8%) in the region is below the target, it has increased by eight percentage points over the last three years (Figure 26).

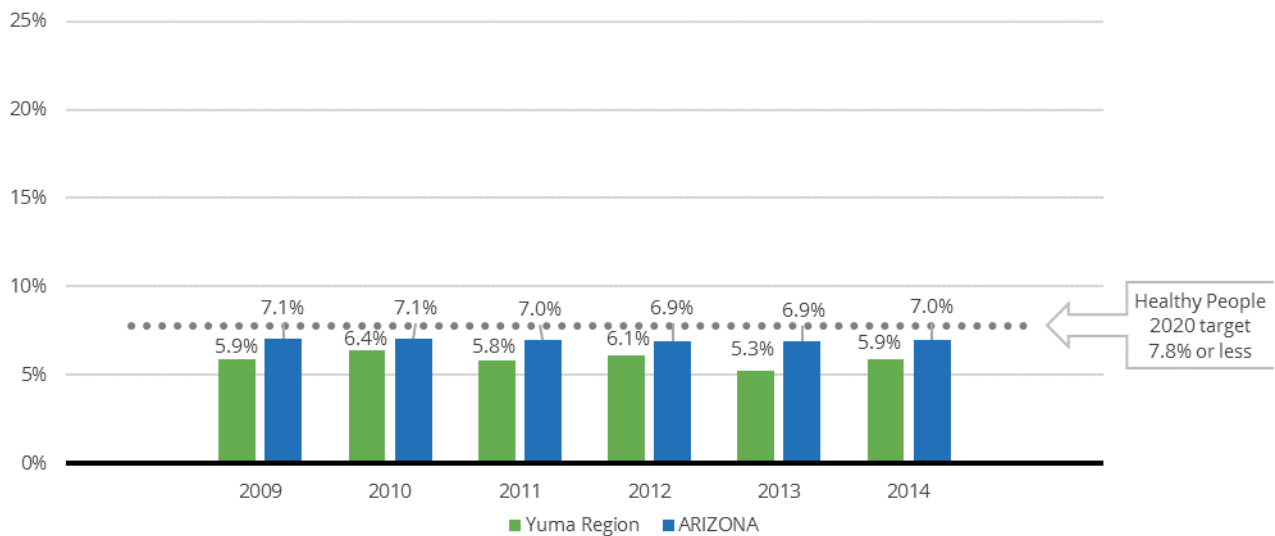
In 2015, about five out of 100 newborns (5.3%) did not pass an initial hearing screen. However, only 0.4 percent of those screened required a diagnostic evaluation and a very small proportion, 0.1 percent, were found to have confirmed hearing loss (Figure 27).

Table 69: Other Characteristics of Babies Born in 2014

	Baby had low birthweight (5.5 lb. or less)	Healthy People 2020 target for low-birthweight babies	Percent of premature births (under 37 weeks)	Healthy People 2020 target for premature births	Newborns admitted to intensive care unit
Yuma Region	5.9%		8.1%		7.3%
Yuma County	5.9%		8.1%		7.3%
ARIZONA	7.0%	Fewer than 7.8%	9.0%	Fewer than 11.4%	6.7%

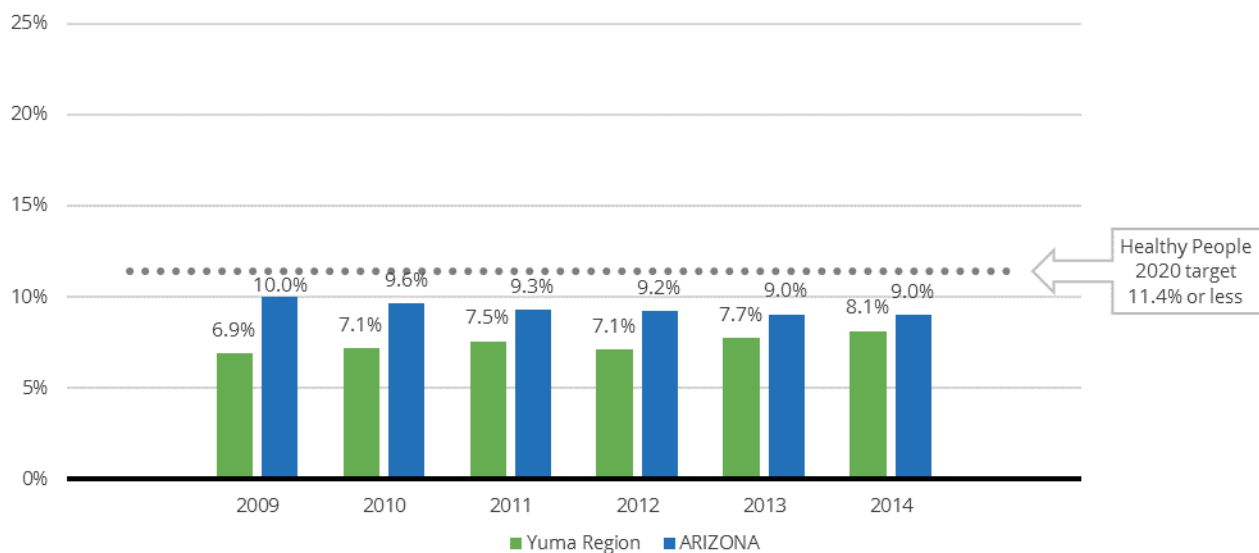
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 24: Percent of Babies Born in 2014 With Low Birthweight (5.5 Pounds or Less)



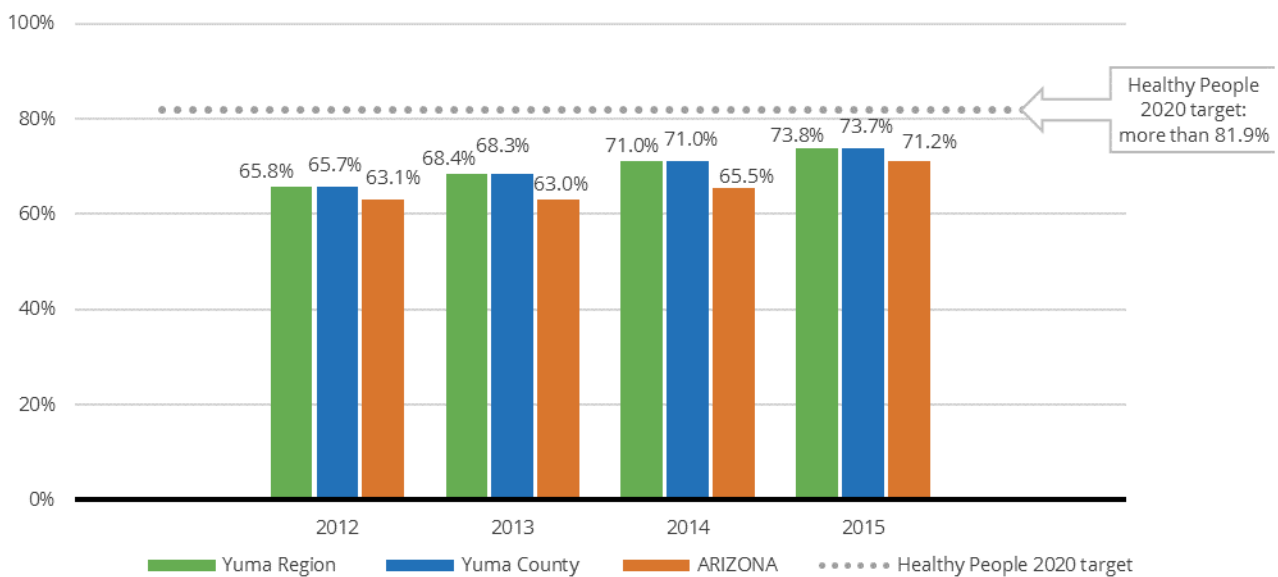
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 25: Percent of Babies Born Premature in 2014 (37 Weeks or Less)



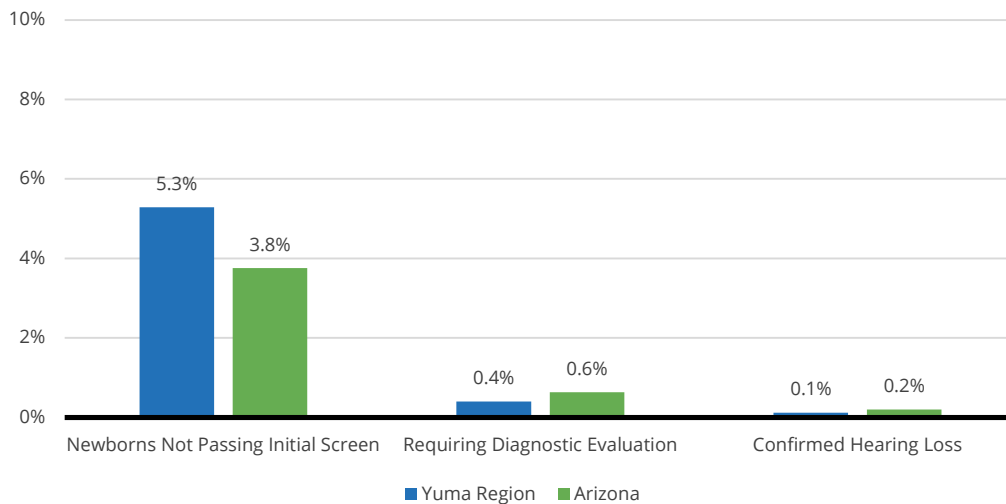
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 26: WIC Infants Who Were Ever Breastfed, 2012 to 2015



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

Figure 27: Newborn Hearing Screening Outcomes, 2015



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

## Immunizations

Although immunization rates vary by vaccine, over 95 percent of children in child care in the Yuma Region had completed each of the three major (DTAP, polio, and MMR) vaccine series; the regional rates were higher than those of the state (Table 70). The Healthy People 2020 target for vaccination coverage for children ages 19–35 months for these vaccines is 90 percent,<sup>174</sup> suggesting the region is meeting this goal. However, given that state regulations require children enrolled in child care to be up to date on immunizations, it is possible that the rates of immunization for children in child care are higher than immunization rates for children not in child care.<sup>xvii</sup> 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. Rates for the three major (DTAP, polio, and MMR) vaccine series for children in kindergarten were similar to or exceeded the rates for children in child care (Table 71). One exception to the extensive vaccine coverage is Hepatitis A; only 85 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.<sup>xviii</sup> Rates of personal exemptions for vaccinations among children in child care (0.6%) and

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

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

kindergarten (1.2%) in the region were much lower than exemption rates at the state level (4% and 4.7% respectively) (Figure 28).

Table 70: Vaccination Rates and Exemption Rates for Children in Childcare

	Students enrolled	Four or more DTAP	Three or more Polio	Two or more MMR	Three or more HIB	Two Hep A	Three or more Hep B	One or more Varicella	Religious exemption	Medical exemption
Yuma Region	3,015	96.1%	98.2%	98.2%	97.3%	85.4%	98.2%	97.1%	0.5%	0.1%
Yuma County	3,034	96.1%	98.2%	98.2%	97.3%	85.4%	98.2%	97.1%	0.5%	0.1%
ARIZONA	92,128	92.0%	93.1%	93.6%	92.4%	81.5%	92.0%	94.6%	3.5%	0.5%

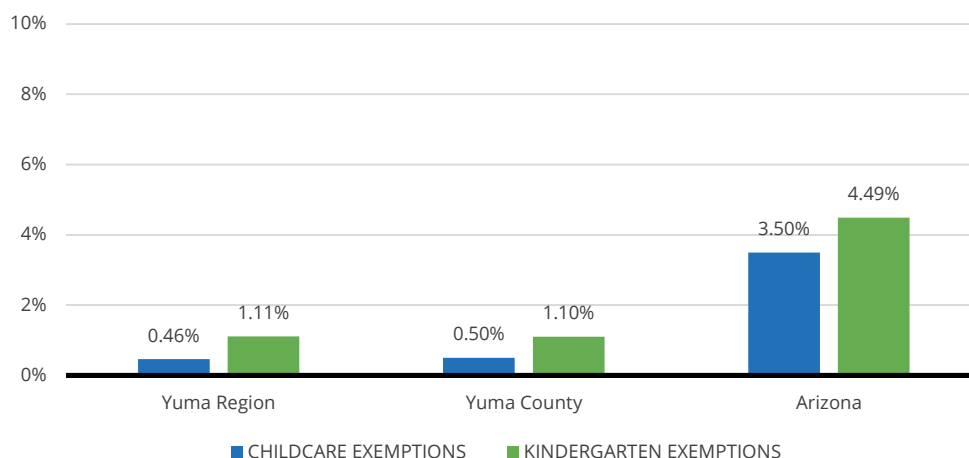
Source: Arizona Department of Health Services (2016). [Immunization Data Reports dataset]. Unpublished data.

Table 71: Vaccination Rates and Exemption Rates for Kindergarten Children

	Students enrolled	Four or more DTAP	Three or more Polio	Two or more MMR	Three or more Hep B	One or more Varicella	Personal exemption	Medical exemption
Yuma Region	2,613	98.5%	98.4%	97.5%	98.8%	99.1%	1.1%	0.1%
Yuma County	2,609	98.5%	98.4%	97.5%	98.8%	99.1%	1.1%	0.1%
ARIZONA	83,088	94.2%	94.6%	94.2%	95.5%	96.7%	4.5%	0.3%

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

Figure 28: Non-Medical Exemption Rates; Childcare and Kindergarten



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

## Oral Health

To identify the trends in the oral health of the state's children, First Things First and the Arizona Department of Health Services administered the *Healthy Smiles Healthy Bodies* survey to 3,630 kindergarten children during the 2014-2015 school year.<sup>xix</sup> The survey was designed to gather information from Arizona's kindergarten children regarding the prevalence and severity of tooth decay, and included dental screening and a parent and caregiver questionnaire component.<sup>175</sup> In the Yuma Region, 200 children were screened and 83 parents or caregivers answered at least one question on the questionnaire given with their child's screening. Untreated decay experience and a need for dental care was reported for 21 percent of kindergarteners in the region, which was slightly lower than for the state as a whole (27%). The prevalence of untreated tooth decay in the Yuma Region (21%) was the third lowest of the county-based FTF regions, and the prevalence of untreated tooth decay in Yuma County (21%) was the lowest amongst all counties in the state. In overall decay experience, 51 percent of kindergarteners evidenced decay experience compared to Arizona's 52 percent. While the state has met the 2020 benchmark (no more than 32% of children with untreated tooth decay) that is on track with the Healthy People's 2020 target of 26 percent, there remains a need for focused oral health efforts on primary prevention across the state.

An asset in the region relating to oral health is Yuma First Smiles.<sup>176</sup> This FTF funded program provides oral health education, screenings and fluoride varnish applications by a trained oral health care professional, and works with local dental providers to increase children's access to preventive dental care. Services are provided to young children at pre-schools, child care centers, community events, and other locations by request.

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

Oral health care may be an under-emphasized issue with regards to children with special needs, because of the other perhaps more salient health needs. In addition to the chronic conditions that children with special health care needs face, they also are twice as likely to have unmet oral health care needs than their typical peers, and face additional barriers to care including inaccessibility of dental offices and limited dentists willing to treat children with special healthcare needs.<sup>177</sup>

### **Childhood Injury, Illness and Mortality**

Asthma can negatively affect health in early childhood and beyond. Nationally, asthma prevalence among children aged birth to four years increased from 2001 to 2007 and then began a sustained decline through 2013. Such a decline may have an impact on the number of asthma-related health care visits with their related costs.<sup>178</sup> In the Yuma Region, emergency room visits by young children due to asthma decreased by 37 percent from 2012 to 2014, a decrease more than double the decline across the state during the same period (16% decrease) (Table 72).

The Arizona Child Fatality Review (CFR) Program produces an annual report in order to identify ways to decrease or eliminate identified preventable deaths amongst children across the state. In the 2015 annual report, 768 deaths were reported in children under 18 years old in Arizona, a decrease from 834 the year prior. Of child fatalities in 2015, 39 percent were determined to be preventable and 74 percent (n=566) were young children from birth to age five. More than one-third of the deaths of children birth to five (38%) occurred in the neonatal period (birth-27 days) and were due to natural causes (prematurity, neurological disorders, and other medical conditions). The infancy age group (28-365 days) saw 23 percent of these deaths, which were largely due to suffocation. About 13 percent of deaths were amongst children one to four years old, an age group with high rates of fatalities due to drowning, motor vehicle accidents, and blunt force trauma. In 2015, 10 percent of perinatal deaths, 48 percent of infant deaths, and 57 percent of young child deaths in Arizona were deemed preventable.

Additionally, local CFR Teams determine which deaths can be classified as maltreatment based on the actions or failures to take appropriate preventative action by a parent, guardian, or caretaker. In the 2015 review, 11 percent of all child fatalities were due to maltreatment and all of these deaths were determined to have been preventable. These maltreatment deaths are classified in one of three categories: homicide (e.g., abusive force trauma), natural (e.g., failure to obtain medical care or prenatal substance use that caused premature death), or accidental (e.g., unintentional injuries caused by negligence or impaired driving).<sup>179</sup>

In Yuma County, the number of deaths among children (under 18 years of age) rose slightly between 2009 and 2011 to a high of 33 deaths, but then decreased to 26 deaths in 2014 (Table 73).

The Yuma County Public Health Services District houses an Injury Prevention Program, including the Safe Kids Yuma County Coalition and the local CFR Program. The goal of the Injury Prevention Program is to prevent unintentional injury to children and adults, by directing outreach activities towards the most common injury types. Safe Kids Yuma County holds trainings, presentations, events, and participates in health fairs to educate the public on how to keep children safe. The local CFR team reviews all deaths under the age of 18 in the county to be used in the state's annual report, and makes recommendations regarding the prevention of child deaths. The team's intent is to prevent future deaths and improve the health and safety of all children. An additional service of the Injury Prevention

Program is Project K.I.S.S., which provides education on car seat safety and free car seats to those trained.

Table 72: Emergency Department Visits By Children (Ages 0-5) Due To Asthma

	2012	2013	2014	Change from 2012 to 2014
Yuma Region	220	209	138	-37%
Yuma County	222	210	138	-38%
ARIZONA	5,450	4,890	4,560	-16%

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

Table 73: Number Of Deaths Among Children (0-17), All Causes, 2009-2014

	Child deaths, 2009	Child deaths, 2010	Child deaths, 2011	Child deaths, 2012	Child deaths, 2013	Child deaths, 2014
Yuma Region	N/A	N/A	N/A	N/A	N/A	N/A
Yuma County	28	31	33	26	27	26
ARIZONA	947	862	837	854	810	834

Source: ADHS, Arizona Child Fatality Review Program. Twenty-Second Annual Report. November 15, 2015.

## Weight Status

Based on data from the Centers for Disease Control and Prevention (CDC), adult obesity has decreased slightly overall in Yuma County between 2011 and 2013 (from 31.2% to 30.5%) (Table 74). This means that as of 2012, Yuma County has met the Healthy People 2020 goal of having no more than 30.5 percent of the population have obesity<sup>xx</sup>. Although adult obesity rates for Yuma County have been consistently higher than those for the state, state rates increased from 25 to 27 percent over the same period.

Those with overweight or obesity are more likely to develop diabetes.<sup>180</sup> The prevalence of adult diabetes has been rising between 2009 and 2013, with 11.7 percent of the adult population of Yuma

<sup>xx</sup> 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>.

County having been diagnosed at some point in their lives with the disease as of 2013 (Table 75). The pattern across the state over those years has been less consistent, but in 2013, the statewide prevalence of adult diabetes (9.7%) was lower than for the county.

Compared to adults, children are less likely to have obesity. Healthy People 2020 has set a goal of no more than 9.4 percent of children having obesity. Among children participating in WIC in the Yuma Region, 13 percent have obesity and an additional 14 percent have overweight (Figure 29). These proportions remained relatively stable between 2012 and 2015, dropping only slightly from 13.4 percent in 2012 to 13 percent in 2015 (Table 76). This pattern mirrors national patterns, where 2014 saw a decrease from 2010 among WIC participants ages 2 to 4.<sup>181</sup> Based on these data, the Yuma 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.

Table 74: Adult Obesity Rate, According to the CDC

	CDC adult obesity rate, 2011	CDC adult obesity rate, 2012	CDC adult obesity rate, 2013
Yuma Region	N/A	N/A	N/A
Yuma County	31.2%	30.4%	30.5%
ARIZONA	25.1%	26.0%	26.8%

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

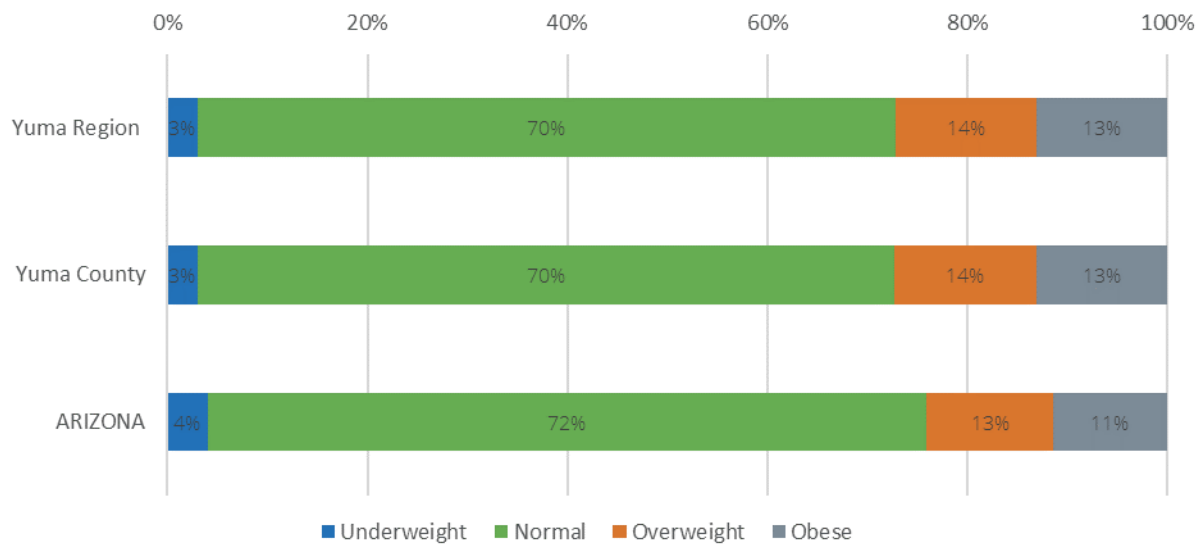
Table 75: Age-Adjusted Prevalence Of Diabetes For Adults

	Prevalence of adult diabetes, 2009	Prevalence of adult diabetes, 2010	Prevalence of adult diabetes, 2011	Prevalence of adult diabetes, 2012	Prevalence of adult diabetes, 2013
Yuma Region	N/A	N/A	N/A	N/A	N/A
Yuma County	8.7%	8.8%	9.4%	9.9%	11.7%
ARIZONA	8.1%	7.5%	9.0%	10.1%	9.7%

Source: CDC, Diabetes Home. County data retrieved from <http://www.cdc.gov/diabetes/data/countydata/countydataindicators.html> 7/5/16 and state data retrieved from <http://gis.cdc.gov/grasp/diabetes/DiabetesAtlas.html> 7/5/16

Prevalence = the percentage of adults who reported ever being told by a health professional that they had diabetes. Prevalence is age-adjusted to allow comparisons between two populations (Arizona and Yuma) which may have different age distributions in their populations, e.g. unequal proportion of older adults.

Figure 29: WIC Children's Weight Status, 2015



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

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

	Childhood obesity rate, 2012	Childhood obesity rate, 2013	Childhood obesity rate, 2014	Childhood obesity rate, 2015
Yuma Region	13.4%	13.3%	13.0%	13.0%
Yuma County	13.4%	13.3%	13.1%	13.1%
ARIZONA	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 Matters

Parents, caregivers and families who provide positive and responsive relationships support optimal brain development during a child's first years<sup>182,183</sup> and promote better social, physical, academic and economic outcomes later in that child's life.<sup>184,185</sup> Parental and family involvement is positively linked to academic skills and literacy in preschool, kindergarten and elementary school.<sup>186</sup> Literacy promotion is so central to a child's development that the American Academy of Pediatrics has identified it as a key issue in primary pediatric care, aiming to make parents more aware of their important role in literacy.<sup>187</sup> Reading aloud, singing songs, practicing nursery rhymes, and engaging in conversation primes children to reach their full potential. To assess the degree to which these activities are happening across the state, the First Things First designed the phone-based Family and Community Survey to measure many critical areas of parents' knowledge, skills, and behaviors related to their young children. Among other topics, the 2012 survey collected data about parent and caregiver knowledge of children's early development and their involvement in a variety of behaviors known to contribute positively to healthy development. Data on the amount and quality of the interaction parents and caregivers typically have with their children can be useful to inform programs and policies to encourage positive engagement. Examples of these community-level resources in Arizona include Read On Arizona, a partnership of agencies, philanthropic organizations, and community stakeholders committed to creating a continuum of services to improve language and literacy outcomes<sup>188</sup>; and the national "Reach Out & Read" program, in which close to 200 clinics and pediatric practices across the state seeing children for a well-child visit provide them with a book to take home.<sup>189</sup>

Not all children are able to begin their lives in the most positive, stable environments. Adverse Childhood Experiences (ACEs)<sup>xxi</sup> have been linked to risky health behaviors (such as smoking, drug use and alcoholism), chronic health conditions (such as diabetes, depression, obesity), poorer life outcomes (such as lower educational achievement and increased lost work time), and early death.<sup>190</sup> Children in Arizona are more likely to have experienced two or more ACEs (31.1%) than children across the country (21.1%).<sup>191</sup> Reports of child maltreatment grew by 44 percent in Arizona between 2010 and 2014, fueled in part by an increasing number of children, in particular poor children, living in the state; cut backs in child care subsidies during the same period; and a decrease in the size of the state child welfare workforce. During the same period, the percentage of reports being substantiated, i.e., verified, also increased. Arizona places more children with a substantiated case of maltreatment in foster care than many other states across the country, and with an increase in the number of substantiated reports, there is an increasing demand on the foster care system.<sup>192</sup> Children involved in the foster care system often have physical and behavioral health issues, in addition to the social needs brought on by being removed from a parent's care. Nationally and in Arizona, very young children are at most risk for child abuse, neglect and fatalities from abuse and neglect; in 2013 children five and under made up more than half (53.3%) of cases of child maltreatment and of children waiting for adoption (52.1%) in Arizona.<sup>193</sup>

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

Children subject to maltreatment and neglect often suffer physical, psychological and behavioral consequences, and in fact are much more likely to have interactions with the criminal justice system in later life.<sup>194</sup> 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.<sup>195</sup> 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.<sup>196</sup>

Children who are exposed to domestic violence, either as direct victims or witnesses, are subject to short and long term negative consequences including physical health problems, behavioral issues, and emotional impacts such as depression, anxiety and post-traumatic stress.<sup>197</sup> Fortunately, the effects of observing domestic violence can be mitigated to some extent through strong relationships and attachments to supportive adults and timely intervention and support.<sup>198</sup> 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.<sup>199</sup>

Behavioral health supports are often needed to address issues of domestic violence, maltreatment, abuse and neglect that children may face. Infant and toddler mental health is the young child's developing capacity to "experience, regulate and express emotions; form close interpersonal relationships; and explore the environment and learn."<sup>200</sup> When young children experience stress and trauma they have limited responses available to react to those experiences.

Children exposed to alcohol and drugs neonatally also face behavioral and other concerns. Opiate use during pregnancy, both illegal and prescribed use, has been associated with neonatal abstinence syndrome (NAS), where infants born exposed to these substances exhibit withdrawal, creating longer hospital stays, increased health care costs and increased complications for infants born with NAS.<sup>201</sup> Infants exposed to cannabis (marijuana) in utero often have a decrease in birth weight, and are more likely to be placed in neonatal intensive care, compared to infants whose mothers had not used the drug during pregnancy.<sup>202</sup> Substance abuse treatment and supports for parents and families grappling with these issues can help to ameliorate these short and long-term impacts on young children.

## What the Data Tell Us

### Family Involvement

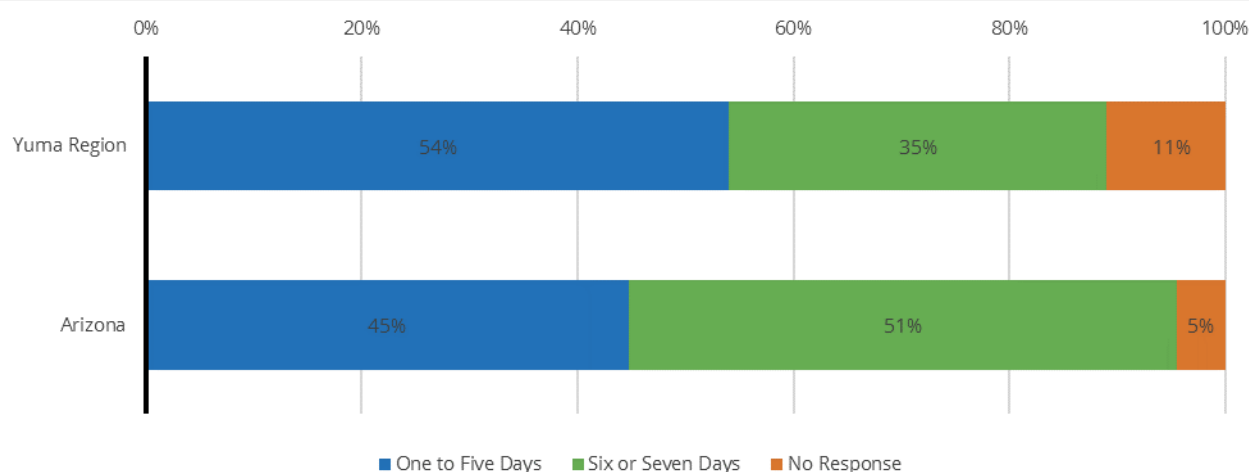
The skills that children develop between birth and five years of age can have profound effects on early and later literacy. The six most important of these skills are alphabet knowledge, phonological awareness, rapid automatic naming of letters or digits and objects or colors, writing and phonological memory.<sup>203</sup> Interventions known to have a positive impact on these skills include shared-reading interventions, parent and home programs, and preschool and kindergarten programs.<sup>204</sup>

Two assets related to literacy in the region are Read On Yuma and Reach Out and Read Yuma. Read On Yuma,<sup>205</sup> facilitated by the United Way of Yuma, is a collaboration of 15 organization in the region. The

goals of Read On Yuma are to improve literacy and language acquisition among young children in Yuma County. Reach Out and Read Yuma<sup>206</sup> promotes literacy during health interventions, when doctors, nurses and other health professionals advise parents about the importance of reading aloud to their children and provide developmentally-appropriate books for children during pediatric check-ups. Reach Out and Read Yuma had 14 Reach Out and Read sites and four affiliated satellites in the Yuma Region in 2016.<sup>207</sup> Twelve of those sites provided data for the last six month of 2016, showing among those sites, 4,734 well-child visits were performed and 4,241 developmentally appropriate books were distributed during those visits. At an individual rather than a site level, 37 primary care physicians and 19 medical residents participated in Reach Out and Read in the Yuma Region in the latter half of 2016. The Reach Out and Read Yuma Coordinator also attended seven outreach events and distributed 800 books at those events during the same time period. The Reach Out and Read Yuma Coordinator is also a member of the Read On Yuma Partnership Collaborative.<sup>208</sup>

In the Yuma Region, 150 people responded to the 2012 First Things First Family and Community Survey.<sup>xxii</sup> Among other topics, the 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 Yuma Region were less likely to report reading to their children (35%), telling stories to their children (42%), and drawing with their child (34%) six or seven days a week compared to families across the state (51%, 51% and 47% respectively) (see Figure 30, Figure 31, and Figure 32). Over three-quarters of parents (83%) in the Yuma Region showed an understanding that brain development can be impacted prenatally or right from birth, similar to respondents across the state as a whole (see Figure 33).

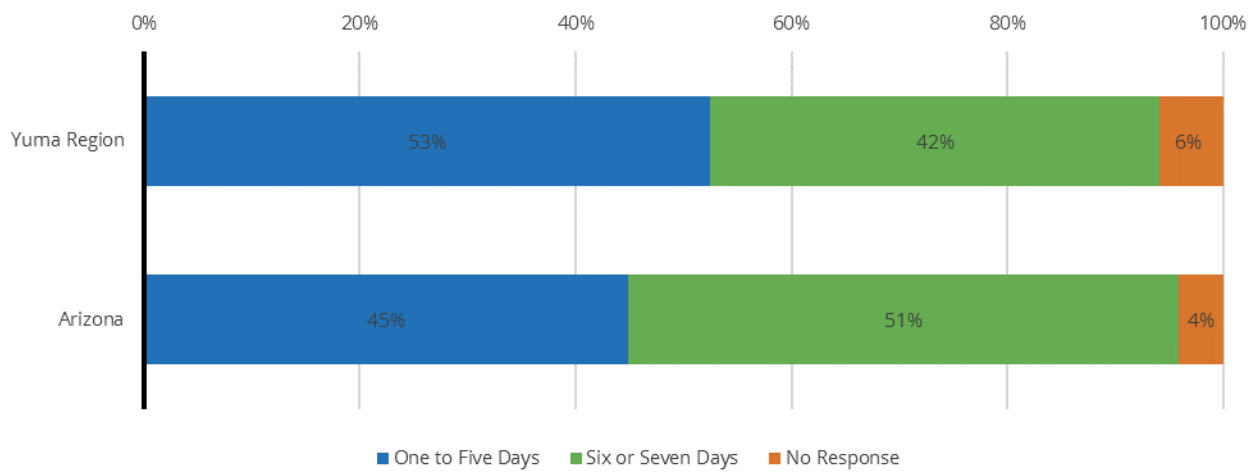
Figure 30. Responses to "During the past week, how many days did you or other family members read stories to your child?"



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

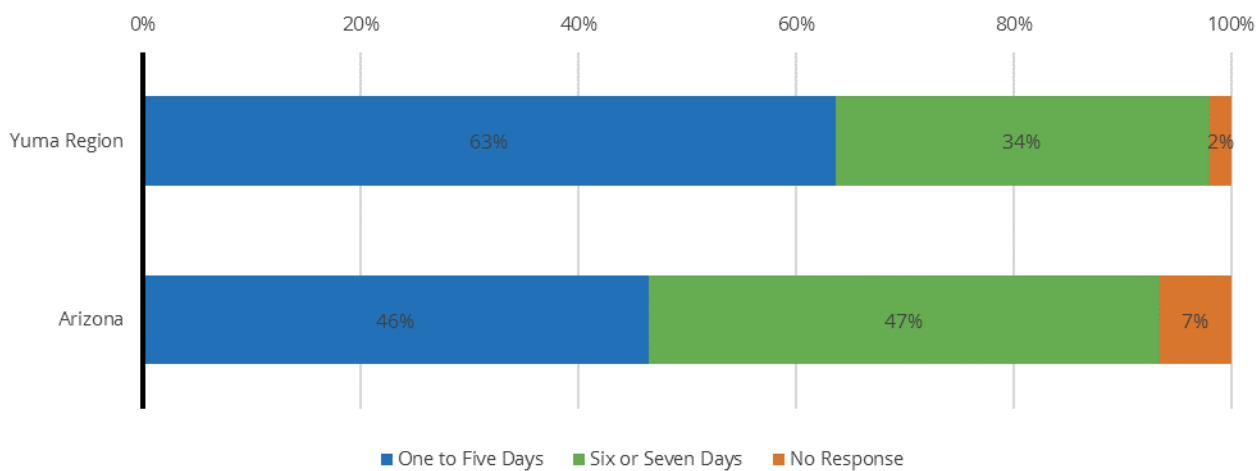
<sup>xxii</sup> The full methodology for the First Things First Family and Community Survey can be found in the Methods and Data Sources section of the Appendix.

Figure 31. Responses to "During the past week, how many days did you or other family members tell stories or sing songs to your child?"



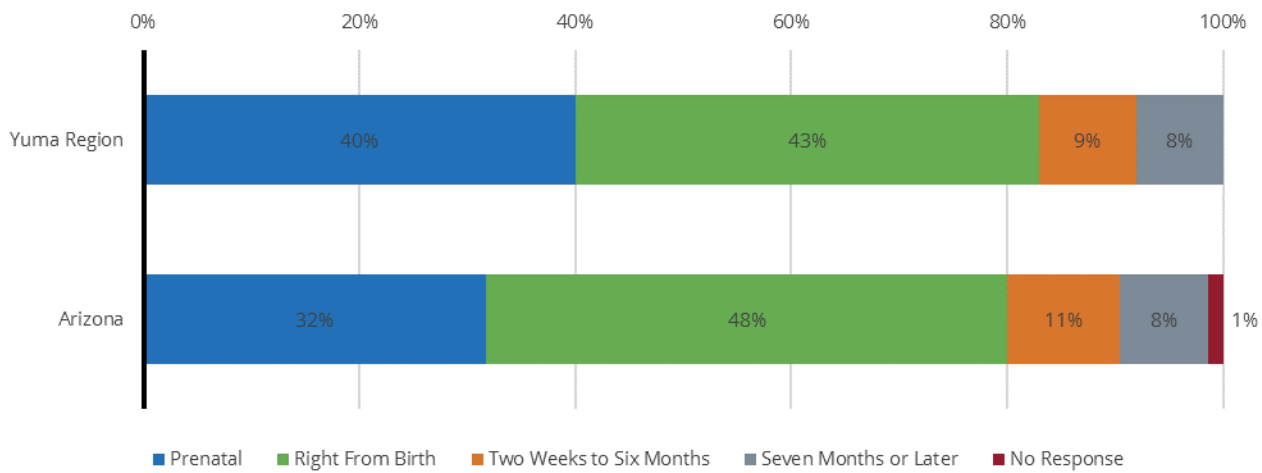
Source: First Things First (2014). [2012 Family and Community Survey dataset]. Unpublished data.

Figure 32. Responses to "During the past week, how many days did your child scribble, pretend draw, or draw with you or another family member?"



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

Figure 33. Responses to "When do you think a parent can begin to significantly impact a child's brain development?"



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

## Child Welfare

The Arizona Department of Child Safety produces a semi-annual report on child welfare services. Statewide, reports of child abuse and neglect had been increasing from 2013 through 2015 to a high of 26,455 reports during the April 1-September 30, 2015 reporting period. In the last two reporting periods available, reports were lower, with 24,787 reports in the last period available, April 1-September 30, 2016.<sup>209</sup> According to this latest report, of 555 reports of abuse and neglect received during that period for Yuma County, 64 (12%) 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%) across the state as a whole. For reports of maltreatment that were substantiated during that period, most (90%) were cases of neglect, followed by sexual (6%) and physical (4%) 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. The total number of children entering out-of-home care in Yuma County for the April 1- September 30, 2016 reporting period (n=130) is higher than the number of removals resulting from substantiated reports of abuse (n=64) due to several factors. One, a report focuses on the family unit, and thus could concern multiple children; two, these removals are also the result of reports prior to the current reporting period; and three, the children entering out-of-home care include children in voluntary foster care agreements (Table 79).

According to data provided by a key informant in the Yuma Region, as of August 2016, there were 120 licensed foster homes in Yuma County. One-hundred and ninety-six children were in licensed foster care in the county, 85 of whom were children aged five and under. Approximately 200 additional children (all ages) in the county are in kinship homes, group homes, or another type of shelter.

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
Yuma Region	N/A	N/A	N/A	N/A
Yuma County	555	545	64	0
ARIZONA	24,787	24,403	2,967	0

Source: Department of Child Safety (2016). Child welfare reporting requirements semi-annual report for the period of April 1, 2016 through September 30, 2016. Tables 5, 15. Retrieved from [https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirements\\_Apr16\\_Sept16.pdf](https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirements_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
Yuma Region	N/A	N/A	N/A	N/A	N/A
Yuma County	68	90%	4%	6%	0%
ARIZONA	2,823	87%	10%	2%	0%

Source: Department of Child Safety (2016). Child welfare reporting requirements semi-annual report for the period of April 1, 2016 through September 30, 2016. Tables 19. Retrieved from [https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirements\\_Apr16\\_Sept16.pdf](https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirements_Apr16_Sept16.pdf)

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
Yuma Region	N/A	N/A	N/A
Yuma County	130	14	11%
ARIZONA	5,669	715	13%

Source: Department of Child Safety (2016). Child welfare reporting requirements semi-annual report for the period of April 1, 2016 through September 30, 2016. Tables 31. Retrieved from [https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirements\\_Apr16\\_Sept16.pdf](https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirements_Apr16_Sept16.pdf)

## Domestic Violence

The Arizona Department of Economic Security produces an annual report on domestic violence shelters including county-level data on the populations served and services provided.<sup>210</sup> In fiscal year 2015, one domestic violence shelter in Yuma County, Safe House Shelter through Catholic Community Services, served 315 people, 151 (48%) of whom were children (Table 80). The average length of stay for those served was 27 days, shorter than the statewide average of 39 days.<sup>211</sup> Additionally, 232 calls were made to hotline and information and referral (I&R) numbers for the county, representing less than one percent of such calls statewide (Table 80).

Table 80: Domestic Violence Shelters, FY2015

	Total number served	Number of adults served	Number of children served	Number of bed-nights	Average length of stay	Number of hours of support services	Number of hotline and information-and-referral (I&R) calls
Yuma Region	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Yuma County	315	164	151	8,486	27 days	3,870	232
ARIZONA	7,567	3,862	3,705	293,970	39 days	144,025	25,185

Source: Arizona Department of Economic Security (2015). Domestic Violence Shelter Fund Report for SFY 2015. Retrieved from [des.az.gov/digital-library/domestic-violence-shelter-fund-report-sfy-2015](https://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.<sup>xxiii</sup> Yuma County is served by the South GSA, which is serviced by Cenpatco Integrated Care.

In 2015, 132 pregnant or parenting women received publically-funded behavioral health services through Cenpatco Integrated Care in the Yuma Region (Table 81). This represents an increase of 45 percent from the 91 women who received services in 2012. Across the state the opposite trend occurred, with 24 percent fewer women receiving these services in 2015 compared to 2012. The number of children ages birth to 5 receiving behavioral health services in the Yuma Region also increased from 2012 (n=302) to 2015 (n=346), representing a 15 percent increase (Table 82). This represents roughly seven percent of young children in poverty in the Yuma 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

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

problems<sup>212</sup>, suggesting that although there is improving coverage in the Yuma Region, there may be an unmet need for services for about 260 additional young children.<sup>xxiv</sup>

According to a 2015 AHCCCS report, 67 percent of children in foster care in Arizona in FY2014 were enrolled in behavioral health services, compared to just one in 15 children (7%) enrolled in AHCCCS, not in the foster care system.<sup>213</sup> This suggests that there may be a higher proportion of children not in the child welfare system who would benefit from behavioral health services statewide, and likely in the Yuma Region, as well. Beginning in 2015, each Regional Behavioral Health Authority (RBHA) was contractually required to ensure that children in Department of Child Safety (DCS) custody and their families are referred for ongoing behavioral health services, suggesting that rates of both mothers and children being provided services are likely to increase going forward.

A continuum of services to address infant and toddler mental health promotion, prevention and intervention has been proposed by a number of national organizations. 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.<sup>214</sup>

Table 81: Number of Pregnant or Parenting Women Receiving Behavioral Health Services, 2012 to 2015

	2012	2013	2014	2015	Change from 2012 to 2015
Yuma Region	91	105	139	132	+45%
Yuma County	92	107	142	136	+48%
ARIZONA	19,134	17,731	13,657	14,546	-24%

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

<sup>xxiv</sup> Representing the difference between the 346 low-income children (7%) currently served, and the estimated 608 (13%) likely in need.

Table 82: Number of Children (Ages 0 to 5) Receiving Behavioral Health Services, 2012 to 2015

	2012	2013	2014	2015	Change from 2012 to 2015
Yuma Region	302	391	361	346	+15%
Yuma County	302	391	361	346	+15%
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<sup>xxv</sup>

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<sup>xxv</sup> The majority of this section of the report was prepared by the First Things First Communications Division.

## Why Communication, Public Information, and Awareness Matters

To create a strong, comprehensive, and sustainable early childhood system, communities need an awareness of the importance of the first five years in a child's life, and a commitment to align priorities and resources to programs and policies affecting these first years. 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

### **First Things First Outreach Efforts**

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

Results of these statewide efforts from SFY2011 through SFY2016 include:

- More than 2,000 formal presentations to community groups which shared information about the importance of early childhood;

- Nearly 230 tours of early childhood programs to show community members and community leaders in-person how these programs impact young children and their families;
- Training of almost 8,700 individuals in using tested, impactful early childhood messaging and how to best share that message with others;
- The placement of more than 2,400 stories about early childhood in media outlets statewide;
- Increased digital engagement through online platforms for early childhood information, with particular success in the growth of First Things First Facebook Page Likes, which grew from just 3,000 in 2012 to 124,000 in 2016.
- Statewide paid media campaigns about the importance of early childhood from FY10 through FY15 included traditional advertising such as television, radio and billboards as well as digital marketing. These broad-based campaigns generated millions of media impressions over that time frame; for example in FY15 alone, the media campaign yielded over 40 million media impressions.

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

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

Table 83. First Things First Engagement of Early Childhood supporters, SFY2014 through SFY2016

	Friends	Supporters	Champions
Yuma Region	1,519	236	89
ARIZONA	21,369	3,102	908

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

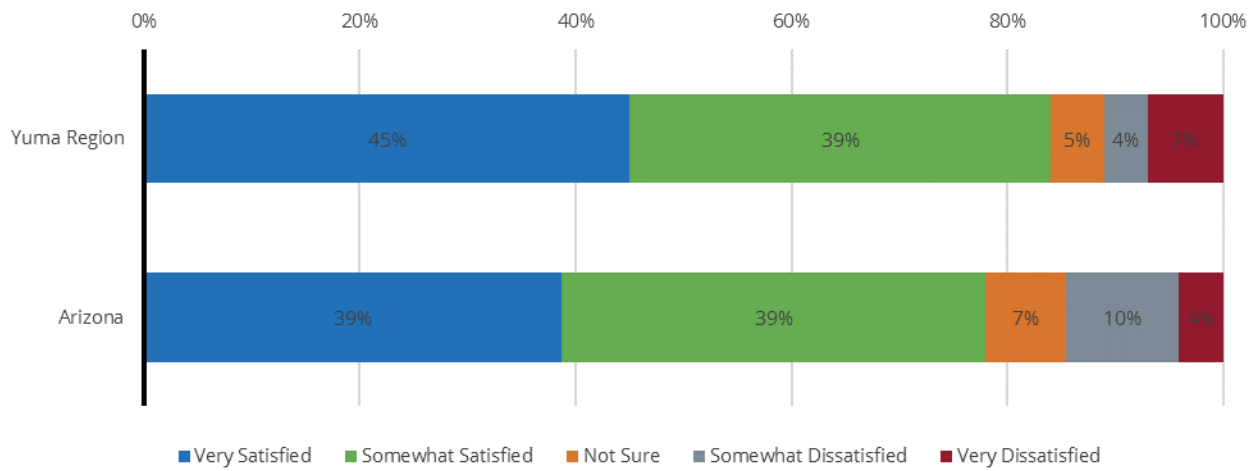
Furthermore, the Arizona Early Childhood Alliance – comprised of early childhood system leaders like FTF, the United Ways, Southwest Human Development, Children’s Action Alliance, Read On Arizona, Stand for Children, Expect More Arizona and the Helios Foundation – represent the united voice of the early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

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

### **2012 First Things First Family and Community Survey**

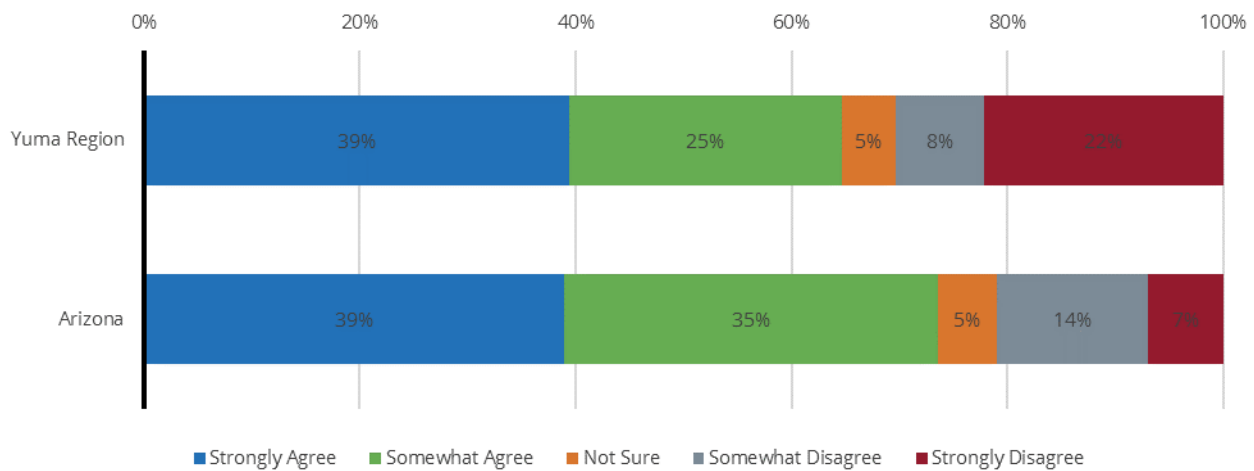
In addition to measuring parent knowledge, skills, and behaviors related to their young children, the 2012 First Things First Family and Community Survey collected data on parents’ perceptions regarding resources available to young children and their families across Arizona. Eighty-four percent of responding parents in the Yuma Region indicated they were “very” or “somewhat satisfied” with “the community information and resources available to them about their children’s development and health” compared to 78 percent of respondents across the state (Figure 34). While parents found the information satisfactory, 30 percent of Yuma parents reported some difficulty in locating needed or desired services (Figure 35). Respondents in the both the Yuma Region and the state were more likely to indicate satisfaction (43% in the region and the state) than dissatisfaction (29% in both the region and the state) with how care providers and government agencies work together and communicate (Figure 36).

Figure 34. Responses to "How satisfied are you with the community information and resources available to you about children's development and health?"



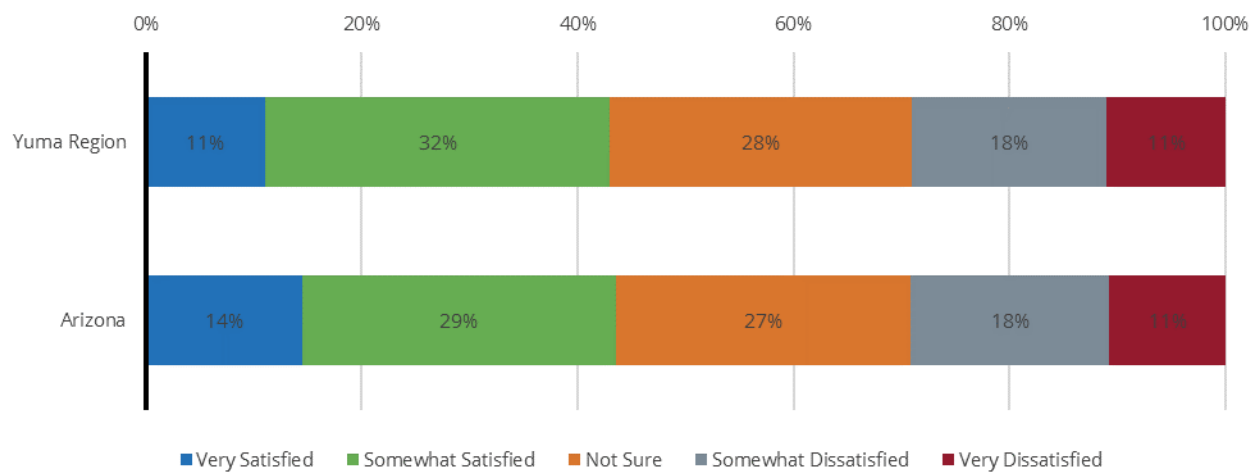
Source: First Things First (2014). [2012 Family and Community Survey dataset]. Unpublished data.

Figure 35. Responses to "It is easy to locate services that I want or need."



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

Figure 36. Responses to "How satisfied are you with how care providers and government agencies work together and communicate with each other?"



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



## 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 enhance the early childhood system by developing 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."<sup>xxvi</sup> 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

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<sup>xxvi</sup> 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.

- Influence policy and program changes

### ***Coordination and Collaboration Survey:***

To gain a better understanding of the coordination and collaboration occurring among early childhood system partners within FTF regions, FTF 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.<sup>xxvii</sup>

The Coordination and Collaboration survey asked system partners in the Yuma Region 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 (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**

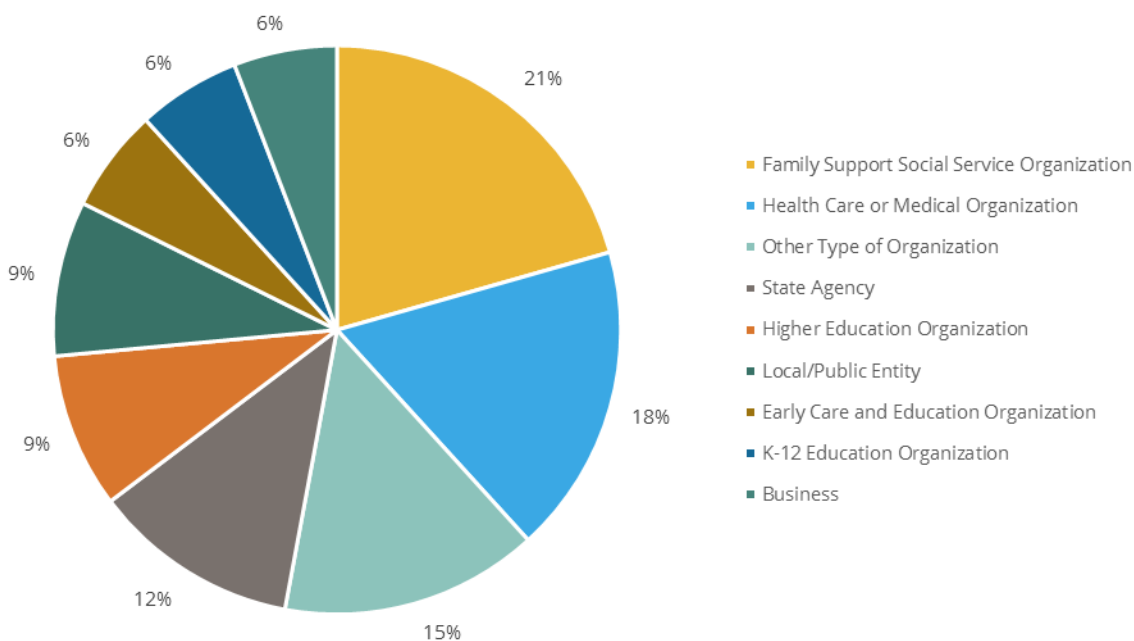
The results are based on the responses from 34 respondents that participated in the survey from the Yuma Region out of 44 that were contacted to participate, for a 77 percent overall survey response rate. However, please note that not all respondents answered each question, and that the number of respondents 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 family support/social service agencies (21%), followed by health care or medical (18%), other type (15%), and state agencies (12%) (Figure 37). The five organizations indicating "other" sectors described themselves as, "home visitation," "Primary Care-BHS Integrated Care and Higher Education non for Profit," "Non-Profit Workforce Development", "Economic Development" and "State Government".

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<sup>xxvii</sup> Partners located on tribal lands will be surveyed at a later date after tribal approvals are requested and received.

Figure 37. Sectors with which organizations work (N=34)



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

The majority of respondents (85%) consider themselves to be a part of the early childhood system in the Yuma Region. Although they were from diverse types of organizations, the goal area respondents most reported engaging with was Family Support and Literacy (59%), followed closely by Health (56%) and Professional Development (53%) (Figure 38). This is in accordance with the large percentage of respondents from the family support social service sector (Figure 37). These values also indicate that respondents engaged with multiple key areas of the early childhood system. For example, although only 18 percent of organizations identified their primary sector as health care, 56 percent of organizations engaged with child health.

Figure 38. Area(s) of the early childhood system that organizations engage with (N=32)

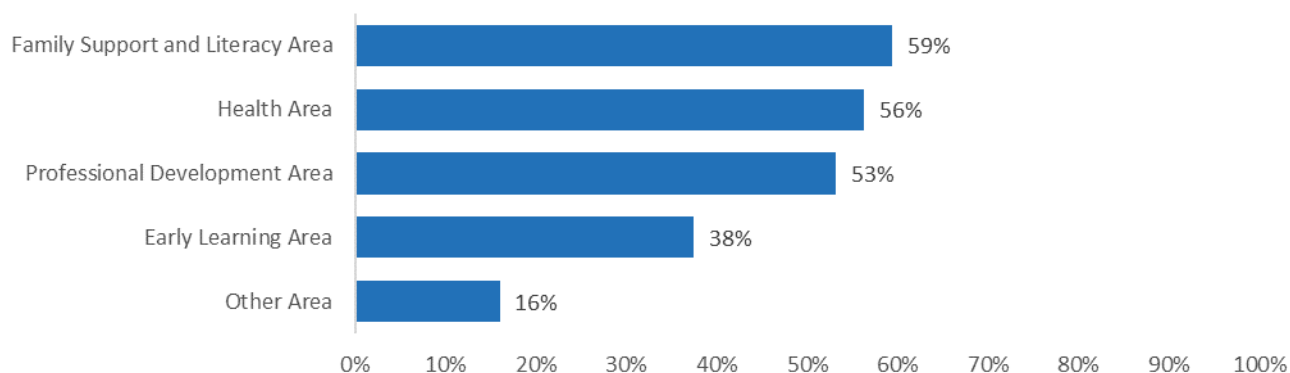
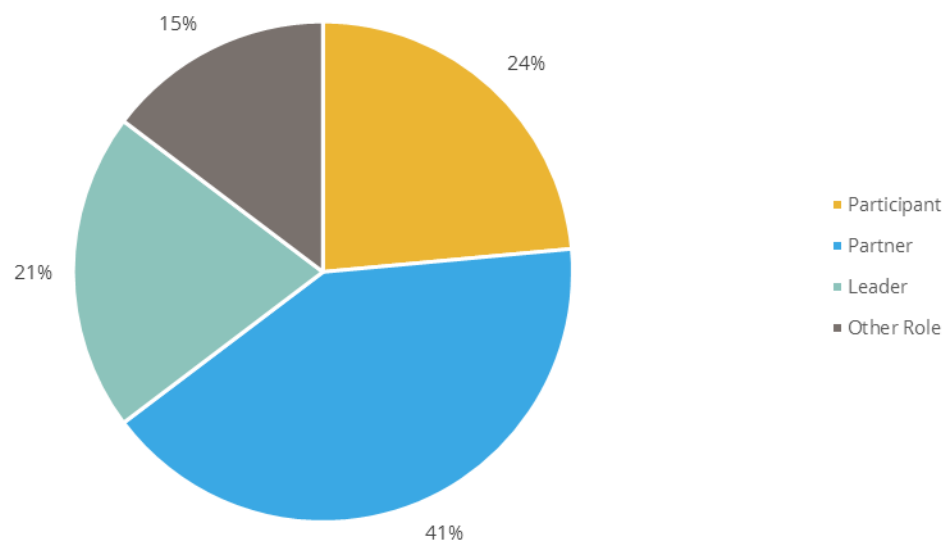


Figure 39. Role of organization in the development and advancement of the Early Childhood System in Yuma County (N=34)



When asked about their organization's role in the development and advancement of the early childhood system in the Yuma Region, respondents most commonly viewed their organization's role as a Partner (41%), 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. Nearly one quarter (24%) identified as a Participant, i.e., one of many community organizations involved in supporting the early childhood system (Figure 39). Twenty-one percent indicated their organization was a Leader, i.e., they take the lead for convening and facilitating a group of community members. Fifteen 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.

In their role as Participant, Partner, or a Leader, survey respondents noted several successful partnerships. Organizations that identified their role as that of a participant described partnering with other groups to provide support and information on services in the community to both families and home-based providers, educating pre-school children participating at school events about healthy eating and living, and through contributing to the development of a family resource guide. Organizations that identified their role as that of a partner also indicated that they participated in long-standing coalitions and programs such as Reach Out and Read Yuma, Read On Yuma, the Yuma County Early Childhood Collaborative, WACOG and the Alliance for Healthy Communities, offered outreach education, assistance with insurance and service enrollment, and implementing a shared plan with partnered agencies (e.g. Community Health Improvement Plan). Organizations that identified their role as that of a leader shared similar experiences in partnerships, with one organization actively coordinating access to care (i.e. providing developmental screening, facilitating specialized prevention education). Another organization reported bringing community leaders together and educating them about the system in which they work, and yet another provided training and support to families through its partnerships with local agencies.

#### *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 the Yuma Region, 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. The Yuma Region has founded a variety of countywide initiatives to enhance the early childhood system including:

#### **Yuma County Early Childhood Collaborative**



The mission of the Yuma County Early Childhood Collaborative (YCECC) is to educate and empower all Yuma County families and children by coordinating efforts with our leaders and agencies. Collaboratively, we strengthen and sustain a high quality early childhood system encompassing services in health, family support and early education. The vision of the YCECC is a Yuma County where all children and families thrive and reach their full potential through a high quality interconnected early childhood system.

The YCECC convenes partners and provides leadership in the development and implementation of a family-centered, comprehensive, collaborative and high-quality early childhood system that supports the development, health and early education of all Yuma's children. Leaders support and advance the collaborative work in Yuma by fostering system partners to create a shared vision/mission which

strengthens collaboration and increases knowledge and understanding of the Yuma early childhood system.

The YCECC has an eight-person leadership team which meets every other month and identifies the topics for discussion and creates the agenda for the quarterly meetings. During Fiscal Year 17, topics discussed by YCECC included: (1) Community Resources: Enhancing our Professional Knowledge and Community Outreach; (2) Health: KidsCare and Behavior Health; (3) Vroom: Improving Family Partnerships; and (4) Collaborating with our Faith-Based Leaders and Partners.

### **Family Resource Fairs with Early Identification Screenings**

This is a multi-agency collaboration on Early Intervention and Child Find. Local agencies collaborate to share resources to families, and develop additional opportunities for children to be screened and referred to appropriate services. Currently, these agencies collaborate with existing early childhood resources (e.g., district child find events, health fairs, Yuma back to school rodeo) and strengthen families of young children by providing locally-based information and instruction on health and child development issues.

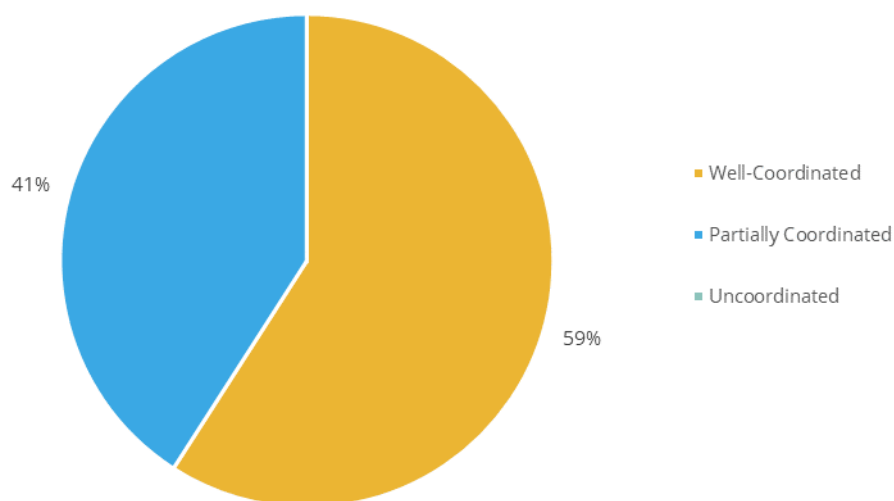
### **Hopeful Hearts- the Yuma County Court Team**

The Yuma County Court Team convenes partners (e.g., Yuma Juvenile Court, CASA, Foster Care Review Board, dependency Attorneys, Service providers, Parents) and provides leadership on the importance of early childhood development, the health of infants and young children, and the potential impact of case decisions on these children within the Juvenile Court System. This program's goal is to promote children's well-being and reduce the recurrence of abuse and neglect. This is accomplished by implementing a multidisciplinary team led by superior court judges, to monitor case plans and supervise placements when children 5 or younger are involved with the court system.

### **Community School:**

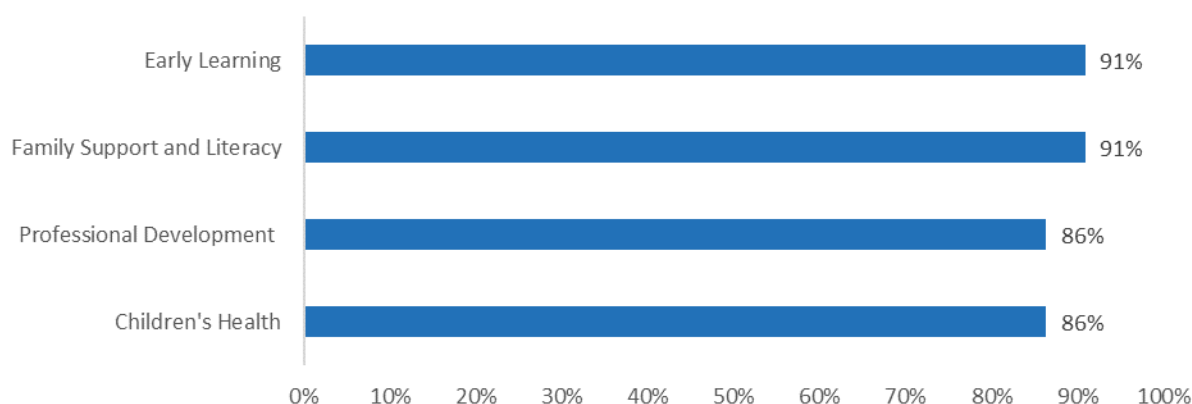
Using public schools as hubs, community schools bring together many partners (e.g., Arizona Western College, Child & Family Resources, Head Start (CPLC and WACOG), Sunset Community Health Center, Crossroads Mission, Yuma One School District, Easter Seals Blake, Home visiting providers, and Arizona PBS to name a few) to offer a range of supports and opportunities for children, youth, families and communities. Partners work to achieve the following results: (1) Children are ready to enter school; (2) students attend school consistently; (3) students are actively involved in learning and are involved in their community; (4) families are increasingly involved with their children's education; (5) schools are engaged with families and communities; (6) students succeed academically; (7) students are healthy - physically, socially, and emotionally; and (8) students live and learn in a safe, supportive, and stable environment, in communities that are desirable places to live. A community school is both a place and a set of partnerships between the school and other community resources. Its integrated focus on academics, health and social services, youth and community development and community engagement leads to improved student learning, stronger families and healthier communities.

Figure 40. Describe the Early Childhood System in the Yuma Region (N=22)



A majority (59%) of survey respondents described the early childhood system in the Yuma Region as a well-coordinated system, with 41 percent of respondents describing the system as a partially coordinated system, and no respondents viewing the early childhood system as a group of separate, uncoordinated system partners working in isolation (Figure 40).

Figure 41. Percent agreeing that the Early Childhood System in Yuma County effectively addresses the needs of young children and their families across key areas (N=22)

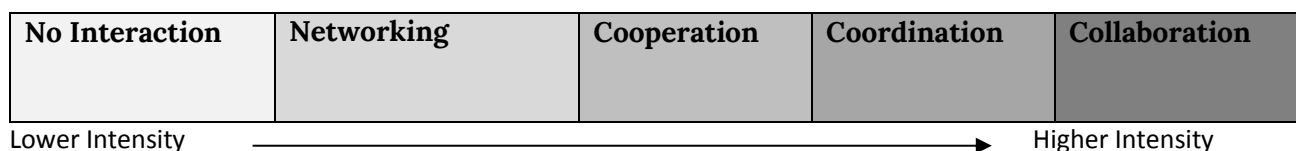


The vast majority of respondents reported that the early childhood system in the Yuma Region effectively addresses the needs of young children and their families (Figure 41). Nearly all respondents (91%) agreed that young children’s early learning and family support and literacy needs are effectively addressed by the system in the region.

### Continuum of Collaboration in the Early Childhood System Areas

In order to understand the current system and to track progress, First Things First uses a five-level continuum of collaboration model. The model consists of five levels describing progressively more intensive levels of collaboration: No Interaction, Networking, Cooperation, Coordination and Collaboration (Figure 42).

Figure 42. The five levels of the Continuum of Collaboration



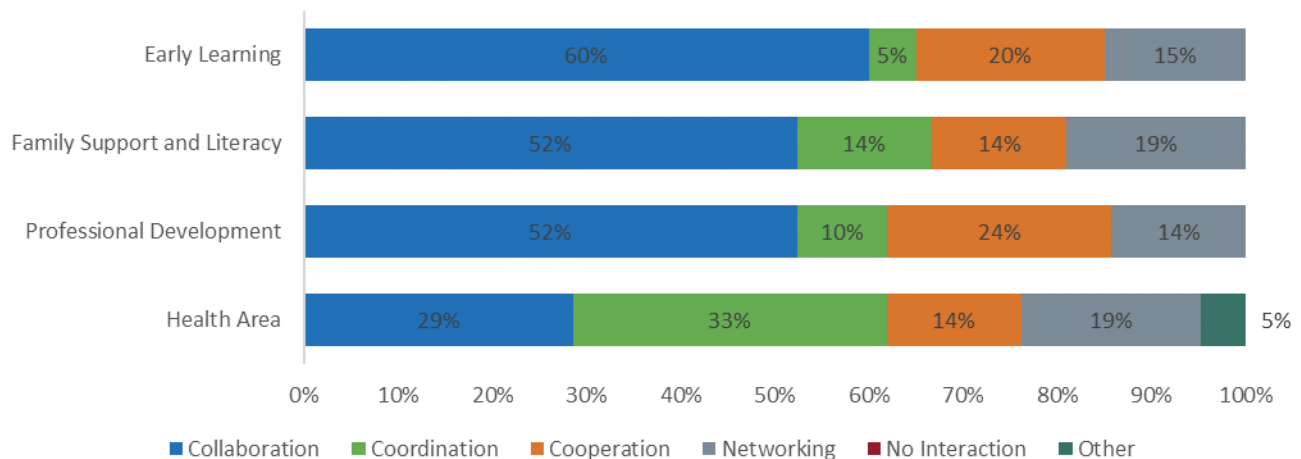
These stages, as described by Frey and colleagues,<sup>215</sup> are:

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

Respondents were asked to refer to the Continuum of Collaboration and to indicate the level of collaboration that is occurring among partners in the Yuma Region for each area of the early childhood system. In accordance with respondents' view of the early childhood system as a well-coordinated system (Figure 40), the results indicated 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 the Yuma Region reportedly happened within the area of Early Learning, where 60% of respondents indicated that *collaboration* was occurring. This was followed by

the areas of Family Support and Literacy (52%), Professional Development (52%), and Health (29%) (Figure 43). This mirrors the patterns seen in Figure 41 for effectiveness, suggesting that greater collaboration is more likely to result in families with young children having their needs effectively met.

Figure 43. Continuum of Collaboration in the Early Childhood System Areas (n=21)



Within the Health area, the greatest proportion (33%) of respondents indicated that they perceived *coordination*, a relationship of relatively high intensity, involves more formal planning and division of roles and opens communication channels between organizations (Figure 43). In each area, between 14 and 24 percent of respondents selected *cooperation* among system partners; a relationship characterized by short-term, informal relationships that exist without a clearly defined mission. *Networking*, a relationship of low intensity, characterized by bringing individuals or organizations together for relationship building and information sharing, was also indicated by similar proportions of respondents (14-19%).

#### *Sectors involved in the Early Childhood System 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. In the area of Family Support and Literacy, respondents felt that Family Support/Social Service (81%), Early Care and Education (76%), and State Agencies (62%) were most involved in system building work in the Yuma Region (Figure 44).

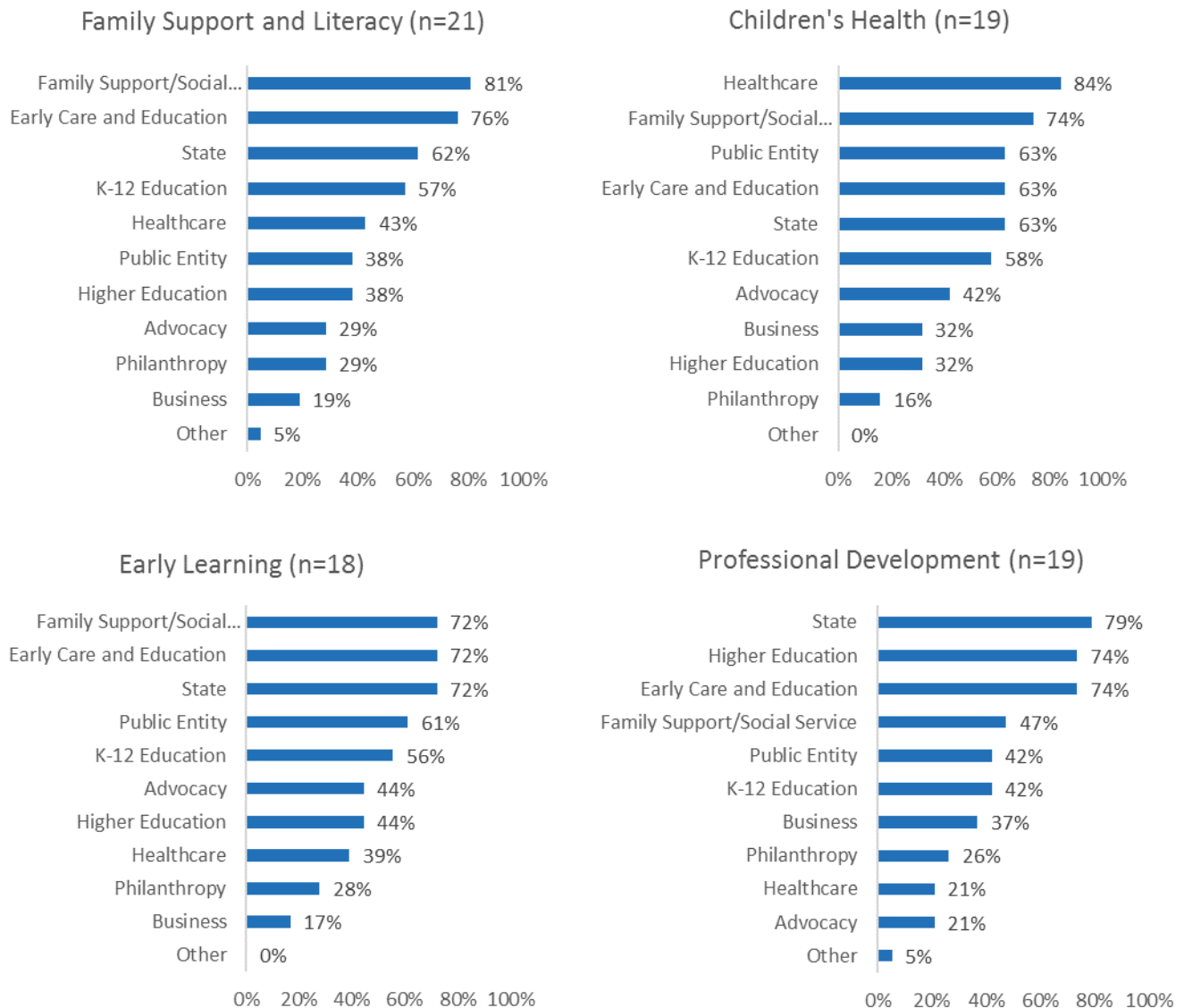
In the area of Children's Health, respondents indicated that the Health Care/Medical (84%), Family Support/Social Service (74%), and Public Entity, Early Care and Education, and State (all 63%) sectors were the most engaged in systems buildings.

In the area of Early Learning, respondents felt that Family Support/Social Service, Early Care and Education, and State (all 72%) sectors played the largest role in systems building.

Finally, in the area of Professional Development, most participants (79%) indicated that State sectors were involved, followed by Higher Education, and Early Care and Education (74% for both) sectors.

Across all four areas, the Advocacy, Business, and Philanthropy sectors played fairly small roles in system building work in the Yuma Region (Figure 44). Advocacy was most important for Early Learning (44% indicated its involvement) and Children's Health (42% indicated its involvement), Business was most important for Professional Development, where 37 percent of participants indicated its involvement, and Philanthropy was most important for Family Support and Literacy, where 29 percent of participants indicated its involvement.

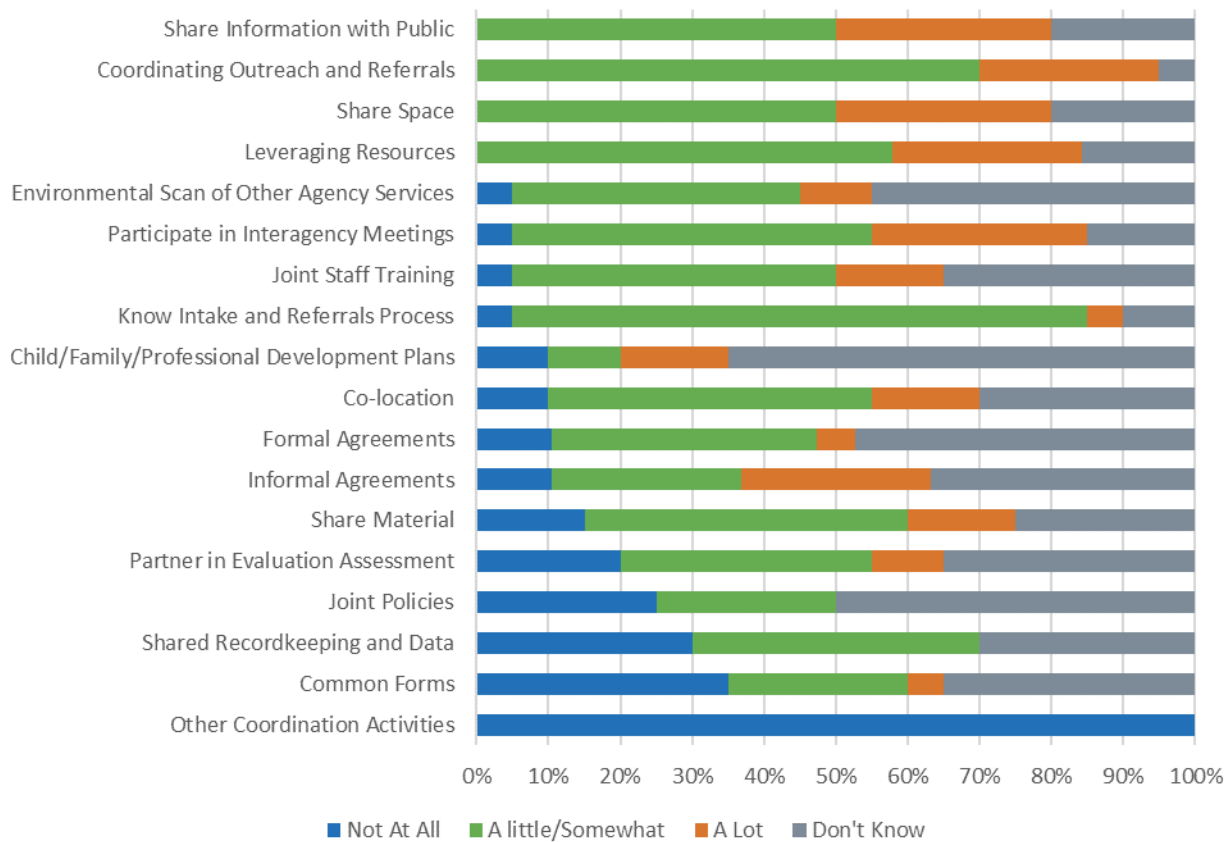
Figure 44. Sectors involved in/engaged in system building work in the Yuma Region



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 (13-15; 38-44%, depending on the question) of those who agreed to take the survey opted not to respond to this

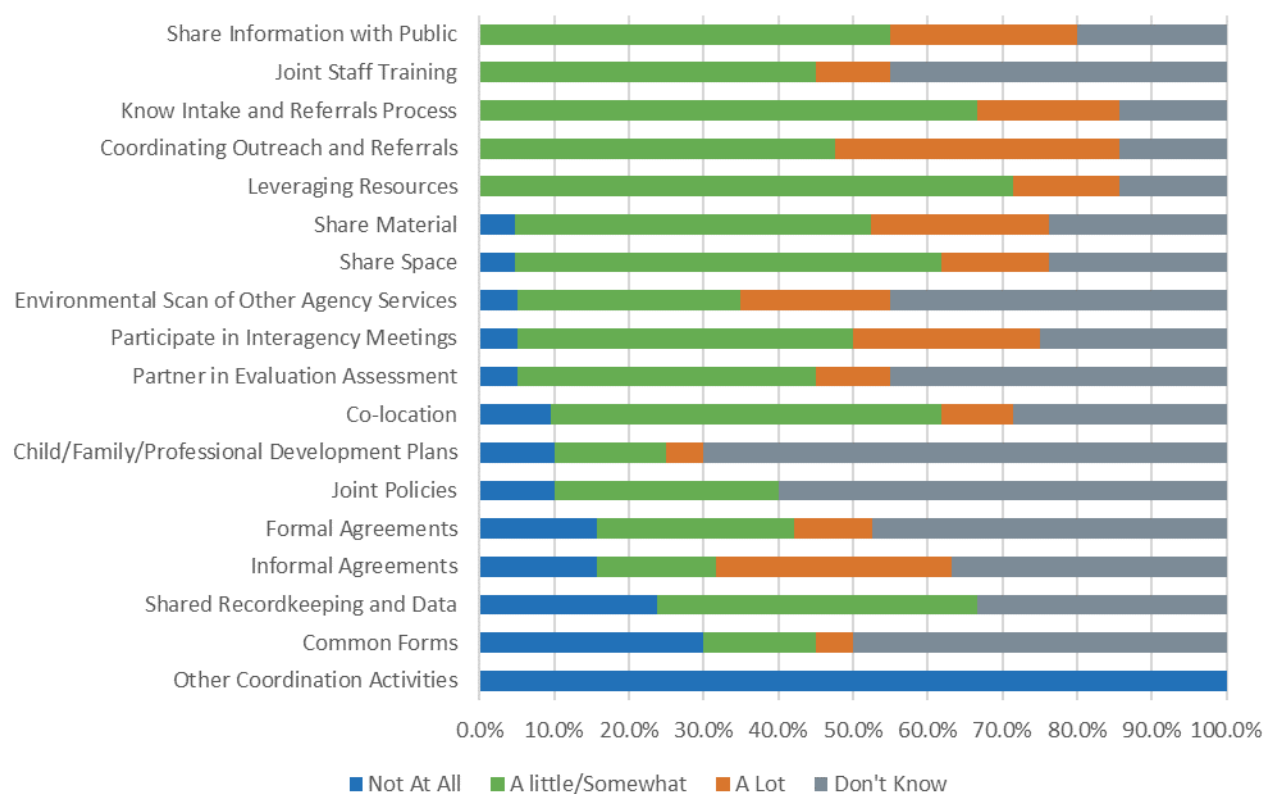
portion of the survey. Of those who did respond, many indicated that they did not know the answer for many activities.

Figure 45. Frequency of Activities: Family Support & Literacy (n=19)



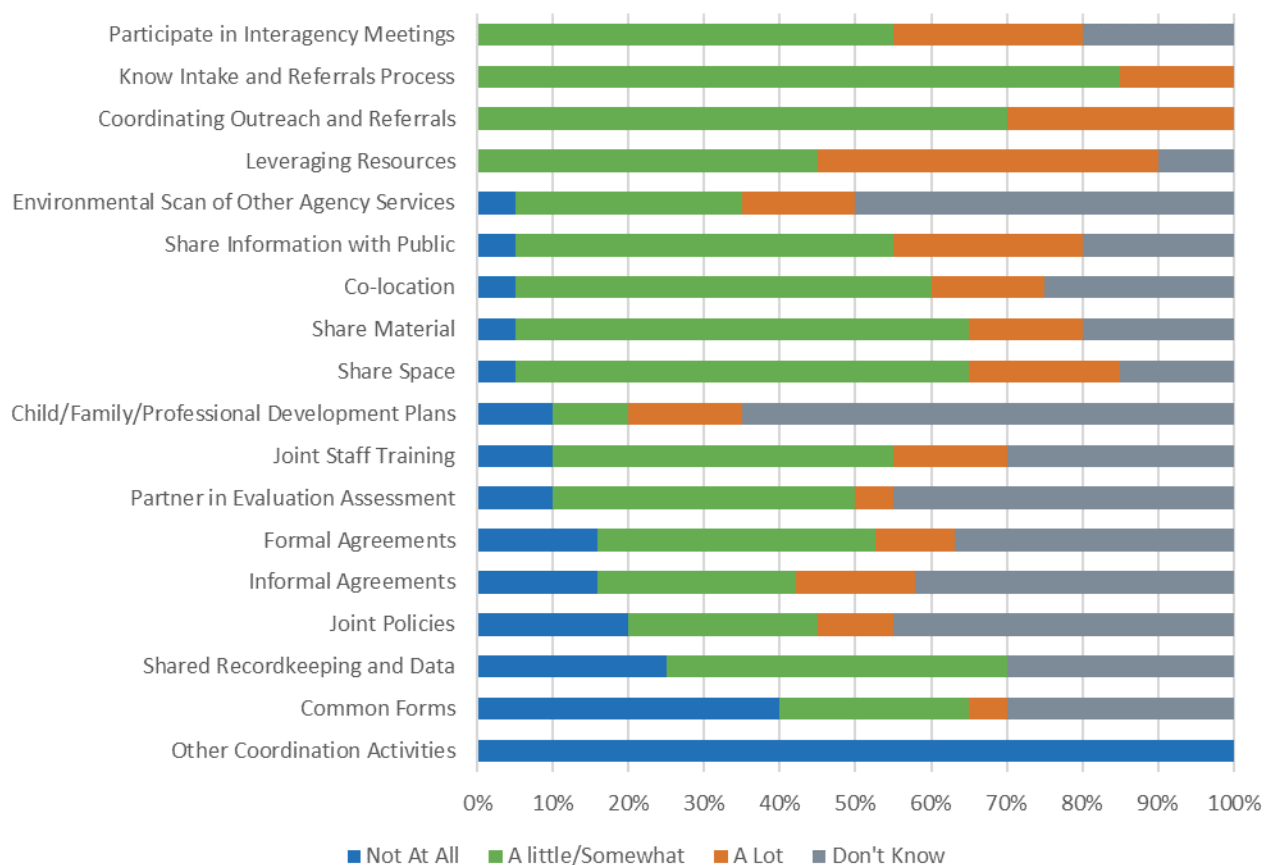
Based on the answers of those who did respond (n= 19 to 20, depending on the question), activities that system partners within Family Support and Literacy are perceived as most often using include: shared approach to informing the public of available services, coordination of outreach and referrals, shared space, leveraging resources/funding across partners, and participation in interagency meetings (Figure 45). Areas where there is a low perceived level of activity include: using common forms (e.g., intake and/or referral forms), shared recordkeeping and management of data information systems, jointly implementing policy changes, and partnering in program evaluation and/or assessment. These activities represent opportunities for continued growth for system partners.

Figure 46. Frequency of Activities: Children's Health (n=21)



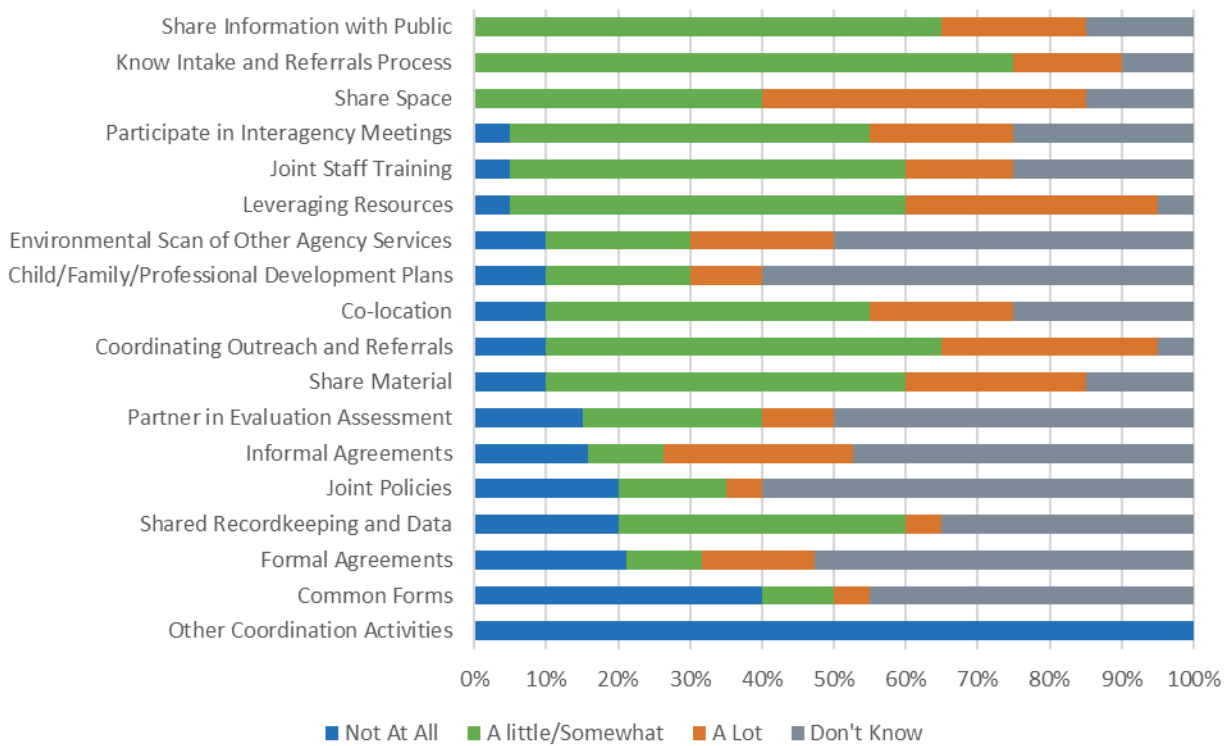
Activities that system partners within Children's Health are seen as most often using include: coordination of outreach and referrals, using a shared approach to informing the public of available services, knowledge of other programs' intake requirements/referral process, leveraging resources and shared development of program materials and shared space (Figure 46). Areas where there is a low perceived level of activity include: using common forms (e.g., intake and/or referral forms), shared record keeping and management of data information systems, and having informal and formal agreements. These activities may be opportunities for system partners to collaborate on in the future.

Figure 47. Frequency of Activities: Early Learning (n=20)



Activities that system partners within the Early Learning area are perceived to be actively engaged in include: knowledge of other programs' intake requirements/referral process, coordination of outreach and referrals, leveraging resources and participation in interagency meetings (Figure 47). Activities where there is a low perceived level of use include: using common forms (e.g., intake and/or referral forms), shared record keeping and management of data information systems, jointly implementing policy changes, and informal agreements.

Figure 48. Frequency of Activities: Professional Development (n=20)



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, knowledge of other programs' intake requirements/referral process, leveraging resources/funding across partners, and shared space (Figure 48). Activities where there is a low perceived level of use include: common forms (e.g., intake and/or referral forms), formal agreements, shared record keeping and management of data information systems, and jointly implementing policy changes.

Commonalities that emerged across all four topic areas were that respondents expressed relatively low use of common forms, shared record keeping and management of data information systems, formal and informal agreements, and jointly implemented policy changes.

### Barriers and Future Directions

Participants were also asked to reflect on barriers in moving the system forward with other early childhood system Partners. The most commonly cited barriers were lack of consistent and effective communication between agencies and programs, and a lack of sufficient funding for programs, especially in the expansion of space. Another common barrier reported was geographic, which is essentially the challenge of serving an area with high travel times and limited access in rural communities. Multiple respondents also noted that there was a lack of knowledge and need for more coordinated efforts amongst agencies to identify and address issues affecting families and children,

and improved means of disseminating this information to families. Additionally, the lack of access to an online registry for trainings and professional development was also seen as a barrier. Finally, one respondent noted that one barrier was the “lack of space to create hubs where different types of services can be consolidated to provide seamless access to services to families and children.”

Finally, participants were asked to reflect on the role of the FTF Regional Partnership Council in supporting early childhood system building and collaboration efforts in the Yuma Region. Noted contributions included funding, supporting and improving coalitions and relationships between agencies, and coordinating meetings with various agencies to discuss issues common in the region and collaboration efforts on services. The work of the Council in responding to individual requests, such as book drive support for Reach Out and Read, and cross-systems work including the establishment and facilitation of the Yuma County Early Childhood Collaborative, has been integral to improving the level of collaboration among agencies in the region. In the words of one respondent, “It (the Council) has created a sense of unity that did not exist before.”

Additional ideas for ways that the Regional Partnership Council could support early childhood system building and partner collaboration efforts in the Yuma Region included continuing to convene collaborative meetings between agencies and services, increasing communication and awareness among agencies, and continuing to target the support of local business leaders and officials. One respondent noted that it could facilitate “conversations among agencies to explore possibilities of satellite hubs where different types of services can be housed and offered to high need communities.” Others mentioned targeting harder to reach collaborative partners, such as migrant populations and those who are not “low hanging fruit”.



## SUMMARY AND CONCLUSIONS

## Summary and Conclusions

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

### **Economic Characteristics**

- Increased participation in supplemental food programs in Yuma County (SFSP +22%; CACFP +21%), including full participation by Head Starts in the region in the Child and Adult Care Food Program (CACFP).
- High rates of home ownership (Yuma Region 69%; East sub-region 76%) across the region.

### **Early Learning**

- Seventy percent of all Quality First sites in the region have achieved the 3-, 4- or 5- star ratings, indicating they are meeting or exceeding quality standards (Only 48% have the equivalent across the state).
- Higher participation in nursery school, preschool, or kindergarten in the region (41%) compared to the state (36%).
- Families in the Yuma Region are paying a slightly lower proportion of their overall income for child care (12-14%) than other families statewide (13-17%) (although still above recommended 10%).
- The number of children receiving a DES childcare subsidy increased substantially (2013=611, 2015=974).
- Many early childhood education professional development opportunities are available in the region including degree or certification programs, numerous ongoing trainings in both English and Spanish, and online trainings.
- The development of new early education resources in the region in the last two years including PDG preschools, and an Early Head Start program.

### **Child Health**

- A lower proportion of new mothers in the Yuma Region reported smoking (2.4%) than across the state (4.6%) (although still above HP 2020 target of 1.4%).
- A lower proportion of babies were born with low birth-weight (5.9%) or premature (8.1%) than across the state as a whole (7% and 9% respectively).

- Over 95 percent of children in child care and kindergarten in the Yuma Region had completed each of the three major (DTAP, polio, and MMR) vaccine series, and at higher rates than across the state.
- Very low rates of personal exemptions for vaccinations among children in child care (0.5%) and kindergarten (1.1%) in the region.
- The Yuma Region has the third lowest prevalence of untreated tooth decay among kindergarteners (21%) of all county-based FTF regions.
- Decrease in the number of emergency room visits by young children due to asthma in the region (-37%); double the decrease across the state (-16%).
- The proportion of adults with obesity in Yuma County decreased slightly (2011 = 31.2%; 2013=30.5%) over the same period that obesity rates across the state increased (2011 = 25.1%; 2013=26.8%).

### **Family Support and Literacy**

- Literacy promotion initiatives, Read On Yuma and Reach Out and Read Yuma.
- The Yuma County Early Childhood Collaborative.
- PBS Yuma Early Literacy Project.

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

- Over 1,800 Friends, Supporters and Champions recruited through First Things First community engagement efforts through SFY2016 in the region.

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

- Thirteen of 22 respondents (59%) to the Coordination and Collaboration Survey described the early childhood system in the Yuma Region as a well-coordinated system. An additional nine respondents (41%) described it as a partially coordinated system. No respondents described the Yuma Region's early childhood system as an uncoordinated system.
- The Yuma Region has founded a variety of countywide initiatives to enhance the early childhood system including: the Yuma County Early Childhood Collaborative, Family Resource Fairs with early identification screenings, Hopeful Hearts- the Yuma County Court Team and Community Schools.

However, there continue to be challenges to fully serving the needs of families with young children throughout the region. It is particularly important to recognize that there is considerable variability in the needs of families across the region. Although the Central area of the region is more likely to have resources and opportunities for young children and their families, there are continuing needs across all three areas of the Yuma Region. These areas run the risk of being overlooked for services if only region or county-level “averages” are examined. A table containing a full summary of identified regional challenges can also be found in the appendix. Many of these have been recognized as ongoing issues by the Yuma Regional Partnership Council and are being addressed by current First Things First-supported strategies in the region. These include:

- **A need for affordable, high quality and accessible child care** – The capacity of early care and education slots available compared to the number of young children in the region (4-7 children per slot), and the length of wait lists for WACOG Head Start programs, point to a shortage of affordable and accessible early care and learning opportunities in the region. While families in the region pay a smaller proportion of their income for child care than others across the state, this still exceeds the recommended 10 percent of annual income. Recent additions in available providers through the Preschool Development Grant, new Early Head Start program and Pecan Grove preschool will help to address this deficit in capacity, as do continued Regional investment in Quality First Scholarships, Coaching & Incentives, and the Family, Friends and Neighbors strategy.
- **The need for additional resources for children with special needs** – Information obtained through family forums, 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. Early intervention can also decrease the need for special education services once children reach school age. The Yuma Regional Partnership Council has recognized this need and is investing in the Inclusion of Children with Special Needs, the Family Support – Children with Special Needs and Home Visitation strategies in FY2017<sup>216</sup>. The region is also supporting family resource fairs with early identification screenings as an unfunded, connections approach. These strategies aim to provide additional opportunities for children and their families to access early learning and support services.
- **The need for additional resources for young children and families facing food insecurity** – Over a third of children (those under 18 years old) are food insecure, and three quarters 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 South sub-region, 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 nearly one in five young children live with a single parent not in the labor force. Participation in two supplemental food programs has increased in the region suggesting that resources are expanding, however more resources are likely needed. The Yuma Regional Partnership Council has recognized this need and food backpacks are provided to children who receive a Quality First Scholarship.

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

### **Population Characteristics**

- Three times as many households in the Yuma Region who speak Spanish at home are classified as limited-English-speaking (12%), compared to statewide (4%). For young children enrolled in kindergarten through third grade in the region, just over a quarter (26%) are classified as “English-language learners”, again higher than the statewide proportion (10%). These households and children may need additional language supports to access resources.

## **Economic Characteristics**

- Almost three-quarters of families with children in the East (69%) and South (73%) sub-regions live below 185 percent of the FPL.
- Decreases in receipt of TANF (-34%) and SNAP (-9%) benefits and WIC (-5%) participation in the region.
- Over a third (36%) of children (those under 18 years old) are food insecure, and three quarters of students have been eligible for free or reduced-price lunch since 2012 in the region.

## **Educational Indicators**

- Over a quarter (28%) of the population 25 and older did not complete high school, and in the South sub-region, half of adults did not complete high school.

## **Early Learning**

- There are between four and seven young children for each available child care slot in the region. In the South sub-region there are seven young children for every available slot.
- Approximately two percent of children aged birth through two years (n=188) are participating in early intervention services in the Yuma Region. Research suggests that about 13 percent of children would typically qualify for early intervention services. Therefore, nearly 1,000 Yuma children who would benefit from early intervention services are not receiving them.
- A lack of early intervention providers is suspected as a contributing factor in the decrease in the number served through early intervention, long waitlists for services, and delays and difficulty in scheduling screening and specialist referral appointments.

## **Child Health**

- One-quarter of young children in the East sub-region are estimated to be uninsured.
- By 2040, Yuma mothers are expected to give birth to 4,130 babies, meaning that birthing facilities will need to accommodate just over a thousand more mothers than they currently serve.
- Almost 10 percent of births in the region are to women 19 and younger.
- Only 59.5 percent of pregnant women in the region obtained prenatal care in the first trimester in 2014. Similarly concerning, in 2014, only 36 percent of women of child-bearing age (18-45) reported discussing preconception health with a health care provider in the Western Region, which includes Mohave, La Paz and Yuma Counties.

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 Yuma Regional Partnership Council and staff, local providers, and other community stakeholders in the region. Families are drawn to the Yuma Region both for the close-knit, supportive nature of many of its communities and for the increasing number of opportunities available to its residents. Continued collaborative efforts have the long-term potential to make these opportunities available to more families across the Yuma Region.

# APPENDICES

## Table of Regional Strategies

### Yuma Regional Partnership Council Planned Strategies for Fiscal Year 2017

Strategy	Strategy description
Quality First Scholarships	The intent of this promising practice strategy is to provide financial support through scholarships for children to attend quality early care and education programs in order to assist low income families (200% of Federal Poverty Level and below) to afford a quality early care and education setting. The expected result is that more children will receive quality early childhood programs and services that will impact their learning and development and promote readiness for kindergarten.
Family, Friend, and Neighbor Care	The intent of this evidence informed strategy is to provide professional development and financial resources to family, friend and neighbor caregivers. The expected result is an improvement in the quality of caregiving, teaching and learning for children in unregulated home based early care and education settings.
Quality First Child Care Health Consultation	The intent of this evidence based strategy is to provide statewide health and safety consultation specific to early care and education settings for children birth to age 5. The expected results are improved overall quality of care, reduced illness, and increased school readiness by supporting best practices that increase provider knowledge and promote behavior change, policy development and improvements in program environments.
Professional Development for Early Childhood Professionals	The intent of this evidence informed strategy is to provide high quality professional development for those that teach and care for young children. Implementation of this strategy must include both theory/topic presentation and theory into practice/practical application. The expected results of the implementation of this strategy include: participants increasing their knowledge base of early childhood and changing their practice in supporting young children's development and learning; and, participants receiving higher education credit for these learning opportunities that will articulate into a degree or certificate program.
Home Visitation	The intent of this evidence based strategy is to provide personalized support for families with young children, particularly as part of a comprehensive and coordinated system. Services may include developmental screenings, weekly home visits, linking families with needed community-based services, and advocacy and support services that empower families. Expected results that are common to home visitation programs include: improved child health and development, increase in children's school readiness, enhancement of parents' abilities to support their children's development; decreased incidence of child maltreatment; and improved family economic self-sufficiency and stability (US Department of Health and Human Services, 2014).
Family Support--Children with Special Needs	The intent of this evidence informed strategy is to promote healthy physical, social and emotional developmental support to children and their families. The expected result is that families will gain knowledge about developmental concerns they may have and the child's development will progress as a result of the supportive interactions. The target population for this strategy is children with mild to moderate developmental concerns, and their families, who do not qualify for services through the Arizona Early Intervention Program (AzEIP) for birth to age 3, or preschool special education services for ages 3 to 5 provided through public school districts. These programs are also known as Individuals with Disabilities Education Act (IDEA) Part C and Part B programs respectively.
Inclusion of Children with Special Needs	The intent of this evidence informed strategy is to provide onsite consultation and coaching to increase the capacity of early education programs to include and serve children with special health and/or developmental needs. The expected results include early care and education professionals increasing their knowledge of how to effectively serve children with special needs and as a result being more willing to enroll children with health or developmental concerns.
Parenting Education	The intent of this evidence based strategy is to offer learning activities designed to increase the knowledge and skills and promote positive parenting practices for parents and caregivers that result in enhanced child health and development when utilized by parents and caregivers. The expected results of effective parenting education programs are increased parental knowledge of child development and parenting skills, improved parent and child interactions, and more effective parental monitoring and guidance, decreased rates of child maltreatment, and better physical, cognitive and emotional development in children (Lundahl, Nimer & Parsons, 2012).
Parenting Outreach and Awareness	The intent of this promising practice strategy is to increase families' awareness of positive parenting; child development including health, nutrition, early learning and language acquisition; and, knowledge of available services and supports to support their child's overall development. The expected result is an increase in knowledge and a change in specific behaviors addressed through the information and activities provided.

Oral Health	The intent of this evidence-based strategy is to provide best practice approaches that enhance the oral health status of children birth through age 5. The expected results are prevention of tooth decay and reduction in the prevalence of early childhood tooth decay and the associated risks for pain and infections that can lead to lifelong complications to health and wellbeing. The approaches for this strategy include: oral health screening for children and expectant mothers with referrals to oral health providers for follow up care as needed; fluoride varnishes for children; oral health education for families and other caregivers; and, outreach to families, other caregivers including early learning and care providers, and oral health and medical professionals.
Registry and College Scholarships	The intent of this evidence informed Professional Development strategy is to provide access to higher education for the early childhood workforce (AAs and BAs) working directly with or on behalf of young children birth to age five. The expected results of supporting continuing education and degree completion is elevating and professionalizing the field, recruiting and retaining a quality early childhood workforce and supporting and increasing the quality of services provided to young children.
Nutrition, Physical Activity, and Obesity Prevention	The intent of this strategy is to provide evidence based community and place-based interactive health education to support children birth to age 5 in achieving and maintaining a healthy weight. Interactive health education will focus on healthy nutrition and physical activity and be provided to children, families, early child care and education professionals, and others in the community who care for young children. The expected result is reduction in risk factors for poor nutrition and insufficient physical activity, which in turn can reduce the prevalence of overweight and obesity during early childhood. A healthy weight during early childhood is highly predictive of achieving a healthy weight at all ages, as well as reduction in psychosocial and health consequences of overweight and obesity.

## Methods and Data Sources

### Data Sources

The data contained in this report come from a variety of sources. Some data were provided to First Things First by state agencies, such as the Arizona Department of Economic Security (DES), the Arizona Department of Education (ADE), and the Arizona Department of Health Services (ADHS). Other data were obtained from publically available sources, including the 2010 U.S. Census, the American Community Survey (ACS), the Arizona Department of Administration (ADOA), and the Arizona Health Care Cost Containment System (AHCCCS). In addition, regional data from the 2012 First Things first Family and Community Survey (FCS), 2015 Healthy Smiles Healthy Bodies Survey, and 2016 Coordination and Collaboration Survey are included. Methodologies for those surveys are included on the following pages.

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

The U.S. Census<sup>217</sup> is an enumeration of the population of the United States. It is conducted every ten years, and includes information about housing, race, and ethnicity. The 2010 U.S. Census data are available by census block. There are about 115,000 inhabited blocks in Arizona, with an average population of 56 people each. The Census data for the Coconino Region presented in this report were calculated by identifying each block in the region, and aggregating the data over all of those blocks. (Note that the Census 2010 data in the current report may vary to a small degree from census data reported in previous Needs & Assets reports. The reason is that in the previous reports, the Census 2010 data were aggregated by zip code; the current report uses aggregation by census blocks.)

The American Community Survey<sup>218</sup> is a survey conducted by the U.S. Census Bureau each month by mail, telephone, and face-to-face interviews. It covers many different topics, including income, language, education, employment, and housing. The ACS data are available by census tract. Arizona is divided into about 1,500 census tracts, with an average of about 4,200 people in each. The ACS data for the Yuma 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 Yuma 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:

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

### **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. Data for charter schools were aggregated to a single number for all charter school located within a given region.

### **Child Care Capacity Calculations**

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

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

## **2018 Report Process**

For the 2018 Needs & Assets Report cycle, Regional Partnership Councils were asked to identify areas of particular focus, or priority areas. These priorities were developed during the spring of 2016, and potential data sources to address these priorities were identified collaboratively among the Council, the Regional Director, FTF Research and Evaluation staff, and CRED staff. For the current report, the Yuma Regional Partnership Council has identified the following topics as priority areas: early education and health (particularly in relation to children with special needs) and early literacy.

In the fall of 2016, a participatory Data Interpretation Session was held to review preliminary results of the data received, compiled and analyzed as of June 2016. Regional Partnership Council members and other participating key stakeholders were involved in facilitated discussion to allow them to share their local knowledge and perspective in interpreting the available data. The Yuma Region Data Interpretation Session was held in Yuma on October 12, 2016 and included invited community members as well as the members of the Regional Partnership Council and the Regional Director. Feedback from participating session members are included as key informant citations within the report, as appropriate.

## **Family and Community Survey 2012 Survey Methodology**

The Family and Community Survey was designed to measure many critical areas of parent knowledge, skills, and behaviors related to their young children. The survey contained over sixty questions, some of which were drawn from the national survey, *What Grown-Ups Understand About Child Development*<sup>219</sup>. Survey items explored multiple facets of parenting. The FTF Family and Community Survey had six major areas of inquiry:

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

A total of 3,708 parents with children under six (FTF's target population) responded to the 2012 survey. The majority of respondents (83%) were the child's parent. The remaining respondents were grandparents (13%) or other relatives (4%). In the Yuma Region, 150 parents participated in the survey.

The sample data were weighted so that the sample would match the population of the state on four characteristics: Family income, Educational attainment, Sex, and Race-ethnicity. Data was weighted at

both the statewide level to arrive at the Arizona results and at the regional level to arrive at the regional results. Please note that regional estimates are necessarily less precise than the state estimates; i.e. small differences observed might easily be due to sampling variability.

### **Oral Health Survey Methodology**

The *Healthy Smiles Healthy Bodies* Survey was designed to obtain information on the prevalence and severity of tooth decay among Arizona's kindergarten children.<sup>xxviii</sup> 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.<sup>xxix</sup> A total of 3,630 kindergarten children in Arizona received a dental screening. In the Yuma Region, 200 children received a dental screening.

#### Sampling

*Healthy Smiles Healthy Bodies* sampled children in kindergarten and third grade. District and charter elementary schools with at least 20 children in kindergarten were included in the sampling frame. The following were excluded from the sampling frame: (1) alternative, detention, and state schools for the deaf and the blind plus (2) schools located in tribal communities (based on the Arizona Department of Health Services list of tribal communities). To ensure a representative sample from every county and FTF region, the sampling frame was initially stratified by county. Where a county included more than one FTF region (Maricopa and Pima), the sampling frame was further stratified by FTF region. This resulted in 21 sampling strata; 13 county-level strata, 2 FTF strata within Pima County, and 6 FTF strata within Maricopa County. Within each stratum, schools were ordered by their National School Lunch Program (NSLP) participation rate. A systematic probability proportional to size sampling scheme was used to select a sample of five schools per stratum.<sup>xxx</sup> 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.

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

<sup>xxix</sup> Schools serving children with special needs and schools located in tribal communities were excluded.

<sup>xxx</sup> 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

### Survey Limitations

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

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

### **Coordination and Collaboration Survey Methods**

System partners in 18 First Things First county-based regions were asked by First Things First to participate in the Coordination and Collaboration Survey in an effort to learn more about how system partners view their role in the region's early childhood system and to what extent they collaborate and coordinate with other system partners. Ten regions elected to conduct region-specific surveys including, Cochise, Coconino, Gila, Graham/Greenlee, La Paz/Mohave, Navajo/Apache, Pinal, Santa 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. In the Yuma Region, the Regional Director reviewed the list of the Yuma County Early Childhood Collaborative partners and identified those partners who were actively engaged in the Collaborative. These were the participants who were invited to part in the survey.

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/Quality First Participants
- Professional Development: Local community colleges and universities
- State/City/County Governments
- Public Library
- Philanthropy/Foundations
- Faith Based Organizations
- Military
- Coalition/Networking groups (including Read On Yuma and the Yuma County Early Childhood Collaborative partners)
- Community Service Groups
- FTF Grant Partner
- Other FTF grant partners

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.

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