# ## FIRST THINGS FIRST

La Paz/Mohave



**2018** NEEDS AND ASSETS REPORT

# LA PAZ/MOHAVE REGIONAL PARTNERSHIP COUNCIL 2018 NEEDS AND ASSETS REPORT

Prepared by

Community Research, Evaluation, and Development (CRED)

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College of Agriculture and Life Sciences

University of Arizona

Funded by

First Things First La Paz/Mohave Regional Partnership Council

## LETTER FROM THE CHAIR

September 6, 2017

Message from the Chair:

Since the inception of First Things First, the La Paz/Mohave 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 La Paz/Mohave Regional Council would like to thank our Needs and Assets vendor, the University of Arizona Community Research, Evaluation and Development (CRED) Norton School, for their knowledge, expertise and analysis of the La Paz and Mohave regions. 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 La Paz/Mohave 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,

La Paz/Mohave Regional Partnership Council. Chair

# LA PAZ/MOHAVE REGIONAL PARTNERSHIP COUNCIL

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## INTRODUCTORY SUMMARY AND ACKNOWLEDGMENTS

90 percent of a child's brain develops before kindergarten and the quality of a child's early experiences impact whether their brain will develop in positive ways that promote learning. Understanding the critical role the early years play in a child's future success is crucial to our ability to foster each child's optimal development and, in turn, impact all aspects of wellbeing of our communities and our state.

This Needs and Assets Report for the La Paz/Mohave 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 La Paz/Mohave 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 La Paz/Mohave 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 Census Bureau, the Child Care Resource & Referral - Arizona, Arizona Department of Administration- Employment and Population Statistics, Department of Child Safety, the Arizona Department of Economic Security, the Arizona Department of Education, the Fort Mojave Indian Tribe, the Arizona Department of Health Services, the Mohave County Department of Public Health, and the Arizona Health Care Cost Containment System for their contributions of data for this report, and their ongoing support and partnership with First Things First on behalf of young children.

To the current and past members of the La Paz/Mohave 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 La Paz/Mohave Region.

#### **Population Characteristics**

According to the U.S. Census, 13,469 children under the age of six reside in the La Paz/Mohave Region representing approximately six percent of the region's total population. This ranged from lows of three percent of young children living in the Parker Strip-Cienega Springs and Quartzsite-Ehrenberg subregions, to a high of 23 percent of young children living in the Colorado City-Centennial Park subregion. The population of young children in La Paz County is projected to grow by 16 percent to 1,381 by 2040 and the young child population in Mohave County is projected to increase even more dramatically, by 53 percent to 17,107 by 2040. Twenty-eight percent of young children in the La Paz/Mohave Region are Hispanic or Latino and 65 percent are White, non-Hispanic.

Based on data from the 2010 U.S. Census, one out of every ten households (10%) in the La Paz/Mohave Region has at least one child under 6 years old. The largest concentration of these families is in the Colorado City-Centennial Park sub-region, where 61 percent of households have a young child. The Parker-Strip-Cienega Springs, Salome-Bouse-Wenden, and Quartzite-Ehrenberg sub-regions have relatively fewer households with young children (5% each), as does the Dolan Springs-Golden Valley sub-region (6%). According to the American Community Survey, 40 percent of children in the La Paz/Mohave Region live with a single parent, which is similar to the proportion statewide. However, in four sub-regions and the Fort Mojave Indian Tribe, more than half of children live with a single parent [Quartzite-Ehrenberg (71%), Fort Mojave Indian Tribe (Arizona part) (70%), Littlefield-Beaver Dam 65%, Bullhead City and Parker-Strip-Cienega Springs (both 57%)]. Fifty-five percent of children ages birth to 17 living with grandparents in the La Paz/Mohave Region live in multigenerational homes where the grandparent has assumed responsibility for the child, despite the presence of a parent, and 18 percent of these children who live with their grandparents do not have a parent present in the household. Approximately a quarter of the grandchildren living with their grandparents in the Kingman and Lake Havasu City sub-regions are being raised with no parent present.

#### **Economic Characteristics**

The median income for La Paz County families is \$43,757, and for Mohave County families, \$46,179. Single-parent families in both counties make substantially less. The median income for households run by a single female in La Paz County is \$24,643, and even less in Mohave County (\$21,670); the median income for households led by single males is similar to households headed by single-women in La Paz County, but in Mohave County, median incomes for male-headed households is about \$5,000 more (\$26,385). The percentage of the population aged birth to 5 in poverty in the La Paz/Mohave Region (40%) is twice that of the total (all-age) population in the region in poverty (20%), and higher than the population of children aged birth to 5 living in poverty across the state (29%). In the Colorado City-Centennial Park sub-region, almost two-thirds of the young child population (61%) lives below the poverty level. Other sub-regions also have markedly higher proportions of young children living below the poverty level compared to both the region and state, including the Dolan Springs-Golden Valley (58%), Salome-Bouse-Wenden (49%), and Fort Mohave-Mohave Valley-Topock (47%) sub-regions.

Almost two-thirds of families (63%) 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. Families with children in five sub-regions are faring even worse, with 70 percent or more living below 185 percent of the FPL. 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 (-45%) and statewide (-39%).

Unemployment rates have been dropping steadily in La Paz County, Mohave County and the state since 2010, although unemployment rates have been consistently higher in both counties compared to the state. In 2016, the unemployment rate in La Paz County was six percent and in Mohave County 6.6 percent, compared to 5.3 percent for the state. Nearly two-thirds (63%) of young children in the region live in a home where all the parents participate in the labor force. Notably, in the Quartzite-Ehrenberg and Littlefield-Beaver Dam sub-region and the Fort Mojave Indian Tribe (Arizona part), a large percentage of children aged birth to 5 were living with one parent who was in the labor force (71%, 65%) and 62%, respectively).

Twenty-nine percent of children (those under 18 years old) in La Paz County and 32 percent in Mohave County are food insecure, slightly 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 8,000 children in the La Paz/Mohave Region annually. WIC participation has also declined substantially in the region from a high of serving 71 percent of women and children in the region in 2012, to a low of 54 percent in 2015. Two-thirds (65-67%) of students in the La Paz/Mohave Region have been eligible for free or reduced-price lunch since 2012; 78 percent of students in La Paz County and 65 percent of students in Mohave County were eligible for free or reduced-price lunch in 2016. Two programs that address food needs, the Summer Food Service Program (SFSP) and the Child and Adult Care Food Program (CACFP), have shown changes in meals served in recent years; a six percent decrease for SFSP in Mohave County, a seven percent increase in CACFP in Mohave County and 24 percent decrease in CACFP in La Paz County.

Of the 86,921 occupied housing units in the La Paz/Mohave Region, 69 percent are occupied by homeowners, with over 80 percent of homes owner-occupied in the Dolan Springs-Golden Valley, Littlefield-Beaver Dam, Quartzite-Ehrenberg and Salome-Bouse-Wenden sub-regions. In the Quartzite-Ehrenberg and Salome-Bouse-Wenden sub-regions, housing is relatively more affordable, with only 13 and 14 percent of units costing more than 30 percent of household income, whereas in the Lake Havasu City sub-region, 38 percent do.

#### **Educational Indicators**

In the 2014-2015 school year, 46 percent of La Paz/Mohave Region students attained a proficient or highly proficient score on the third grade math assessment, which was a higher passing rate than across Arizona as a whole (41%). However, substantial differences existed by county with only 24 percent La Paz County third-graders passing the math test compared to 47 percent of Mohave County third graders. Performance on the English language arts (ELA) test was lower overall for the region, with 37 percent of La Paz/Mohave Region students demonstrating proficiency, compared to 40 percent across the state. Again, differences exist by county, with 19 percent of La Paz County third graders receiving a passing score on the ELA test compared to 38 percent in Mohave County.

The high school drop-out rate in the La Paz/Mohave Region fell slightly to three percent in 2015, from a high of four percent in 2014. Graduation rates have increased in the region overall from 2012 and 2015, but the 2015 rate (75%) is lower than the rate in 2013 and 2014 (both 77%). Adults aged 25 and older in the La Paz/Mohave Region are less likely to have a Bachelor's or higher degree (12%) than adults across Arizona (27%). In the La Paz/Mohave Region, 16 percent of the population 25 and older did not complete high school, and in the Colorado City-Centennial Park sub-region, 4 out of 10 adults did not complete high school. Just under a quarter of the population 25 and older did not complete high school in La Paz County, compared to 16 percent in Mohave County.

#### **Early Learning**

According to the most recent data available in 2015 and 2016, there were 67 registered child care providers approved to serve up to 3,268 children in the La Paz/Mohave Region. With a population of young children of 13,469 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 Colorado City-Centennial Park and Parker Strip-Cienega Springs sub-regions have a population of 1,513 and 86 children aged birth to 5 respectively, but no capacity to serve young children. Of the 67 known child care providers, about one-quarter (n=28) are participating in the Quality First program, 10 sites are Head Start programs, one operates at a public school, one is operated by the Fort Mojave Indian Tribe, and 36 are other providers listed with Child Care Resource & Referral. Of the 19 programs that participated in the Quality First program in the La Paz/Mohave Region as of June 2016, nine (47%) achieved the 3-, 4- or 5- star ratings, indicating they are meeting or exceeding quality standards.

Families in the La Paz/Mohave 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; a single-female householder making the median household income in Mohave County would pay 27 percent of her income on child care for one infant. The number of children receiving a Department of Economic Security (DES) subsidy in the La Paz/Mohave Region increased from 756 in 2013 to 1,150 in 2015.

In the La Paz/Mohave 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, 187 children ages 0 to 2 were served through the AzEIP program in the La Paz/Mohave Region. Almost 700 children in the region who would benefit from early intervention services are not receiving them. In FY 2015, 35 children aged 0 to 2, and 48 children aged 3–5 were served by DDD in the La Paz/Mohave Region. The number of children referred to DDD has increased between FY2012 and FY2015 for both age groups, as did the number of children aged 0 to 2 and 3 to 5 served by DDD. The number of preschoolers in special education in ADE schools with a special needs preschool has decreased between 2012 (n=258) to 2015 (n=194) in the La Paz/Mohave Region. Among children who are in special education programs in public preschools in the region, the majority of children have either a developmental disability (44%), severe delay (35%), or a speech or language impairment (21%). For older children in the region, of the 7,229 children enrolled in kindergarten through third grade in October 2015, 11 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). A community assessment and forums held in the region

indicate difficulty navigating the early intervention system for parents and the need for additional early intervention providers in the region.

#### Child Health

All but two of the regions Arizona Department of Health Services designated Primary Care Areas (PCAs) had population-provider ratios greater than that seen statewide (449 to 1), indicating a potential need for more primary care providers. Fourteen percent of young children in the region were estimated to be uninsured, compared to 10 percent across the state. Almost one-third of children in the Dolan Springs-Golden Valley (31%) and Colorado City-Centennial Park (28%) sub-regions and the Fort Mojave Indian Tribe (Arizona part) (28%) were uninsured, as were over a quarter of the total population in the Colorado City-Centennial Park and Littlefield-Beaver Dam sub-regions (26% each).

In 2014, 1,879 La Paz/Mohave Region residents gave birth. Of the 1,879 mothers who gave birth in the La Paz/Mohave Region in 2014, the majority (74%) were White, non-Hispanic. New mothers in the La Paz/Mohave Region had lower educational attainment than mothers statewide; 57 percent had a high school education or less (45% statewide), and 10 percent had attained a bachelor's degree or more (23% statewide). Over half (54%) of mothers were not married in the region (63% La Paz County, 54% Mohave County; 45% statewide) and 10 percent were in their teens (15% La Paz County, 10% Mohave County; 8% statewide). A much higher proportion of mothers in the La Paz/Mohave Region reported smoking while pregnant (13.4%-18.7%) than across the state (3.9%-4.6%). The proportion of women participating in WIC who were obese before pregnancy in the region dropped in 2013 to 24 percent but then rebounded to 32 percent in 2015, whereas the rate of obesity across the state has increased slightly but steadily since 2012. Across the La Paz/Mohave Region in 2014, 69 percent of pregnant women obtained prenatal care during the first trimester.

In the region in 2014, 6.3 percent of babies were low birth weight (7.5% La Paz County; 6.2% Mohave County), compared to seven percent across the state. The percent of premature births in the region was 7.6 percent (8.9% La Paz County; 7.7% Mohave County), with nine percent across the state falling into this category. Infants participating in WIC in the La Paz/Mohave Region who are breastfed (2015: 72.2%) are slightly more likely to be breastfed than infants participating in WIC across the state of Arizona (71.2%).

Over 92 percent of children in child care and kindergarten in the La Paz/Mohave Region had completed each of the three major (DTAP, polio, and MMR) vaccine series; the regional rates were above those of the state. Rates of personal exemptions for vaccinations among children in child care in the region (2.8%) were lower than exemption rates at the state level (4%) whereas exemption rates in kindergarten (5.1%) were higher than those at the state level (4.7%).

Untreated decay experience and need for dental care was reported for 36 percent of kindergarteners in the region, which was higher than the state (27%). In overall decay experience, 62 percent of kindergarteners evidenced decay experience in the region, compared to Arizona's 52 percent. Among children participating in WIC in the La Paz/Mohave Region in 2015, 8.2 percent had obesity and an additional 13 percent had overweight. The obesity rate has been decreasing, dropping from 9.1 percent in 2012 to 8.2 percent in 2015. Data from the Indian Health Service for children from the Fort Mojave Indian Tribe receiving services at the Colorado Service Unit indicate that just over one-quarter (26.8%) of children (ages 2-5) from the Arizona portion of the Fort Mojave Indian Tribe had obesity.

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

Of 78 reports of abuse and neglect of children birth to 17 received during the April 1-September 30, 2015 reporting period for La Paz County, 11 percent resulted in a removal from the home; in Mohave County of 806 reports, 115 (14%) resulted in a removal from the home. Over the last seven reporting periods, there has been a marked increase in the number of substantiated cases resulting in removal in both counties. In La Paz County, while the number of substantiated cases has remained below 10, the number increased by a factor of nine since the April 1-September 30, 2015 reporting period. In Mohave County, the most notable increase happened in the reporting period ending in September 30, 2016, when there were 115 substantiated cases resulting in removal up from 18 in the prior period. Annual reports of child abuse and neglect provided by the Fort Mojave Indian Tribe's Social Services Department showed a decrease from the period October 2014–September 2015 (48 referrals received) to October 2015-September 2016 (24 referrals received). An asset in the region is the Mohave County Infant and Toddler Mental Health Court Team which seeks to improve outcomes for infants, toddlers and their families involved in the child welfare system in order to reduce or prevent future court involvement.

In fiscal year 2015, one domestic violence shelter in La Paz County, Colorado River Regional Crisis Shelter, served 110 people, 34 (31%) of whom were children. In Mohave County, three organizations, Kingman Aid to Abused People, Sally's Place - Interagency Council Lake Havasu City, and WestCare Arizona served 321 people, 106 (33%) of whom were children. In 2015, 853 pregnant or parenting women received publically-funded behavioral health services in the La Paz/Mohave Region, the vast majority of whom resided in Mohave County. This represents a decrease of 16 percent from the 1,021 women who received services in 2012, a smaller decrease than across the state overall (-24% from 2012 to 2015). The number of children ages birth to 5 receiving behavioral health services in the La Paz/Mohave Region showed an opposite trend, and actually increased from 2012 (n=459) to 2015 (n=504), amounting to a 10 percent increase. Community members involved in a community health needs assessment, and key informants in the region, all pointed to substance use and mental health as the most pressing health concern facing the region.

#### 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 La Paz/Mohave Region, these efforts have resulted in the recruitment of 688 Friends, 63 Supporters and 19 Champions during the period of FY2014 through 2016. In addition to these strategic communications efforts, First Things First has also led a concerted effort of policymaker awareness-building throughout the state. Furthermore, the Arizona Early Childhood Alliance represents the united voice of the early childhood community in advocating for early childhood programs and services. Finally, FTF recently launched enhanced online information for parents of young children, including the more intentional and strategic placement of early childhood content and resources in the digital platforms that today's parents frequent.

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

A majority (52%, n=12) of 23 survey respondents described the early childhood system in the La Paz/Mohave Region as a partially coordinated system, with just under half of respondents (43%, n=10) describing the system as a well-coordinated system, and only one respondent viewing the early childhood system as an uncoordinated system. A large majority of respondents (91%, n=20) agreed that young children's early learning and health needs are effectively addressed by the system in the region. In addition, 86 percent of respondents (n=19) felt that professional development needs are effectively addressed, and 82 percent (n=18) felt that young children's family support and literacy needs were effectively addressed. The La Paz/Mohave Region has founded a variety of countywide initiatives to enhance the early childhood system including; connecting children in foster care with early learning programs, multiple agencies' collaboration on children with special needs, early intervention, and Child Find, the Home Visitation Collaborative and La Paz Mohave Oral Health.

# 2018 NEEDS AND ASSETS REPORT

# **About this Report**

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

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

For the 2018 cycle, the Regional Partnership Council identified the following topics as priority areas. These topics were a focus of a Data Interpretation Session held in the fall of 2016, as well as a separate Data Interpretation Session with representatives of the Fort Mojave Indian Tribe, which participates in the La Paz/Mohave Region. Additional information and data are included on these topics whenever possible.

- 1) Child care providers,
- 2) **Pediatric health care providers** (occupational therapy, speech therapy, physical therapy, hearing services, vision services, and infant-toddler mental health) and,
- 3) Foster care.

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.

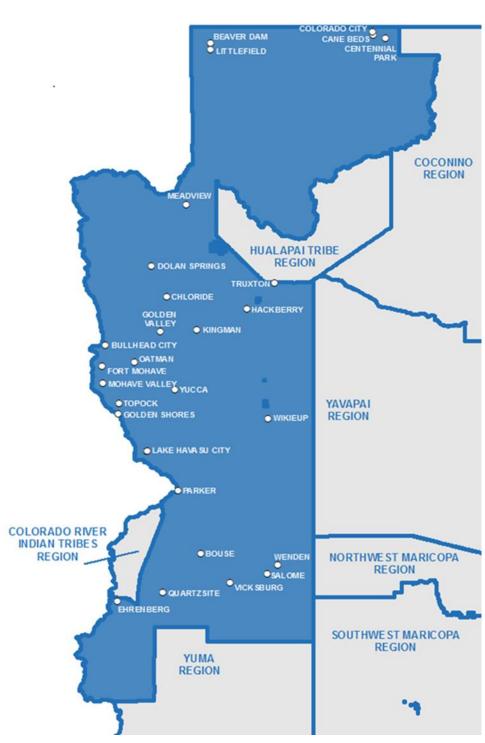
# **Description of the Region**

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 La Paz/Mohave Region is defined as the combined area of the two counties, not including the lands belonging to the Colorado River Indian Tribes, the Hualapai Tribe, and the Kaibab Paiute Tribe. The region does include the Arizona portion of the land belonging to the Fort Mojave Indian Tribe, as this tribe has chosen to participate as part of the La Paz/Mohave Region. This decision must be ratified every two years, and the Fort Mojave Indian Tribe has opted to continue as part of the region, with the opportunity to be represented on the Regional Partnership Council. The region covers about 16,700 square miles, with its northern end separated from the rest by the Grand Canyon. The communities of the region are diverse in population density and in demographics, and are often isolated by large areas of unpopulated land. People and services are concentrated in larger places in the region such as Bullhead City, Kingman, Lake Havasu City, and Parker.

Figure 1 shows the geographical area covered by the La Paz/Mohave Region.

Figure 1. The La Paz/Mohave First Things First Region



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

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

The **Bullhead City** area is defined as the 86422 and 86429 zip codes and contains Bullhead City and the Census Designated Place (CDP) of Katherine.

The Colorado City-Centennial Park area is comprised of the 86021 zip code and the portion of the 86022 zip code that is within the La Paz/Mohave Region (within Mohave County and not part of the Kaibab Indian Reservation). It contains the town of Colorado City and the CDPs of Centennial Park and Cane Beds.

The **Dolan Springs-Golden Valley** area encompasses the zip codes of 86413, 86431, 86441, 86443, 86444 (excluding Hualapai Off-Reservation Trust Land), and 86445. It contains the CDPs of Dolan Springs, Golden Valley, Meadview, White Hills, Chloride, So-Hi, Walnut Creek, and McConnico.

The Fort Mohave-Mohave Valley-Topock area is defined as the zip codes of 86426, 86433, 86436, and 86440 and contains the CDPS of Fort Mohave, Mohave Valley, Topock, Golden Shores, Arizona Village, Mojave Ranch Estates, Willow Valley, and Mesquite Creek.

The **Kingman** area is comprised of the 86401, 86409, 86411, and 86438 zip codes, as well as the portions of the 85360, 86437, and 86434 zip codes that are not part of the Hualapai Indian Reservation. It contains the city of Kingman and the CDPs of New Kingman-Butler, Lazy Y-U, Pinion Pines, Pine Lake, Valle Vista, Hackberry, Valentine, Truxton, Antares, Crozier, Wikieup, and Yucca.

The Lake Havasu City area encompasses the 86103, 86404, and 86406 zip codes and contains Lake Havasu City and the CDPs of Desert Hills and Crystal Beach.

The **Littlefield-Beaver Dam** area is defined as the 86432 zip code and contains the CDPs of Beaver Dam, Littlefield, and Scenic.

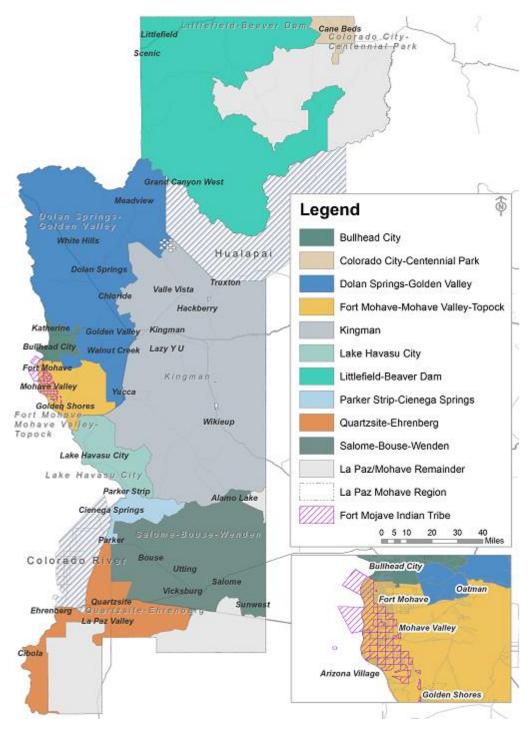
The Parker Strip-Cienega Springs area is comprised of the portion of the 85344 zip code that is not part of the Colorado River Reservation. It contains the southernmost portion of the town of Parker that does not fall within the Colorado River Reservation as well as the CDPs of Cienega Springs and Parker Strip.

The Quartzsite-Ehrenberg area is defined as the zip codes of 85328, 85334, and 85346 and contains the town of Quartzsite and the CDPs of Ehrenberg, La Paz Valley, and Cibola.

The **Salome-Bouse-Wenden** area encompasses the 85325, 85348, and 85357 zip codes. It contains the CDPs of Bouse, Salome, Wenden, Vicksburg, Utting, Brenda, Alamo Lake, and Sunwest.

The **Fort Mojave Indian Tribe** falls within the Fort Mohave sub-region. In this report, data for the tribe is also reported where available. Data are reported in two ways: first for the part of tribal lands that are within Arizona and second for the entire reservation.

Figure 2: Sub-Regions of the La Paz/Mohave Region



Source: U.S. Census Bureau (2016). TIGER-Line Shapefiles Map produced by CRED.



**POPULATION CHARACTERISTICS** 

# Why Population Characteristics Matter

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

An understanding of the supports and resources within a family is also key to helping young children achieve the best possible developmental outcomes.<sup>3,4</sup> Children living with and being cared for by someone other than their parents, such as relatives or close friends, is known as kinship care and is increasingly common. 5 Children living in kinship care can arrive in those situations for a variety of reasons including a parent's absence for work, military service, chronic illness, incarceration, or due to abuse, neglect, or homelessness, among others. Children in kinship care often face special needs as a result of trauma, and these families often require additional support and assistance to help children adjust and provide the best possible home environment. 6 Caring for young children may pose a particular challenge for aging grandparents, as they often lack information on resources, support services, benefits, and policies available to aid in their caregiving role. Understanding the makeup of families in a region can help better prepare child care, school and agency staff to engage with diverse families in ways that support positive interactions with staff and within families to enhance each child's early learning.8

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

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

#### What the Data Tell Us

#### **Demographics**

According to the U.S. Census, 13,469 children under the age of six reside in the La Paz/Mohave Region (Table 1). Overall, the region's population was 211,922 in 2010, meaning that approximately six percent of the region's residents are young children. This ranged from lows of three percent of young children living in the Parker Strip-Cienega Springs and Quartzsite-Ehrenberg sub-regions, to a high of 23 percent of young children living in the Colorado City-Centennial Park sub-region (Table 3).

La Paz and Mohave Counties have 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, La Paz County saw only a three percent increase, and Mohave County saw a 15 percent increase (Table 2). Both counties are projected to have faster growth in the population of young children relative to the total population growth over the next several decades. The population of young children in La Paz County is projected to grow by 16 percent to 1,381 by 2040 and overall by six percent to be 22,351 by 2040. The young child population in Mohave County is projected to increase even more dramatically, by 53 percent to 17,107 by 2040. The overall population will increase by 36 percent to 280,765 in this same time period (see Table 4 and Table 5). Although the numbers of young children in both counties are expected to increase over the years, the percentage of the overall population to be comprised of young children is projected to remain at approximately six percent in both counties by 2040.

Twenty-eight percent of young children in the La Paz/Mohave Region are Hispanic or Latino and 65 percent are White, non-Hispanic. The percentage of Latino children in the La Paz/Mohave Region is considerably lower than that across the state of Arizona as a whole (45%) (Table 7). Within the region, the Littlefield-Beaver Dam, Salome-Bouse-Wenden, and Quartzite-Ehrenberg sub-regions have a substantially higher proportion of Latino children, with over half (59%, 57% and 53%, respectively) identified as Hispanic or Latino. Compared to children, a smaller proportion of adults (those aged 18 and older) identify as Hispanic or Latino across both the region (12%) and state (25%) (Table 6).

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

	Ages 0-5	Age 0	Age 1	Age 2	Age 3	Age 4	Age 5
La Paz/Mohave Region	13,469	2,128	2,218	2,253	2,376	2,245	2,249
Bullhead City area	2,656	420	454	443	459	455	425
Colorado City-Centennial Park area	1,513	246	248	233	247	264	275
Dolan Springs-Golden Valley area	594	95	88	96	105	126	84
Fort Mohave-Mohave Valley-Topock area	1,343	195	219	244	232	224	229
Kingman area	3,597	586	589	611	640	573	598
Lake Havasu City area	2,998	464	494	510	540	476	514
Littlefield-Beaver Dam area	280	50	43	38	53	48	48
Parker Strip-Cienega Springs area	86	11	16	10	23	9	17
Quartzsite-Ehrenberg area	204	35	36	29	44	32	28
Salome-Bouse-Wenden area	198	26	31	39	33	38	31
Fort Mojave Indian Tribe (Arizona part)	89	11	19	9	18	14	18
Fort Mojave Indian Tribe (entire)	109	14	23	12	23	16	21
La Paz County	1,227	178	199	203	244	204	199
Mohave County	13,218	2,093	2,174	2,214	2,322	2,202	2,213
ARIZONA	546,609	87,557	89,746	93,216	93,880	91,316	90,894

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

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

	Number of children (ages 0- 5) in 2000 Census	(ages 0-5) in 2010	Percent change in population (ages 0-5), 2000 to 2010
La Paz/Mohave Region	N/A	13,469	N/A
Fort Mojave Indian Tribe (Arizona part)	N/A	89	N/A
Fort Mojave Indian Tribe (entire)	105	109	4%
La Paz County	1,195	1,227	3%
Mohave County	11,454	13,218	15%
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
La Paz/Mohave Region	211,922		
Bullhead City area	40,544	2,656	7%
Colorado City-Centennial Park area	6,571	1,513	23%
Dolan Springs-Golden Valley area	16,406	594	4%
Fort Mohave-Mohave Valley-Topock area	22,984	1,343	6%
Kingman area	52,264	3,597	7%
Lake Havasu City area	55,808	2,998	5%
Littlefield-Beaver Dam area	3,933	280	7%
Parker Strip-Cienega Springs area	2,489	86	3%
Quartzsite-Ehrenberg area	6,164	204	3%
Salome-Bouse-Wenden area	4,759	198	4%
Fort Mojave Indian Tribe (Arizona part)	1,004	89	9%
Fort Mojave Indian Tribe (entire)	1,477	109	7%
La Paz County	20,489	1,227	6%
Mohave County	200,186	13,218	7%
ARIZONA	6,392,017	546,609	9%

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

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

	2015	2020	2025	2030	2035	2040
La Paz/Mohave Region	N/A	N/A	N/A	N/A	N/A	N/A
La Paz County	1,187	1,245	1,266	1,305	1,340	1,381
Mohave County	11,209	12,307	14,002	15,466	16,460	17,107
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
La Paz/Mohave Region	N/A	N/A	N/A	N/A	N/A	N/A
Fort Mojave Indian Tribe (Arizona part)	1,080	1,238	1,386	1,527	1,661	1,783
Fort Mojave Indian Tribe (entire)	N/A	N/A	N/A	N/A	N/A	N/A
La Paz County	21,183	21,478	21,755	21,961	22,147	22,351
Mohave County	205,716	220,678	235,747	250,599	265,716	280,765
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)		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)
La Paz/Mohave Region	169,706	12%	84%	1%	1%	1%
Bullhead City area	32,537	19%	76%	1%	1%	2%
Colorado City-Centennial Park area	2,610	2%	97%	0%	0%	0%
Dolan Springs-Golden Valley area	14,234	11%	83%	1%	2%	1%
Fort Mohave-Mohave Valley-Topock area	18,468	13%	82%	2%	1%	1%
Kingman area	40,990	9%	85%	1%	1%	1%
Lake Havasu City area	45,962	9%	87%	1%	1%	1%
Littlefield-Beaver Dam area	3,055	25%	73%	1%	0%	1%
Parker Strip-Cienega Springs area	2,192	8%	88%	1%	1%	1%
Quartzsite-Ehrenberg area	5,500	10%	87%	1%	0%	0%
Salome-Bouse-Wenden area	4,158	13%	84%	1%	0%	0%
Fort Mojave Indian Tribe (Arizona part)	729	21%	49%	27%	0%	1%
Fort Mojave Indian Tribe (entire)	1,136	16%	50%	30%	0%	1%
La Paz County	16,811	18%	70%	9%	1%	0%
Mohave County	158,921	12%	83%	2%	1%	1%
ARIZONA	4,763,003	25%	63%	4%	4%	3%

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

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

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

		Hispanic or Latino	White alone (not Hispanic or Latino)	American Indian		Asian or Pacific Islander
La Paz/Mohave Region	11,220	28%	65%	2%	1%	1%
Bullhead City area	2,231	46%	47%	2%	1%	1%
Colorado City-Centennial Park area	1,238	1%	98%	0%	0%	0%
Dolan Springs-Golden Valley area	510	21%	71%	3%	1%	1%
Fort Mohave-Mohave Valley-Topock area	1,114	30%	59%	7%	1%	0%
Kingman area	2,999	21%	72%	3%	1%	1%
Lake Havasu City area	2,484	27%	66%	1%	1%	2%
Littlefield-Beaver Dam area	232	59%	36%	1%	0%	0%
Parker Strip-Cienega Springs area	69	23%	71%	7%	0%	0%
Quartzsite-Ehrenberg area	176	53%	38%	5%	2%	0%
Salome-Bouse-Wenden area	167	57%	34%	1%	3%	0%
Fort Mojave Indian Tribe (Arizona part)	71	32%	6%	63%	1%	0%
Fort Mojave Indian Tribe (entire)	88	26%	5%	69%	1%	0%
La Paz County	1,028	50%	24%	27%	1%	0%
Mohave County	11,005	27%	65%	4%	1%	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

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

0% 20% 40% 60% 80% 100% La Paz/Mohave Region Bullhead City area 46% Colorado City-Centennial Park area Dolan Springs-Golden Springs area 21% Fort Mohave-Mohave Valley-Topock area 30% Kingman area Lake Havasu City area 27% Littlefield-Beaver Dam area 59% Parker Strip-Cienega Springs area 23% Quartzsite-Ehrenberg area 53% Salome-Bouse-Wenden area 57% Fort Mojave Indian Tribe (Arizona part) 32% Fort Mojave Indian Tribe (entire) 26% La Paz County 50% Mohave County 27% ARIZONA

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 ten households (10%) in the La Paz/Mohave Region has at least one child under 6 years old (Table 8). The largest concentration of these families is in the Colorado City-Centennial Park sub-region, where 61 percent of households have a young child. The Parker-Strip-Cienega Springs, Salome-Bouse-Wenden, and Quartzite-Ehrenberg sub-regions have relatively fewer households with young children (5% each), as does the Dolan Springs-Golden Valley sub-region (6%).

According to the American Community Survey, 40 percent of children in the La Paz/Mohave Region live with a single parent, which is similar to the proportion statewide (38%) (Figure 4). However, in four sub-regions and the Fort Mojave Indian Tribe, more than half of children live with a single parent [Quartzite-Ehrenberg (71%), Fort Mojave Indian Tribe (Arizona part) (70%), Littlefield-Beaver Dam 65%, Bullhead City and Parker-Strip-Cienega Springs (both 57%)]. Children throughout the region are more likely to live with two parents (53%), with those in the Colorado City-Centennial Park, Salome-Bouse-Wenden and Lake Havasu city sub-regions being the most likely to live with two parents (73%, 69% and 65%, 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 La Paz County, 0.8 percent of families are same-sex households, and in Mohave County 1.0 percent of households are the same, 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 the same in the region and the state (both 14%) (Figure 5). The approximate locations of children ages birth to 5 living with their grandparents in the La Paz Mohave Region is in shown in Figure 6. 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 3,634 children ages birth to 17 living with grandparents in the La Paz/Mohave Region. Fifty-five percent of these children (n=1,999) live in multigenerational homes where the grandparent has assumed responsibility for the child, despite the presence of a parent, and 18 percent of these children who live with their grandparents do not have a parent present in the household. Approximately a quarter of the grandchildren living with their grandparents in the Kingman and Lake Havasu City sub-regions 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. 14,15 For ethnically diverse children, kinship care can also support linguistic heritage.

In the La Paz/Mohave Region, 22 percent of children ages birth to 5 live with a foreign-born parent. This is lower than the statewide proportion (27%), although the Salome-Bouse-Wenden sub-region stands out, having over two in three young children (69%) living with a foreign-born parent (Table 10).

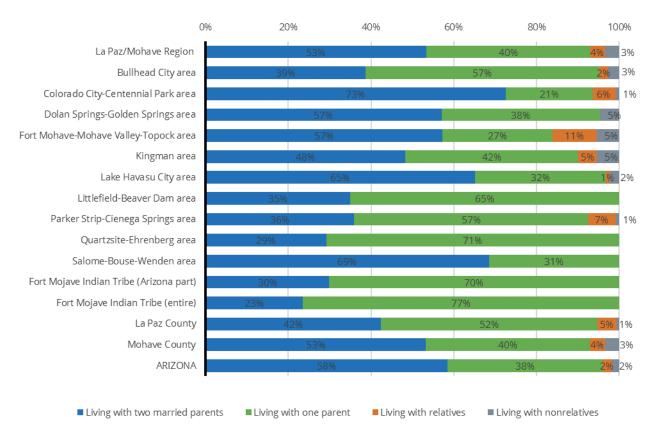
<sup>i</sup> Please note that Figure 5 and Table 9 draw from two different data sources and are not directly comparable.

Table 8: Composition of Households in the 2010 Census

				child(ren) under 6		Households with child(ren) under 6 years old, single female householder
La Paz/Mohave Region	88,926	9,168	10%	59%	15%	26%
Bullhead City area	17,187	1,902	11%	49%	18%	33%
Colorado City-Centennial Park area	936	568	61%	85%	5%	10%
Dolan Springs-Golden Valley area	6,875	400	6%	59%	19%	22%
Fort Mohave-Mohave Valley-Topock area	9,428	979	10%	55%	17%	28%
Kingman area	21,343	2,544	12%	58%	16%	26%
Lake Havasu City area	24,739	2,242	9%	61%	15%	25%
Littlefield-Beaver Dam area	1,556	196	13%	76%	12%	13%
Parker Strip-Cienega Springs area	1,304	69	5%	52%	12%	36%
Quartzsite-Ehrenberg area	3,199	145	5%	60%	14%	26%
Salome-Bouse-Wenden area	2,359	123	5%	65%	13%	22%
Fort Mojave Indian Tribe (Arizona part)	370	63	17%	35%	14%	51%
Fort Mojave Indian Tribe (entire)	571	76	13%	36%	14%	50%
La Paz County	9,198	822	9%	53%	15%	33%
Mohave County	82,539	8,981	11%	58%	16%	26%
ARIZONA	2,380,990	384,441	16%	65%	11%	24%

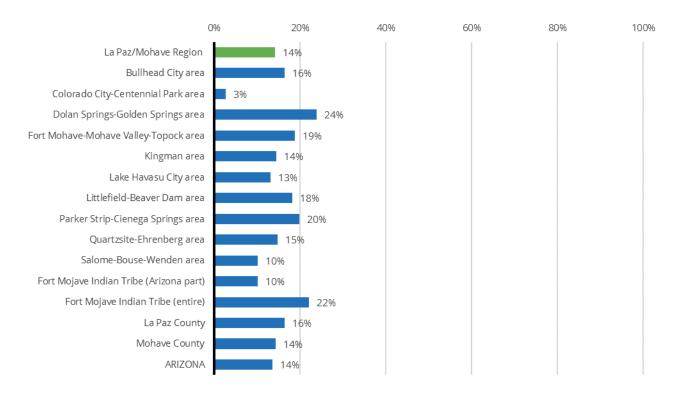
Source: U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P20  $\,$ 

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



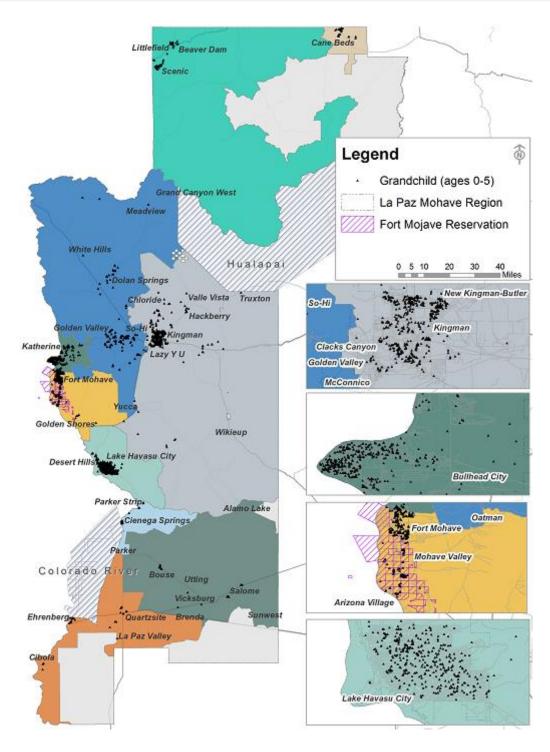
Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Tables B05009, B09001, B17006

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

Figure 6. Grandchildren (0-5) living with Grandparents



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

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

	Number of children (ages 0-17) living in a grandparent's	17) living in a grandparent's household and the	Number of children (ages 0- 17) living in a grandparent's household and the grandparent is responsible for the child (with no parent present)
La Paz/Mohave Region	3,634	55%	18%
Bullhead City area	520	58%	18%
Colorado City-Centennial Park area	61	66%	10%
Dolan Springs-Golden Valley area	187	65%	0%
Fort Mohave-Mohave Valley-Topock area	490	35%	10%
Kingman area	1,103	64%	25%
Lake Havasu City area	891	51%	24%
Littlefield-Beaver Dam area	138	100%	0%
Parker Strip-Cienega Springs area	N/A	N/A	N/A
Quartzsite-Ehrenberg area	N/A	N/A	N/A
Salome-Bouse-Wenden area	199	15%	3%
Fort Mojave Indian Tribe (Arizona part)	N/A	N/A	N/A
Fort Mojave Indian Tribe (entire)	141	74%	5%
La Paz County	626	44%	16%
Mohave County	3,484	58%	19%
ARIZONA	140,038	53%	14%

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

 $Note: Due\ to\ small\ sample\ sizes,\ estimates\ for\ the\ Parker\ Strip-Cienga\ Springs,\ Quartz site-Ehrenberg\ and\ Fort\ Mojave\ Indian\ Tribe\ (Arizona\ part)\ areas\ cannot\ be\ reliably\ calculated.$ 

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
La Paz/Mohave Region	11,794	22%
Bullhead City area	2,740	29%
Colorado City-Centennial Park area	1,158	0%
Dolan Springs-Golden Valley area	349	0%
Fort Mohave-Mohave Valley-Topock area	1,034	. 33%
Kingman area	3,239	14%
Lake Havasu City area	2,789	28%
Littlefield-Beaver Dam area	146	16%
Parker Strip-Cienega Springs area	80	20%
Quartzsite-Ehrenberg area	65	0%
Salome-Bouse-Wenden area	194	69%
Fort Mojave Indian Tribe (Arizona part)	97	0%
Fort Mojave Indian Tribe (entire)	149	0%
La Paz County	1,012	28%
Mohave County	11,640	21%
ARIZONA	510,658	27%

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

### Language Use

A large majority of La Paz/Mohave Region residents age 5 and older (88%) speak English at home, with only 10 percent speaking Spanish at home (Table 11). In the Salome-Bouse-Wenden and Parker-Strip-Cienega Springs sub-regions, a higher proportion (24% and 20%, respectively) speak Spanish at home. Only five percent of La Paz/Mohave Region residents 5 and older speak a language other than English at home, and do not speak English "very well", compared to nine percent across the state (Table 12). In the Salome-Bouse-Wenden sub-region this proportion is much higher with 14 percent of these households not speaking English "very well".

Only four percent of young children enrolled in kindergarten through third grade in the region are classified as "English-language learners" (ELL) (Table 13). This is lower than the statewide proportion of

10 percent. Variability exists within districts in the region, with the Salome Consolidated Elementary District, Wenden Elementary District and Littlefield Unified District having the highest proportions of students who are ELL (44%, 36% and 26% respectively).

At a household level, only one percent of households in the La Paz/Mohave Region who speak Spanish at home are classified as limited-English-speaking; this is less than the proportion of households with that designation (4%) statewide (Table 14). A map of the proportion of limited English speaking households throughout the region is shown in Figure 7.<sup>ii</sup>

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
La Paz/Mohave Region	203,163	88%	10%	0%	2%
Bullhead City area	37,895	84%	14%	0%	2%
Colorado City-Centennial Park area	5,851	99%	1%	1%	0%
Dolan Springs-Golden Valley area	18,128	85%	13%	0%	2%
Fort Mohave-Mohave Valley-Topock area	21,262	85%	11%	0%	4%
Kingman area	50,113	91%	7%	0%	2%
Lake Havasu City area	54,080	90%	7%	0%	2%
Littlefield-Beaver Dam area	3,552	90%	10%	0%	0%
Parker Strip-Cienega Springs area	2,466	78%	20%	1%	1%
Quartzsite-Ehrenberg area	5,569	95%	5%	0%	0%
Salome-Bouse-Wenden area	4,248	75%	24%	0%	1%
Fort Mojave Indian Tribe (Arizona part)	995	86%	10%	3%	1%
Fort Mojave Indian Tribe (entire)	1,639	87%	8%	4%	2%
La Paz County	19,395	81%	17%	1%	1%
Mohave County	192,410	88%	9%	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

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

ii Note: Differences in the percentages of limited English speaking households in Table 14 and Figure 7 are due to differences in the size of the geography presented; sub-regions (Table 14) vs. census tracts (Figure 7) The areas with high percentages of limited-English speaking households have very small populations that get drowned out when looking only at the larger sub-regions.

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

	Population (ages 5 and older)	Speak English at home	language at home,	Speak another language at home, and do not speak English "very well"
La Paz/Mohave Region	203,163	88%	7%	5%
Bullhead City area	37,895	84%	9%	7%
Colorado City-Centennial Park area	5,851	99%	1%	0%
Dolan Springs-Golden Valley area	18,128	85%	9%	6%
Fort Mohave-Mohave Valley-Topock area	21,262	85%	9%	6%
Kingman area	50,113	91%	6%	2%
Lake Havasu City area	54,080	90%	6%	4%
Littlefield-Beaver Dam area	3,552	90%	2%	8%
Parker Strip-Cienega Springs area	2,466	78%	14%	9%
Quartzsite-Ehrenberg area	5,569	95%	4%	1%
Salome-Bouse-Wenden area	4,248	75%	11%	14%
Fort Mojave Indian Tribe (Arizona part)	995	86%	9%	5%
Fort Mojave Indian Tribe (entire)	1,639	87%	9%	5%
La Paz County	19,395	81%	11%	8%
Mohave County	192,410	88%	7%	4%
ARIZONA	6,120,900	73%	17%	9%

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

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

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

	Number of students enrolled (K to 3)	Number of English Language Learners (ELL)	Percent of students who are ELL
La Paz/Mohave Region Schools	7,229	272	4%
Bouse Elementary District	12	0	0%
Bullhead City School District	1,319	57	4%
Colorado City Unified District	189	0	0%
Hackberry School District	23	0	0%
Kingman Unified School District	2,052	69	3%
Lake Havasu Unified District	1,542	43	3%
Littlefield Unified District	124	32	26%
Mohave Valley Elementary District	498	14	3%
Quartzsite Elementary District	93	<10	6%
Salome Consolidated Elementary District	48	21	44%
Topock Elementary District	60	0	0%
Wenden Elementary District	42	15	36%
Yucca Elementary District	14	0	0%
La Paz/Mohave Region Charter Schools	1,213	15	1%
La Paz County Schools	838	89	11%
Mohave County Schools	7,396	228	3%
All Arizona Schools	342,307	34,256	10%

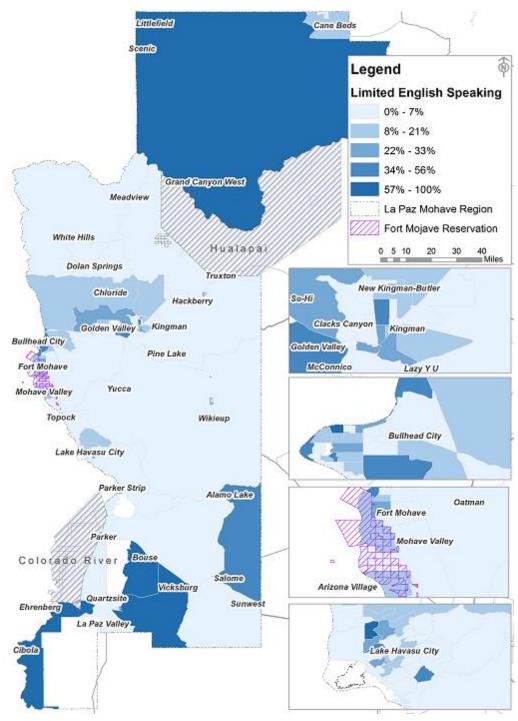
 $Source: Arizona\ Department\ of\ Education\ (2016).\ [Enrollment\ dataset].\ Unpublished\ data.$ 

Table 14: Limited-English-Speaking Households

	Number of households	speak a language other		Limited-English- speaking households (Spanish)
La Paz/Mohave Region	86,921	12%	2%	1%
Bullhead City area	17,109	16%	3%	3%
Colorado City-Centennial Park area	938	4%	0%	0%
Dolan Springs-Golden Valley area	6,468	9%	1%	1%
Fort Mohave-Mohave Valley-Topock area	9,495	15%	2%	1%
Kingman area	20,650	10%	1%	1%
Lake Havasu City area	24,201	10%	1%	1%
Littlefield-Beaver Dam area	1,223	9%	6%	6%
Parker Strip-Cienega Springs area	1,556	21%	4%	4%
Quartzsite-Ehrenberg area	3,279	3%	0%	0%
Salome-Bouse-Wenden area	2,003	15%	6%	6%
Fort Mojave Indian Tribe (Arizona part)	400	18%	2%	2%
Fort Mojave Indian Tribe (entire)	652	17%	2%	1%
La Paz County	9,707	14%	3%	3%
Mohave County	80,529	12%	2%	1%
ARIZONA	2,387,246	27%	5%	4%

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

Figure 7. Limited English Speaking Households



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

Note: The percentages in this figure and the table above differ because census tracts are smaller than the sub-regions and may contain populations smaller than the sub-regions.



**ECONOMIC CIRCUMSTANCES** 

# Why Economic Circumstances Matter

The economic well-being of a family is a powerful predictor of child well-being. Children raised in poverty are at a greater risk of adverse outcomes including low birth weight, lower school achievement, and poor health. 16,17,18,19,20 They are also more likely to remain impoverished later in life. 21 More than a quarter (26%) of Arizona's children lived in poverty in 2014, compared to just over a fifth (21%) six years earlier.<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. 30 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. 42 In Arizona in 2015, half of all children aged birth through four were enrolled in WIC. 43 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 La Paz County families is \$43,757, for Mohave County families, \$46,179, and for families in the Arizona part of the Fort Mojave Indian Tribe, \$35,357. (Table 15). Single-parent families in both counties make substantially less, as do single-female headed households in the Arizona part of the Fort Mojave Indian Tribe. The median income for households run by a single female in La Paz County is \$24,643, less in Mohave County (\$21,670), and even less in the Arizona part of the Fort Mojave Indian Tribe (\$16,893). The median income for households led by single males is similar to households headed by single-women in La Paz County, but in Mohave County, median incomes for male-headed households is about \$5,000 more (\$26,385) (Table 15).

Table 15: Median Annual Family Income

	Median family income for all families	families with	Median family income for single-male-	Median family income for single-female- householder families with child(ren) under 18
La Paz/Mohave Region	N/A	N/A	N/A	N/A
Fort Mojave Indian Tribe (Arizona part)	\$35,357	N/A	N/A	\$16,893
Fort Mojave Indian Tribe (entire)	\$42,273	N/A	N/A	\$17,071
La Paz County	\$43,757	\$39,057	\$24,500	\$24,643
Mohave County	\$46,179	\$52,804	\$26,385	\$21,670
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: Due to small sample sizes, some estimates for the the Fort Mojave Indian Tribe (Arizona part) and (entire) cannot be reliably calculated.

#### **Poverty**

Twenty percent of the total (all-age) population of the La Paz/Mohave 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 La Paz/Mohave Region (40%) is twice that of the total (all-age) population in the region in poverty (20%), and higher than the population of children aged birth to 5 living in poverty across the state (29%).

Sub-regional variation in the percentage of the all-age and young child populations living in poverty exist. In the Colorado City-Centennial Park sub-region, half of the total population (50%) and almost two-thirds of the young child population (61%) live below the poverty level. Other sub-regions also have markedly higher proportions of young children living below the poverty level compared to both the region and state, including the Dolan Springs-Golden Valley (58%), Salome-Bouse-Wenden (49%), and Fort Mohave-Mohave Valley-Topock (47%) sub-regions. Conversely, the percentage of those living in poverty in the Littlefield-Beaver Dam and Quartzite-Ehrenberg sub-regions both fall below the regional and state percentages; while these percentages may not truly fall at 0 percent due to the issue of small samples, they do likely fall below the other sub-regions (Table 16). Figure 8 illustrates 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)]. Almost two-thirds of families (63%) 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 five subregions are faring even worse, with 70 percent or more living below 185 percent of the FPL.

Another potential indicator of a family's resources, in addition to the ability to access services, relates to transportation. With limited public transportation in the region and great geographic distance separating cities, having a working mode of transportation would be crucial to access services and resources for young children and their families in the region. As can be seen in the map in Figure 9, some communities throughout the region have a notable proportion of households with no vehicle available.

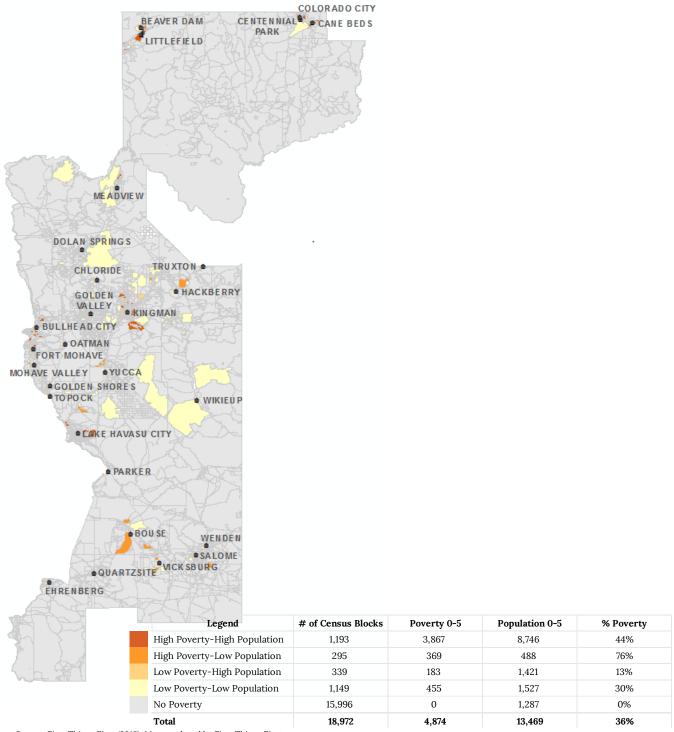
The TANF/Cash Assistance program can be an important short-term support to families in dire financial need. The number of young children supported by this program has steadily declined in recent years, both in the La Paz/Mohave Region and statewide (Table 18). Between 1996 and 2015, Arizona reduced TANF 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)	Number of young children (ages 0-5) for whom poverty status is known		Number of older children (ages 6-17) for whom poverty status is known	Older children (ages 6-17) below poverty level
La Paz/Mohave Region	206,112	20%	12,253	40%	27,334	28%
Bullhead City area	39,912	19%	2,800	37%	4,758	29%
Colorado City-Centennial Park area	6,736	50%	1,227	61%	2,578	59%
Dolan Springs-Golden Valley area	13,651	23%	349	58%	1,069	43%
Fort Mohave-Mohave Valley-Topock area	22,202	16%	1,167	47%	2,326	24%
Kingman area	51,350	23%	3,402	38%	7,583	25%
Lake Havasu City area	55,974	15%	2,817	34%	7,130	20%
Littlefield-Beaver Dam area	3,636	22%	146	0%	861	22%
Parker Strip-Cienega Springs area	2,577	20%	86	34%	173	24%
Quartzsite-Ehrenberg area	5,631	12%	65	0%	237	13%
Salome-Bouse-Wenden area	4,442	22%	194	49%	619	41%
Fort Mojave Indian Tribe (Arizona part)	1,059	26%	97	23%	157	41%
Fort Mojave Indian Tribe (entire)	1,755	22%	149	32%	246	31%
La Paz County	20,108	18%	1,063	36%	2,485	29%
Mohave County	195,144	20%	12,115	40%	26,719	28%
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 8: Map of Poverty in the La Paz/Mohave Region



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.

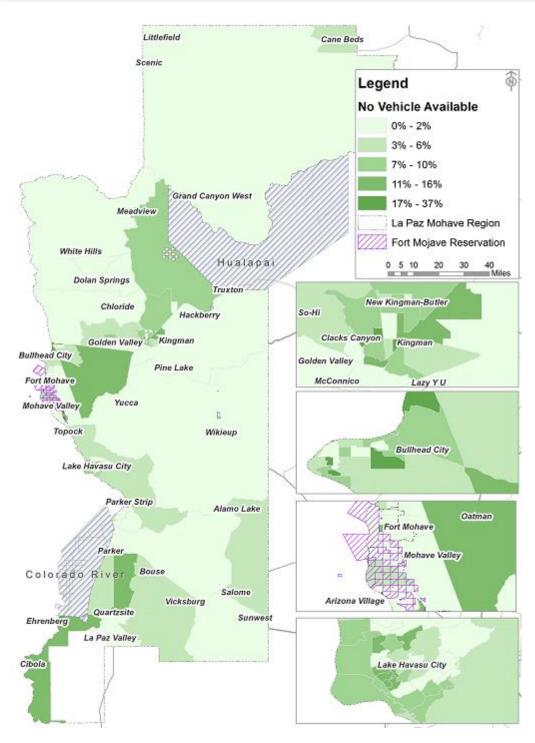
Table 17: Ratio of Income to Federal Poverty Level (FPL) for Families with Young Children (Ages 0 to 4)

	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
La Paz/Mohave Region	6,483	35%	47%	55%	63%
Bullhead City area	1,446	31%	42%	55%	59%
Colorado City-Centennial Park area	451	55%	69%	70%	81%
Dolan Springs-Golden Valley area	159	53%	77%	86%	86%
Fort Mohave-Mohave Valley-Topock area	590	45%	46%	50%	61%
Kingman area	1,955	36%	46%	51%	57%
Lake Havasu City area	1,546	30%	43%	48%	62%
Littlefield-Beaver Dam area	75	0%	61%	87%	87%
Parker Strip-Cienega Springs area	83	28%	41%	64%	74%
Quartzsite-Ehrenberg area	N/A	N/A	N/A	N/A	N/A
Salome-Bouse-Wenden area	150	41%	53%	100%	100%
Fort Mojave Indian Tribe (Arizona part)	N/A	N/A	N/A	N/A	N/A
Fort Mojave Indian Tribe (entire)	62	34%	47%	76%	79%
La Paz County	838	31%	44%	70%	80%
Mohave County	6,310	35%	47%	54%	62%
ARIZONA	301,165	27%	35%	41%	49%

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

Note: Due to small sample sizes, estimates for Quartzsite-Ehrenberg and Fort Mojave Indian Tribe (Arizona part) areas cannot be reliably calculated

Figure 9. Households with No Vehicle Available



 $Source: U.S.\ Census\ Bureau\ (2016).\ American\ Community\ Survey, 5-year\ estimates\ (2010-2014),\ Table\ B25044.\ Mapproduced\ by\ CRED.$ 

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

	CY 2012	CY 2013	CY 2014		Change from 2012 to 2015
La Paz/Mohave Region	844	797	576	460	-45%
La Paz County	113	101	64	82	-27%
Mohave County	852	802	580	454	-47%
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 La Paz County, Mohave County and the state since 2010, although unemployment rates have been consistently higher in both counties compared to the state (Table 19). In 2016, the unemployment rate in La Paz County was six percent and in Mohave County 6.6 percent, compared to 5.3 percent for the state.

For young children living with both parents in the region, both parents are slightly more likely to be in the labor force (29%) than just one parent (28%) (Table 20). iii This pattern is the same for the state. Thirty-four percent of young children in the La Paz/Mohave Region live with a single parent who is employed. Taken together, this means that nearly two-thirds (63%) 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. 48 Notably, in the Quartzite-Ehrenberg and Littlefield-Beaver Dam sub-regions and the Fort Mojave Indian Tribe (Arizona part), a large percentage of children aged birth to 5 were living with one parent who was in the labor force (71%, 65% and 62% respectively). Also of note; in the Salome-Bouse-Wenden subregion, 27 percent of young children were living with a single parent who was not in the labor force.

<sup>&</sup>quot;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 19. Annual Unemployment Rates, 2009 to 2016

	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016
La Paz/Mohave Region	N/A							
City of Bullhead City	10.9%	14.1%	11.3%	10.8%	9.9%	8.7%	7.6%	6.9%
Town of Colorado City	N/A	N/A	17.2%	15.5%	14.6%	12.4%	11.5%	N/A
City of Kingman	N/A	10.7%	11.5%	10.9%	10.2%	7.9%	8.0%	6.2%
City of Lake Havasu City	N/A	9.1%	12.8%	11.0%	10.1%	8.8%	7.4%	6.1%
Town of Parker	N/A	N/A	8.4%	7.3%	7.0%	6.5%	6.5%	N/A
Town of Quartzsite	N/A	N/A	14.0%	12.2%	11.7%	11.0%	10.9%	N/A
La Paz County	9.9%	10.2%	9.8%	8.6%	8.2%	7.6%	7.4%	6.0%
Mohave County	11.4%	13.0%	12.3%	11.0%	10.3%	8.7%	7.9%	6.6%
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

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

		Children (ages 0- 5) living with two parents who are both in the labor force	two parents,	0-5) living with two parents, neither in the	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
La Paz/Mohave Region	11,794	29%	28%	1%	34%	8%
Bullhead City area	2,740	25%	14%	2%	47%	13%
Colorado City-Centennial Park area	1,158	16%	62%	0%	11%	11%
Dolan Springs-Golden Valley area	349	6%	54%	0%	30%	11%
Fort Mohave-Mohave Valley-Topock area	1,034	39%	29%	0%	27%	5%
Kingman area	3,239	26%	27%	0%	37%	9%
Lake Havasu City area	2,789	40%	27%	1%	30%	3%
Littlefield-Beaver Dam area	146	35%	0%	0%	65%	0%
Parker Strip-Cienega Springs area	80	16%	23%	0%	43%	18%
Quartzsite-Ehrenberg area	65	29%	0%	0%	71%	0%
Salome-Bouse-Wenden area	194	61%	7%	0%	4%	27%
Fort Mojave Indian Tribe (Arizona part)	97	16%	13%	0%	62%	8%
Fort Mojave Indian Tribe (entire)	149	15%	9%	0%	71%	5%
La Paz County	1,012	25%	20%	0%	38%	18%
Mohave County	11,640	29%	28%	1%	35%	8%
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**

The USDA defines food insecurity as a "household-level economic and social condition of limited or uncertain access to adequate food."49 Sixteen percent of the population of La Paz County, and 19 percent of Mohave County is estimated to be food insecure, compared to 17 percent across the state as a whole (Table 21).<sup>50</sup> Twenty-nine percent of children (those under 18 years old) in La Paz County and 32 percent in Mohave County are food insecure, slightly higher than the state's 27 percent. Almost all

food insecure children in La Paz County (98%) and 81 percent in Mohave County are likely to be income-eligible for federal nutrition assistance, both higher than the state (68%) (Table 21).<sup>51,52</sup>

Families' abilities to promote the health of their children are influenced by the built environment (the physical parts of where people live and work (e.g., homes, buildings, streets, open spaces and infrastructure) of their communities. In Mohave County in 2012 (the most recent data available), there were five times as many fast-food restaurants as there were grocery stores (Table 22). In La Paz County, this ratio was less, with 2.4 times as many fast food restaurants as grocery stores. In all of Mohave County, there were 14 fitness and recreation facilities in 2012, and none in La Paz County, meaning that many families cannot reasonably access this type of facility.

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 8,000 children in the La Paz/Mohave Region annually (Table 23). WIC participation has also declined substantially in the region (Table 25) from a high of serving 71 percent of women and children in the region in 2012, to a low of 54 percent in 2015. Table 26 provides a single month snapshot of participation in the program; 79 percent of the infants and 76 percent of the children who were enrolled in WIC claimed their benefits that month (January 2015). A key informant noted that the WIC program will be initiating a "WIC to 5" campaign in the near future to educate current and potential WIC participants about the program, including eligibility and continuing requirements, in an effort to boost participation.

One challenge to participating in SNAP or WIC may be the availability of retailers where WIC vouchers or SNAP EBT are accepted. In 2016, La Paz and Mohave County had few accessible WIC retailers. As of June 2016, there were six WIC retailers in La Paz County, and only 17 in Mohave County WIC (**Error! eference source not found.**). In order to redeem WIC benefits, residents must travel to other cities to do their grocery shopping. Figure 10 illustrate the location of SNAP and WIC authorized retailers in the region.

Schools are an important part of the nutrition assistance system, especially for children that may be food insecure. Two-thirds (65-67%) of students in the La Paz/Mohave Region have been eligible for free or reduced-price lunch since 2012 (Table 28), although there is variability by county, with 78 percent of students in La Paz County and only 65 percent of students in Mohave County eligible for free or reduced-price lunch in 2016 (Figure 11). Differences also exist by school district, from a low of 54 percent of students eligible for free or reduced-price lunch in the Lake Havasu Unified District in

iv 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."

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

<sup>&</sup>lt;sup>v</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"

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

2016, to a high of 94 percent of students in the Littlefield Unified District (see Table 29). At the same time, the percent across the state has hovered at 57 or 58 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>53</sup> to provide summer meals to children of all ages.<sup>54</sup> The number of meals provided by SFSP has decreased by six percent in Mohave County, while that number has dropped by 10 percent across the state as a whole (Table 30; Figure 12).

In Mohave County in January 2015, there were 18 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 child care centers (n=9) similar to the state where most CACFP sites are child care centers and preschools (Table 32). In La Paz County there was a single site, a Head Start site. The number of meals served increased in Mohave County (+7%) between 2014 and 2015, decreased in La Paz County (-24%), and increased statewide during the same period (+9%) (Table 33; Figure 13). Eight of 11 Head Start centers in the La Paz/Mohave Region participate in CACFP, but there are many child care centers who could participate in the program. Family and home child care providers can also participate in CACFP; however no data for these providers was received for this report.

Table 21: Food Insecurity and Eligibility for Federal Nutrition Assistance

		Food insecurity	Likely eligible for Federal Nutrition Assistance (all ages)	children (ages 0-	Food insecurity	Likely eligible for Federal Nutrition Assistance (ages 0-17)
La Paz/Mohave Region	N/A	N/A	N/A	N/A	N/A	N/A
La Paz County	20,348	16%	90%	3,557	29%	98%
Mohave County	202,482	19%	74%	39,674	32%	81%
ARIZONA	6,731,487	17%	67%	1,622,074	27%	68%

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

Table 22: Food Environment

	Grocery stores, 2012	residents, 2012	Fast-food restaurants, 2012	thousand residents, 2012	Recreation & fitness facilities, 2012	residents, 2012
La Paz/Mohave Region	N/A	N/A	N/A	N/A	N/A	N/A
La Paz County	8	0.39	19	0.94	0	0.00
Mohave County	23	0.11	116	0.57	14	0.07
ARIZONA	825	0.13	4,238	0.65	456	0.07

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

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

	FY 2012	FY 2013	FY 2014		Change from 2012 to 2015
La Paz/Mohave Region	9,459	9,308	8,703	7,899	-16%
La Paz County	980	967	892	803	-18%
Mohave County	9,337	9,168	8,601	7,790	-17%
ARIZONA	296,686	290,513	277,345	249,712	-16%

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

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

	Total	Women	Infants	Children
La Paz/Mohave Region	8,242			3,750
La Paz County	33	9	11	13
Mohave County	8,212	2,138	2,337	3,737
ARIZONA	310,181	82,860	87,836	139,485

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

Table 25: Infants and Children (Ages 0 to 4) Enrolled in the WIC Program as a Percentage of the Population, 2012 to 2015

	Number of children (ages 0-4) in 2010 US Census	2012	2012	2013	2013	2014	2014	2015	2015
La Paz/Mohave Region	11,220	8,013	71%	7,243	65%	6,467	58%	6,097	54%
La Paz County	1,028	22	2%	25	2%	22	2%	24	2%
Mohave County	11,005	7,994	73%	7,218	66%	6,446	59%	6,074	55%
ARIZONA	455,715	255,332	56%	243,050	53%	233,012	51%	227,321	50%

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

Table 26: WIC Participation Rates During January 2015

	Total	Women	Infants	Children
La Paz/Mohave Region	77%	75%	79%	76%
La Paz County	N/A	N/A	N/A	N/A
Mohave County	77%	75%	79%	76%
ARIZONA	79%	78%	84%	77%

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

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

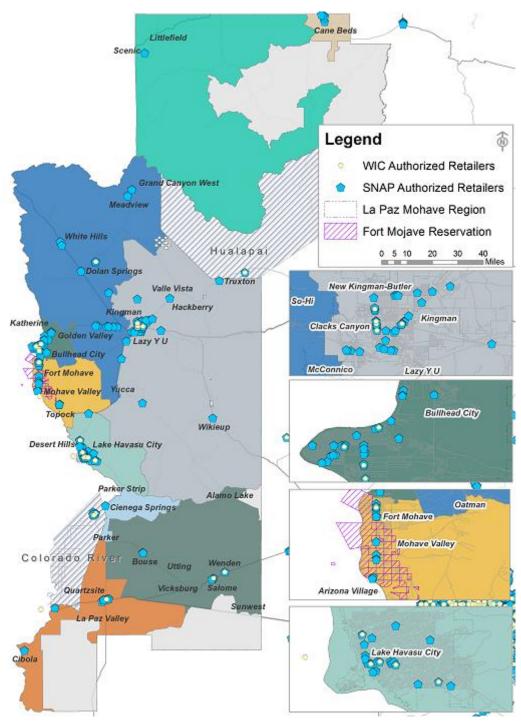
Table 27: Retailers Participating in the SNAP or WIC Programs

	1			WIC retailers per 100,000 residents
La Paz/Mohave Region	182	85.88	18	8.49
La Paz County	36	175.70	6	29.28
Mohave County	162	80.92	17	8.49
ARIZONA	4,038	63.17	644	10.08

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

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

Figure 10. SNAP and WIC Authorized Retailers



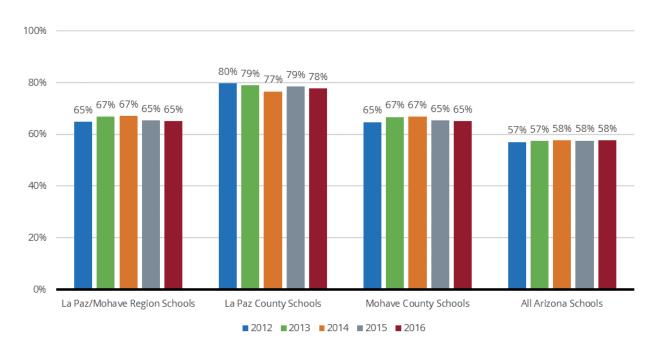
Source: United Arizona Department of Health Services (2016). Arizona WIC Vendor List. Retrieved from http://azdhs.gov/documents/prevention/azwic/az-wic-vendor-list.pdf; Inter-Tribal Council of Arizona (2016). Special Supplemental Nutrition Program for Women, Infants, and Children: Find a Store. Retrieved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

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
La Paz/Mohave Region	65%	67%	67%	65%	65%
La Paz County	80%	79%	77%	79%	78%
Mohave County	65%	67%	67%	65%	65%
ARIZONA	57%	57%	58%	58%	58%

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

Figure 11: Proportion of Students (Pre-kindergarten Through Twelfth Grade) Eligible for Free or Reduced-Price Lunch, 2012 to 2016



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

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

La Paz/Mohave Region Schools	<b>2012</b> 65%			<b>2015</b> 65%	<b>2016</b> 65%
Bicentennial Union High School District	88%	74%	77%	77%	77%
Bouse Elementary District	80%	93%	85%	79%	87%
Bullhead City School District	80%	79%	80%	77%	79%
Colorado City Unified District	66%	82%	89%	86%	87%
Colorado River Union High School District	53%	56%	56%	56%	55%
Hackberry School District	100%	91%	88%	94%	92%
Kingman Unified School District	64%	67%	67%	66%	66%
Lake Havasu Unified District	55%	57%	57%	55%	54%
Littlefield Unified District	95%	97%	90%	89%	94%
Mohave Valley Elementary District	68%	69%	73%	69%	62%
Owens School District No.6	58%	74%	65%	61%	88%
Quartzsite Elementary District	93%	91%	86%	86%	86%
Salome Consolidated Elementary District	84%	84%	84%	84%	85%
Topock Elementary District	84%	84%	79%	91%	91%
Wenden Elementary District	87%	87%	87%	93%	93%
Yucca Elementary District	85%	N/A	89%	77%	86%
La Paz/Mohave Region Charter Schools	67%	67%	65%	63%	60%
La Paz County Schools	80%	79%	77%	79%	78%
Mohave County Schools	65%	67%	67%	65%	65%
All Arizona Schools	57%	57%	58%	58%	58%

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

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

Table 30: The Summer Food Service Program (SFSP)

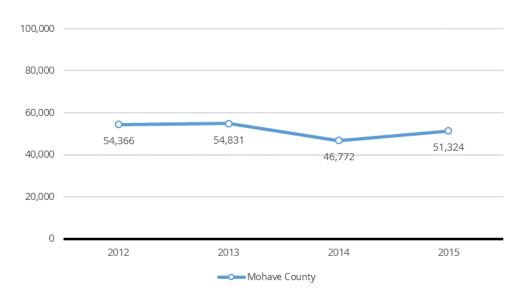
			Change in the number of meals from 2012 to 2015
La Paz/Mohave Region	N/A	N/A	N/A
La Paz County	0	0	0%
Mohave County	54	51,324	-6%
Arizona	3,506	3,998,264	-10%

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

Note: There were no sites in La Paz County that participate in the Summer Food Service program.

Figure 12: Meals Served by the Summer Food Service Program (SFSP), 2012 and 2015



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

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

	Breakfast	Morning snack	Lunch	Afternoon snack	Suppor	Evening snack
La Paz/Mohave Region	N/A					
La Paz County	183	0	183	183	0	0
Mohave County	1,044	918	1,300	1,462	678	380
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. 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
La Paz/Mohave Region	N/A	N/A	N/A	N/A
La Paz County	0	0	1	0
Mohave County	1	9	8	0
Arizona	196	401	294	10

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

Note: This does not include adult care centers or emergency shelters where meals were served. The La Paz County Head Start site is the Colorado River Indian Tribes Head Start.

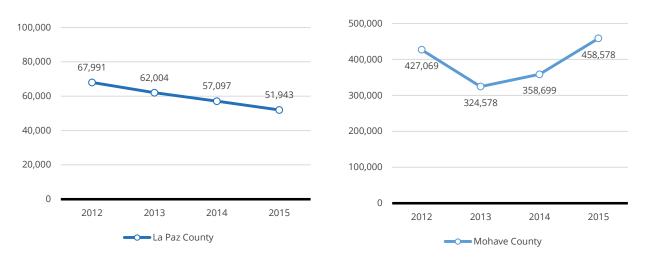
Table 33: Meals Served by the Child and Adult Care Food Program (CACFP), 2012 and 2015

	Number of meals served in 2012	Number of meals served in 2015	Change from 2012 to 2015
La Paz/Mohave Region	N/A	N/A	N/A
La Paz County	67,991	51,943	-24%
Mohave County	427,069	458,578	7%
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. The La Paz County Head Start site is the Colorado River Indian Tribes Head Start.

Figure 13. Trends in Meals Served through the Child and Adult Care Food Program, 2012-2015



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.

### Housing and Homelessness

Of the 86,921 occupied housing units in the La Paz/Mohave Region, 69 percent are occupied by homeowners and 31 percent are occupied by renters (Table 34), higher and lower respectively than across the state as a whole (63% and 37%, respectively). Rates vary across the sub-regions, with over 80 percent of homes owner-occupied in the Dolan Springs-Golden Valley, Littlefield-Beaver Dam, Quartzite-Ehrenberg and Salome-Bouse-Wenden sub-regions. Renter-occupied homes are more common in Colorado City-Centennial Park sub-region and the Fort Mojave Indian Tribe (Arizona part). The La Paz/Mohave Region looks similar to the state as a whole with regard to the cost of housing: 31

percent of La Paz/Mohave housing units require their residents to contribute more than 30 percent of their household income toward housing, compared to 34 percent statewide (Table 35). In the Quartzite-Ehrenberg and Salome-Bouse-Wenden sub-regions, housing is relatively more affordable, with only 13 and 14 percent of units crossing the 30 percent cost threshold, whereas in the Lake Havasu City sub-region, 38 percent do.

Table 34: Owner- and Renter-Occupied Housing Units

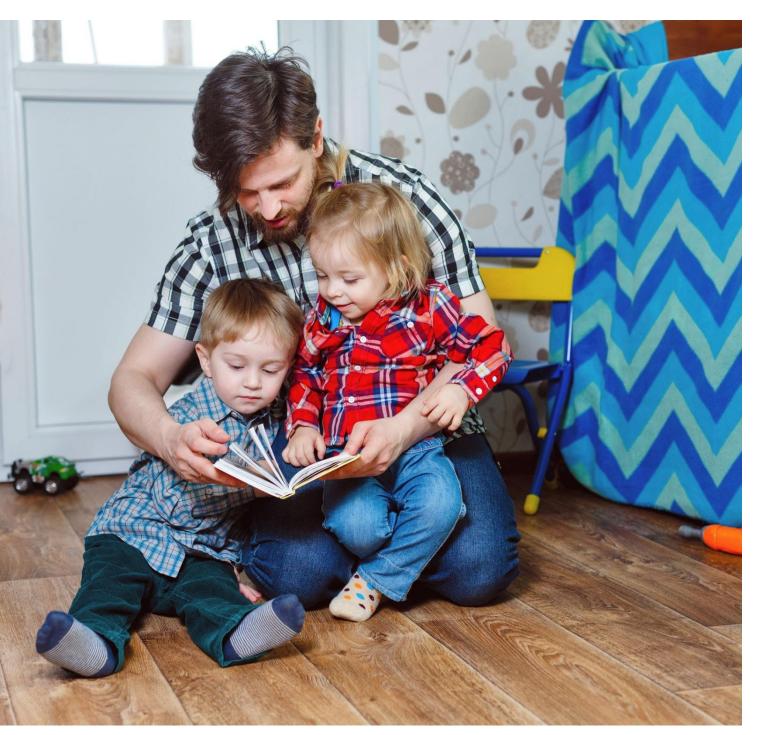
	Number of occupied housing units	Owner-occupied units	Renter-occupied units
La Paz/Mohave Region	86,921	69%	
Bullhead City area	17,109	60%	40%
Colorado City-Centennial Park area	938	33%	67%
Dolan Springs-Golden Valley area	6,468	83%	17%
Fort Mohave-Mohave Valley-Topock area	9,495	71%	29%
Kingman area	20,650	69%	31%
Lake Havasu City area	24,201	69%	31%
Littlefield-Beaver Dam area	1,223	87%	13%
Parker Strip-Cienega Springs area	1,556	69%	31%
Quartzsite-Ehrenberg area	3,279	86%	14%
Salome-Bouse-Wenden area	2,003	84%	16%
Fort Mojave Indian Tribe (Arizona part)	400	52%	48%
Fort Mojave Indian Tribe (entire)	652	64%	36%
La Paz County	9,707	77%	23%
Mohave County	80,529	68%	32%
ARIZONA	2,387,246	63%	37%

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

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

		Occupied housing units which cost 30% of
La Paz/Mohave Region	Number of occupied housing units 86,921	household income, or more 31%
Bullhead City area	17,109	34%
Colorado City-Centennial Park area	938	18%
Dolan Springs-Golden Valley area	6,468	24%
Fort Mohave-Mohave Valley-Topock area	9,495	33%
Kingman area	20,650	31%
Lake Havasu City area	24,201	38%
Littlefield-Beaver Dam area	1,223	20%
Parker Strip-Cienega Springs area	1,556	20%
Quartzsite-Ehrenberg area	3,279	13%
Salome-Bouse-Wenden area	2,003	14%
Fort Mojave Indian Tribe (Arizona part)	400	34%
Fort Mojave Indian Tribe (entire)	652	27%
La Paz County	9,707	16%
Mohave County	80,529	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. 55,56,57,58 Starting in kindergarten, poor school attendance can cause children to fall behind, leading to lowered proficiency in reading and math, and increased grade-retention.<sup>59</sup>

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

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

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

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

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

## What the Data Tell Us

#### **Standardized Test Scores**

La Paz/Mohave Region school district boundaries are shown in Figure 14.<sup>72</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, 46 percent of La Paz/Mohave Region students attained these scores on the third grade math assessment, which was a higher passing rate than across Arizona as a whole (41%) (Figure 15). However, substantial differences existed by county with only 24 percent La Paz County third-graders passing the math test compared to 47 percent of Mohave County third graders. Performance on the English language arts (ELA) test was lower overall for the region, with 37 percent of La Paz/Mohave Region students demonstrating proficiency, comparted to 40 percent across the state (Figure 16). Again, differences exist by county, with 19 percent of La Paz County third graders receiving a passing score on the ELA test compared to 38 percent in Mohave County. A portion of the 47 percent of La Paz/Mohave Region third graders (66% La Paz County; 46% Mohave County) 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.vi

The highest achieving districts in the region in math were the Hackberry School District (100% passing math), Topock Elementary District (73% passing math), Lake Havasu Unified District (61% passing math), and La Paz/Mohave Region Charter Schools (57% passing math) (Table 36). Only four districts had half or more of third-grade students passing English language arts; Owens School District No.6 (100% passing ELA), Hackberry School District (80% passing ELA), Lake Havasu Unified District (52% passing ELA), and La Paz/Mohave Region Charter Schools (50% passing ELA) (Table 37). The districts with the lowest proficiency rates in Math were Owens School District No.6 (0% passing math), Salome Consolidated Elementary District (0% passing math), Wenden Elementary District (10% passing math) and Littlefield Unified District (13% passing math) (Table 36). In ELA, Salome Consolidated Elementary District (8% passing ELA) and Wenden Elementary District (10% passing ELA) had the lowest proficiency rates (Table 37).

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

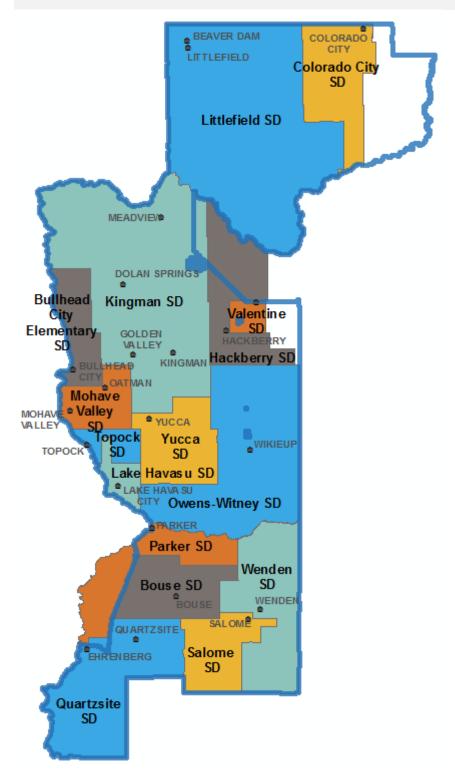
vi Note that in the data provided the scores reported are a combined ELA score of reading and writing. Students may have a minimally proficient ELA score and still meet the Move On When Reading requirement.

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>73</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. Fiftytwo 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 La Paz/Mohave Region, particularly within La Paz County, 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 14. School Districts of the La Paz/Mohave Region



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

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

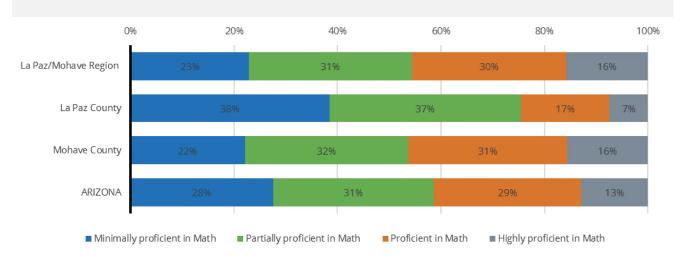
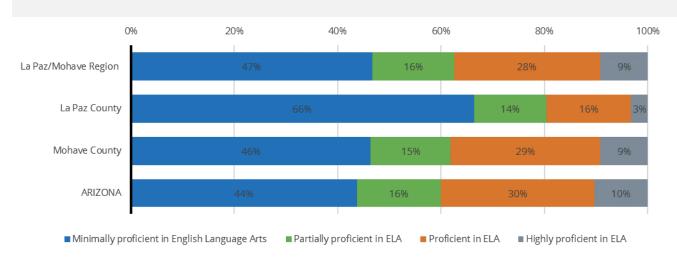


Figure 16: AzMERIT English Language Arts Test Results for Third-Graders in the 2014-2015 School Year



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

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

	Minimally proficient in Math	Partially proficient in Math	Proficient in Math	Highly proficient	Passing Math (proficient or highly proficient)
La Paz/Mohave Region Schools	23%	31%	30%	16%	46%
Bouse Elementary District	N/A	N/A	N/A	N/A	N/A
Bullhead City School District	32%	35%	20%	13%	33%
Colorado City Unified District	21%	30%	33%	16%	49%
Hackberry School District	0%	0%	60%	40%	100%
Kingman Unified School District	26%	34%	25%	15%	39%
Lake Havasu Unified District	13%	27%	38%	22%	61%
Littlefield Unified District	50%	38%	13%	0%	13%
Mohave Valley Elementary District	29%	30%	27%	14%	41%
Owens School District No.6	0%	100%	0%	0%	0%
Quartzsite Elementary District	52%	24%	16%	8%	24%
Salome Consolidated Elementary District	79%	21%	0%	0%	0%
Topock Elementary District	7%	20%	33%	40%	73%
Wenden Elementary District	60%	30%	10%	0%	10%
Yucca Elementary District	DS	DS	DS	DS	DS
La Paz/Mohave Region Charter Schools	12%	31%	42%	15%	57%
La Paz County Schools	38%	37%	17%	7%	25%
Mohave County Schools	22%	32%	31%	16%	46%
All Arizona Schools	28%	31%	29%	13%	41%

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

	Minimally proficient in English Language Arts	Partially proficient in English Language Arts	Proficient in English Language Arts		Passing English Language Arts (proficient or highly proficient)
La Paz/Mohave Region Schools	47%	16%	28%	9%	37%
Bouse Elementary District	N/A	N/A	N/A	N/A	N/A
Bullhead City School District	58%	13%	23%	6%	29%
Colorado City Unified District	54%	18%	22%	7%	28%
Hackberry School District	0%	20%	80%	0%	80%
Kingman Unified School District	58%	14%	20%	7%	28%
Lake Havasu Unified District	34%	14%	39%	13%	52%
Littlefield Unified District	48%	26%	22%	4%	26%
Mohave Valley Elementary District	54%	16%	24%	5%	30%
Owens School District No.6	0%	0%	100%	0%	100%
Quartzsite Elementary District	44%	20%	32%	4%	36%
Salome Consolidated Elementary District	85%	8%	8%	0%	8%
Topock Elementary District	31%	31%	25%	13%	38%
Wenden Elementary District	80%	10%	0%	10%	10%
Yucca Elementary District	DS	DS	DS	DS	DS
La Paz/Mohave Region Charter Schools	28%	21%	36%	14%	50%
La Paz County Schools	66%	14%	16%	3%	20%
Mohave County Schools	46%	15%	29%	9%	38%
All Arizona Schools	44%	16%	30%	10%	40%

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 38 shows these percentages for elementary school districts in the region. The percentage of elementary school students in first through third grade who were chronically absent increased slightly from 2014 to 2015 in the La Paz/Mohave Region, from 33 to 35 percent, but were similar to those percentages across the state (34% in 2014 and 36% in 2015). Some variability existed across school districts, with Colorado City Unified District having 93 percent of students chronically absent in 2015. Identifying and addressing the reasons behind chronic absenteeism is important to ameliorate later effects on educational achievement and graduation rates.<sup>74</sup>

The high school drop-out rate in the La Paz/Mohave Region fell slightly to three percent in 2015, from a high of four percent in 2014 (Table 39). The rate in Mohave County has been similar to the region and state rate over time, while La Paz County drop-out rates were higher than both until 2015 (4% La Paz County, 3% Mohave County, 3% Arizona in 2015). Graduation rates have increased in the region overall from 2012 and 2015, but the 2015 rate (75%) is lower than the rate in 2013 and 2014 (both 77%) (Table 39). Of note, Bicentennial Union High School District and Lake Havasu Unified District stand out as high-performers: 85 percent of students at Bicentennial Union and 84 percent at Lake Havasu graduated in four years in 2015. (Table 39).

Adults aged 25 and older in the La Paz/Mohave Region are less likely to have a Bachelor's or higher degree (12%) than adults across Arizona (27%) (Table 40). In the La Paz/Mohave Region, adults are most likely to have had some college or professional training (37%), and this is slightly higher than the percentage across the state (34%). In the La Paz/Mohave Region, 16 percent of the population 25 and older did not complete high school, and in the Colorado City-Centennial Park sub-region, 4 out of 10 adults did not complete high school. Just under a quarter of the population 25 and older did not complete high school in La Paz County, compared to 16 percent in Mohave County. In 2015, unemployment rates for those adults 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. 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.

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

	Number of schools	Number of students in 2014	Students with chronic (more than 10) absences in 2014		Number of students in 2015		
La Paz/Mohave Region Schools	39	6,349	2,122	33%	6,329	2,230	35%
Bouse Elementary District	1	<10	0	0%	<10	<10	13%
Bullhead City Elementary School District	4	1,200	419	35%	1,173	405	35%
Colorado City Unified District	1	191	47	25%	160	41	26%
Hackberry School District	1	16	<10	25%	25	12	48%
Kingman Unified School District	7	1,874	731	39%	1,855	798	43%
Lake Havasu Unified District	6	1,224	330	27%	1,263	371	29%
Littlefield Unified District	1	103	48	47%	99	42	42%
Mohave Valley Elementary District	3	556	196	35%	530	179	34%
Owens School District No.6	1	<10	<10	38%	<10	<10	25%
Quartzsite Elementary District	2	89	38	43%	91	37	41%
Salome Consolidated Elementary District	1	51	19	37%	41	12	29%
Topock Elementary District	1	44	16	36%	56	24	43%
Wenden Elementary District	1	38	<10	16%	32	<10	6%
Yucca Elementary District	1	10	<10	40%	16	<10	6%
La Paz/Mohave Region Charter Schools	8	936	261	28%	976	304	31%
La Paz County Schools	7	721	311	43%	719	294	41%
Mohave County Schools	37	6,286	2,096	33%	6,328	2,228	35%
All Arizona Schools	1,185	278,142	93,719	34%	283,147	103,078	36%

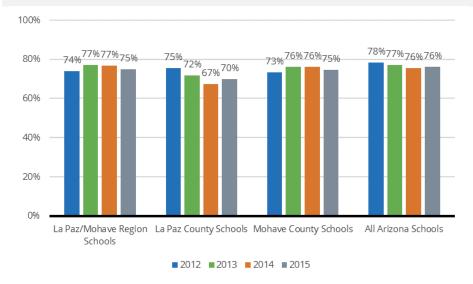
Note: The school-district data in this table include only the schools that fall within the region's boundaries. For districts which are partially outside of the region, the data for the complete district is likely to vary from the percentages reported here.

Table 39: High School Drop-Out and Graduation Rates, 2012 to 2015

	Total number of high schools and alternative schools	Drop-out				graduatio n rate,		Four-year graduatio n rate, 2013	
La Paz/Mohave Region Schools	18	3%	3%	4%	3%	74%	77%	77%	75%
Bicentennial Union High School District	1	DS	DS	DS	DS	85%	72%	81%	85%
Colorado City Unified District	3	DS	DS	DS	11%	85%	73%	70%	70%
Colorado River Union High School District	3	6%	5%	5%	4%	71%	74%	75%	70%
Kingman Unified School District	2	1%	3%	5%	4%	76%	80%	74%	70%
Lake Havasu Unified District	3	2%	3%	2%	2%	73%	81%	82%	84%
Littlefield Unified District	1	DS	DS	DS	DS	67%	86%	73%	70%
La Paz/Mohave Region Charter Schools	5	3%	3%	2%	2%	77%	72%	73%	79%
La Paz County Schools	3	5%	6%	5%	4%	75%	72%	67%	70%
Mohave County Schools	25	3%	3%	4%	3%	73%	76%	76%	75%
All Arizona Schools	836	4%	3%	3%	4%	78%	77%	76%	76%

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 17. High School Graduation Rates, 2012 to 2015



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

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

	Estimated population (ages 25 and older)	Less than high school	High school or GED	Some college or professional education	Bachelor's degree or more
La Paz/Mohave Region	158,387	16%	35%	37%	12%
Bullhead City area	29,807	18%	34%	36%	13%
Colorado City-Centennial Park area	2,301	40%	22%	28%	10%
Dolan Springs-Golden Valley area	15,331	21%	36%	37%	6%
Fort Mohave-Mohave Valley-Topock area	17,272	19%	36%	34%	11%
Kingman area	38,109	15%	34%	38%	13%
Lake Havasu City area	42,610	11%	35%	39%	14%
Littlefield-Beaver Dam area	2,495	23%	39%	30%	8%
Parker Strip-Cienega Springs area	1,811	23%	34%	32%	11%
Quartzsite-Ehrenberg area	5,218	18%	39%	35%	8%
Salome-Bouse-Wenden area	3,432	29%	34%	25%	12%
Fort Mojave Indian Tribe (Arizona part)	704	25%	31%	38%	6%
Fort Mojave Indian Tribe (entire)	1,235	21%	34%	36%	9%
La Paz County	15,618	23%	36%	31%	10%
Mohave County	148,797	16%	35%	37%	12%
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>77</sup> Gaps in language development between children from disadvantaged backgrounds and their more advantaged peers are already evident by 18 months of age;<sup>78</sup> those disparities that persist until kindergarten are predictive of later academic problems.<sup>79</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. 80,81 This is particularly true for children from disadvantaged backgrounds. 82 Children whose education begins in high quality preschool programs repeat grades less frequently, obtain higher scores on standardized tests, experience fewer behavior problems, and are more likely to graduate high school.<sup>83</sup>

Investing in children during the crucial first five years not only provides the necessary foundation for later achievement, but also produces a positive return on investment to society through increased educational achievement and employment, reductions in crime, and better overall health of those children as they mature into adults. 84,85,86 Experts estimate that investments in quality early learning initiatives can offer returns as high as \$16 per dollar spent. 87,88 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. 89 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. 90 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>91</sup>

Child care subsidies can be a support for families who have financial barriers to accessing early learning services. 92 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>93</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. How parents perceive and understand quality may differ; this points to the importance of quality ratings systems to help guide parent choices. Quality First is Arizona's Quality Improvement and Rating System (QRIS) for early child care and preschool providers. Quality First employs a five-point rating scale to indicate quality levels. A one-star rating indicates that the provider is committed to examining practices and improving the quality of care beyond basic health and safety requirements. Quality First providers 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.

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

The presence of qualified, well-trained, caring professionals is essential to providing quality child care and early education experiences for children. In Arizona, the number of early childhood professionals receiving a credential or degree has increased from 2007 (21%) to 2012 (29%). However, one incentive for attaining these credentials – increased wages – shows an opposite pattern. Wages for assistant teachers, teachers, and administrative directors working across all types of licensed child care and education settings in Arizona decreased between 2007 and 2012, after adjusting for inflation. In addition, average annual wages for early education professionals in Arizona are about half that of kindergarten and elementary teachers, which may affect retention of those in early education settings, particularly after degree attainment. <sup>97</sup>

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

professional development opportunities, career and job advancement, and networking in the early childhood field. 98,99

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." 100 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>101</sup> and are at an increased risk for maltreatment and neglect. 102, 103 Almost half (46%) of families with a child with special needs in Arizona have incomes below 200 percent of the federal poverty level. 104

Ensuring all families have access to timely and appropriate screenings for children who may benefit from early identification of special needs is paramount to improving outcomes for these children and their families. Timely intervention can help young children with, or at risk for, developmental delays improve language, cognitive, and socio-emotional development. It also reduces educational costs by decreasing the need for special education. <sup>105,106,107</sup> In Arizona, the services available to families with children with special needs include early intervention screening and intervention services provided through the Arizona Department of Education AZ FIND (Child Find), <sup>108</sup> the Arizona Early Intervention Program (AzEIP), 109 and the Division of Developmental Disabilities (DDD). 110

### What the Data Tell Us

#### Child Care and Preschool

According to data from the American Community Survey, 34 percent of children in the La Paz/Mohave Region aged 3 and 4 were enrolled in nursery school, preschool, or kindergarten, meaning that slightly less participate compared to children statewide (36%) (Figure 18). The lowest rates of participation occur in the Bullhead City (23%), Littlefield-Beaver Dam area (23%), Colorado City-Centennial Park (26%) and Kingman (32%) sub-regions.

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 67 registered child care providers approved to serve up to 3,268 children in the La Paz/Mohave Region (Table 41). The Arizona Department of Economic Security's 2014 Market Rate Survey<sup>111</sup>, which surveyed a total of 3,717 child care providers (1,756 licensed centers, 1,552 approved family homes, 280 certified group homes, and 129 unregulated homes listed with CCR&R), found that providers typically provided care to about 58 percent of their approved capacity. This suggests that the actual availability of child care slots in the region may be closer to 1,895. With a population of young children of 13,469 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.vii

vii 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 afterschool programs, and not all providers accept infants.

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>112</sup> it seems likely that parts of the La Paz/Mohave Region fall within this definition. In particular, the Colorado City-Centennial Park and Parker Strip-Cienega Springs sub-regions have a population of 1,513 and 86 children aged birth to 5 respectively, but no capacity to serve young children. <sup>viii</sup> Figure 19 presents a map of early education and child care providers located throughout the La Paz/Mohave Region.

Of the 67 known child care providers, about one-quarter (n=28) are participating in the Quality First program. An additional 10 sites in the La Paz/Mohave Region are Head Start programs<sup>ix</sup>, one operates at a public school, one is operated by the Fort Mojave Indian Tribe, and 36 are other providers listed with Child Care Resource & Referral (CCR&R) (Table 41). 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 36 CCR&R providers<sup>x</sup> in the region have a capacity to serve 1,696 children (Table 42). Most of these providers are child care centers (22 sites, capacity to serve 1,592) or family child care providers (12 sites, capacity to serve 96). All providers registered with CCR&R in the La Paz/Mohave Region are in Mohave County (the one La Paz County provider is a Colorado River Indian Tribes facility) and the subregions in the population centers, Bullhead City, Kingman and Lake Havasu have the bulk of providers registered with CCR&R. Figure 19 presents a map of child care and Head Start sites located throughout the La Paz/Mohave Region.

Of the 19 programs that participated in the Quality First program in the La Paz/Mohave Region as of June 2016, nine achieved the 3-, 4- or 5- star ratings, indicating they are meeting or exceeding quality standards. This represents 47 percent of all Quality First sites in the region, similar to 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 La Paz/Mohave Region are centers (n=17) with the capacity to serve 1,160 (Table 44).

The Western Association Council of Governments (WACOG) operates 11 Head Start sites in La Paz and Mohave Counties. These WACOG programs served 316 children in the La Paz/Mohave Region in the 2014–2015 school year, and two fewer, 314 in the 2015–2016 school year (Table 45). The number of children on waitlists increased during the same period from 194 in 2014–2015 to 231 the following school year. The one Head Start site in La Paz County participates in Quality First and enrolled 20 children in 2015–2016. Mohave County Head Start sites served 294 young children in 2015–2016. The Bullhead City Head Start had the highest enrollment by far of any site in 2015–2016 (n=66), and also the highest waitlist of 68 young children the same year. Enrollment at that site dropped from 85 the previous year to 66 in 2015–2016.

viii It should be noted that there is one non-tribal child care provider in the town of Parker, which is outside the bounds of the Parker Strip-Cienega Springs sub-region.

<sup>&</sup>lt;sup>ix</sup> There are 11 Head Start sites in the region, but one is a Quality First site and is counted under Quality First programs. WACOG Head Start sites are described in a following section.

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

The Fort Mojave Indian Tribe operates its own child care center with a capacity to serve 75 children. The center consists of three classrooms, and can accommodate 15 infants, 10 toddlers aged 18-24 months, 15 toddlers aged 24-35 months, 30 preschool aged children (3-4 years) and 5 children aged 5 and 6 years. As of December 2016, the center was serving 60 children, with a waitlist of 13, which was comprised primarily of infant and toddlers.<sup>113</sup>

60% 80% 100% 0% 20% 40% La Paz/Mohave Region Bullhead City area 23% Colorado City-Centennial Park area 26% Dolan Springs-Golden Valley area 53% Fort Mohave-Mohave Valley-Topock area 65% Kingman area 32% Lake Havasu City area Littlefield-Beaver Dam area 23% Parker Strip-Cienega Springs area N/A Quartzsite-Ehrenberg area N/A Salome-Bouse-Wenden area Fort Mojave Indian Tribe (Arizona part) Fort Mojave Indian Tribe (entire) N/A La Paz County Mohave County ARIZONA 36%

Figure 18: Estimated Numbers of Children (Ages 3 and 4) Enrolled in School

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

Note: Data in this figure is based on ACS survey estimates and for smaller sub-regions is less reliable. For example the Salome-Bouse-Wenden sub-region has a preschool available and likely has children enrolled in that setting. In addition, estimates for some communities cannot be reliably calculated.

Table 41: Childcare Capacity, by Type of Site

	Total num total capac childcare s	ity of all	Number a capacity o First sites	nd f Quality	Number and capacity of Start sites (excluding sites)	f Head any QF	Number a capacity o school-bas (excluding HS sites)	f public- sed sites any QF or	Number ar capacity of childcare p	other
La Paz/Mohave Region	67	3,268	19	1,185	10	289	1	23	36	1,696
Bullhead City area	19	790	3	169	1	66	1	23	14	532
Colorado City-Centennial Park area	1	N/A	0	0	1	N/A	0	0	0	0
Dolan Springs-Golden Valley area	2	45	1	25	1	20	0	0	0	0
Fort Mohave-Mohave Valley-Topock area	6	377	3	218	1	20	0	0	2	139
Kingman area	16	1,121	2	387	4	116	0	0	10	618
Lake Havasu City area	18	747	5	268	3	72	0	0	10	407
Littlefield-Beaver Dam area	1	38	1	38	0	0	0	0	0	0
Parker Strip-Cienega Springs area	0	0	0	0	0	0	0	0	0	0
Quartzsite-Ehrenberg area	1	25	1	25	0	0	0	0	0	0
Salome-Bouse-Wenden area	3	55	3	55	0	0	0	0	0	0
Fort Mojave Indian Tribe (Arizona part)	1	75	0	0	0	0	0	0	0	0
La Paz County	8	389	6	322	0	0	1	11	1	56
Mohave County	69	3,240	16	1,154	15	294	2	25	35	1,692
ARIZONA	3,054	173,641	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. Fort Mojave Indian Tribe data from Fort Mojave Indian Tribe Child Care Development Fund 2016 Supplemental Narrative Report provided through personal correspondence.

Note: Head Start enrollment numbers for La Paz and Mohave County do not include enrollment data for tribal or migrant Head Start programs.

Note: The Colorado City-Centennial Park area Head Start site is not a WACOG site and is a home-based Early Head Start. Capacity data was not available for this site.

Note: The one other child care provider in La Paz County provider is a Colorado River Indian Tribes facility

Table 42. CCR&R Child Care Provider Types

	Nanny / Individu Number and ap <sub>l</sub> capacity	proved Number and approved Number and approved Total: Number		Number and approved Number and approved		Total: Number a approved capaci		
La Paz/Mohave Region	2	8	12	96	22	1,592	36	1,696
Bullhead City area	1	4	7	52	6	476	14	532
Colorado City-Centennial Park area	0	0	0	0	0	0	0	0
Dolan Springs-Golden Valley area	0	0	0	0	0	0	0	0
Fort Mohave-Mohave Valley-Topock area	0	0	0	0	2	139	2	139
Kingman area	1	4	2	20	7	594	10	618
Lake Havasu City area	0	0	3	24	7	383	10	407
Littlefield-Beaver Dam area	0	0	0	0	0	0	0	0
Parker Strip-Cienega Springs area	0	0	0	0	0	0	0	0
Quartzsite-Ehrenberg area	0	0	0	0	0	0	0	0
Salome-Bouse-Wenden area	0	0	0	0	0	0	0	0
La Paz County	0	0	0	0	1	56	1	56
Mohave County	2	8	11	92	22	1,592	35	1,692
Arizona Source: Arizona Danastment of Foonom	50	191	903	4,729	670	68,528	1,623	73,448

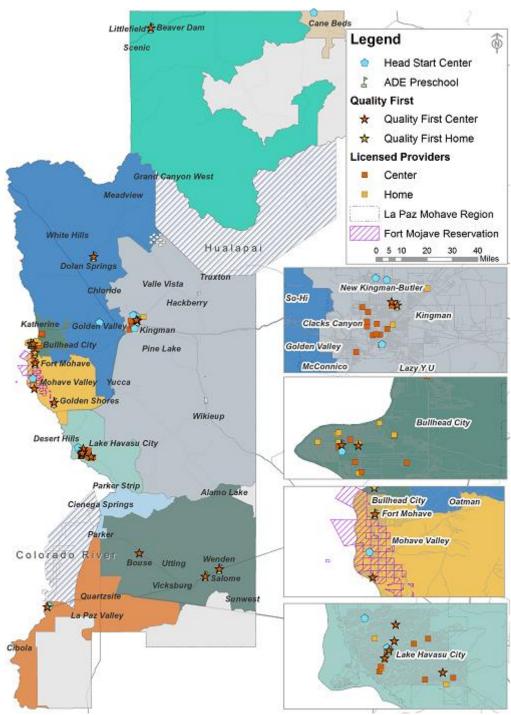
Source: Arizona Department of Economic Security (2016). [Child Care Resource & Referral dataset]. Unpublished data.

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

Note: The one child care center in La Paz County provider is a Colorado River Indian Tribes facility.

Note: The Child Care Resource & Referral quide 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, 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 19. Childcare and Head Start Centers in the Region



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

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

	Numbe capacit star QF	y of 1-	Numbe capacit star QF	y of 2-	Numbe capacit star QF	y of 3-	Numbe capacit star QF	y of 4-	Numbe capacit star QF	r and y of 5-	Numbe capacity sites no publica rated	y of QF t lly	Total nu and tota capacity QF sites	al y of all
La Paz/Mohave Region	0	0	3	148	5	314	4	360	1	59	6	304	19	1,185
La Paz County	0	0	2	242	1	20	2	35	0	0	1	25	6	322
Mohave County	0	0	3	148	5	333	2	325	1	59	0	0	16	1,144
ARIZONA	2	96	288	27,350	262	20,978	143	10,106	36	2,350	180	13,880	911	74,760

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

Table 44. Quality First Providers by Type

	Center		Head Start		Home		Total	
La Paz/Mohave Region	17	1,160	1	25	1	0	19	1,185
Bullhead City area	2	169	0	0	1	0	3	169
Colorado City-Centennial Park area	0	0	0	0	0	0	0	0
Dolan Springs-Golden Valley area	1	25	0	0	0	0	1	25
Fort Mohave-Mohave Valley-Topock area	3	218	0	0	0	0	3	218
Kingman area	2	387	0	0	0	0	2	387
Lake Havasu City area	5	268	0	0	0	0	5	268
Littlefield-Beaver Dam area	1	38	0	0	0	0	1	38
Parker Strip-Cienega Springs area	0	0	0	0	0	0	0	0
Quartzsite-Ehrenberg area	0	0	1	25	0	0	1	25
Salome-Bouse-Wenden area	3	55	0	0	0	0	3	55
La Paz County	4	114	2	208	0	0	6	322
Mohave County	15	1,144	0	0	1	10	16	1,154
Arizona	706	70,412	50	3,134	155	1,214	911	74,760

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

Table 45. WACOG Head Start Enrollment and Waitlist for the 2014-2015 and 2015-2016 School Years

Head Start Center	2014-2015 Enrollment	2014-2015 Waitlist	2015-2016 Enrollment	2015-2016 Waitlist
Brian Meyer Davis (Kingman)	34	<10	34	19
Bullhead City	85	72	66	68
Cerbat (Kingman)	20	12	32	20
Golden Valley	20	12	20	13
Hubbs House (Kingman)	17	<10	18	<10
Kingman North	34	15	32	17
Lake Havasu City	30	15	32	18
Mohave Valley	20	24	20	16
Nautilus (Lake Havasu City)	20	18	20	19
Oro Grande (Lake Havasu City)	19	<10	20	20
Ehrenberg	17	<10	20	13
La Paz County	17	<10	20	13
Mohave County	299	189	294	218
Total	316	194	314	231

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

#### **Cost of Care**

The cost of care in La Paz and Mohave 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 La Paz and Mohave County pay lower prices for child care centers (e.g., \$26 per day for infant care in both counties vs. \$42 in Arizona), approved family homes (e.g., \$20 per day for infant care each vs. \$22 state), and certified group homes (e.g., \$25 each vs. \$27 state) 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 La Paz/Mohave 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. 114 Families in the La Paz/Mohave 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. For example, the charge for full-time care for one infant is \$5,765 annually (see Table 49), meaning that a singlefemale householder making the median household income in Mohave County would pay 27 percent of her income on child care for one infant. Additional children would make the cost higher, and in both circumstances would far exceed the recommended 10 percent of family income to be spent on child care.

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 in the La Paz/Mohave Region increased from 756 in 2013 to 1,150 in 2015 (Table 50). Just under half of those children who received subsidies in 2015 were involved with DCS; 86 percent of DCS-involved children received a subsidy, suggesting that this is an important support for those families (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. The number of children on the waitlist in the La Paz/Mohave Region has decreased each year since 2013; the most recent data from 2015 showed 185 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
La Paz/Mohave Region	N/A	N/A	N/A
La Paz County	\$26.00	\$24.00	\$23.00
Mohave 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
La Paz/Mohave Region	N/A	N/A	N/A
La Paz County	\$20.00	\$20.00	\$18.00
Mohave 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
La Paz/Mohave Region	N/A	N/A	N/A
La Paz County	\$25.00	\$24.00	\$23.00
Mohave 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
La Paz/Mohave Region	N/A	N/A	N/A
La Paz County	14%	13%	13%
Mohave County	14%	12%	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	eligible for	receiving subsidy	receiving subsidy	subsidy		waiting list	Children on waiting list during 2015
La Paz/Mohave Region	826	779	1,293	756	723	1,150	281	176	185
La Paz County	44	57	68	43	45	49	17	<10	<10
Mohave County	818	774	1,282	748	717	1,144	278	174	182
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 receiving subsidy	Percent of DCS-involved children receiving subsidy
La Paz/Mohave Region	510	438	86%
La Paz County	20	14	70%
Mohave County	508	436	86%
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 statewide 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. Most classroom teachers with WACOG<sup>xi</sup>, the provider of Head Start services in the La Paz/Mohave Region, hold an

xi The WACOG credential data above includes staff in La Paz, Mohave and Yuma counties.

Associate's degree in early childhood education or other field (59%) or a Bachelor's degree in early childhood education (20%) (Table 52). Assistant teachers are most likely to have a CDA or other childhood credential (55%).

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>xii</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>116</sup>

Table 52. WACOG Staff Credentials, 2015-2016 School Year

Degree Type	% of classroom teachers with this credential	% of assistant teachers with this credential
Advanced degree in ECE	0%	0%
Advanced degree in any field and coursework equivalent to a major relating to early childhood education, with experience teaching preschool-age children	0%	0%
BA in ECE	20%	0%
BA in any field and coursework equivalent to a major relating to early childhood education with experience teaching preschool-age children	7%	2%
Associates degree in ECE	59%	21%
Associates degree in any field related to early childhood education and course work equivalent to a major relating to early childhood education with experience teaching preschool-age children	9%	7%
CDA or state-awarded preschool, infant/toddler, family child care or home-based certification, credential, or licensure that meets or exceeds CDA requirements	7%	55%

Source: Data received through personal correspondence

Note: WACOG credential data includes staff in La Paz, Mohave and Yuma counties

xii National Association for the Education of Young Children (NAEYC) (2004). NAEYC Advocacy Toolkit. Retrieved from www.naeyc.org/files/naeyc/file/policy/toolkit.pdf.

### 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 and Appropriate Public Education (FAPE). 117 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 he need for special education services as children reach school age. 118 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.119

The Department of Economic Security Arizona Early Intervention Program (AzEIP) provides services to children from birth to 36 months of age who have a developmental delay, or disability. In the La Paz/Mohave 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, 187 children ages 0 to 2 were served through the AzEIP program in the La Paz/Mohave 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 three percent of children aged birth through 2 years in the La Paz/Mohave Region, compared to about four percent statewide. Research suggests that about 13 percent of children would typically qualify for early intervention services, <sup>120</sup> or about 858 kids in the region. This suggests that almost 700 children in the region 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 delay, cerebral palsy, autism, epilepsy, or be at risk for a developmental disability (including the diagnosis of an established condition which has a high probability of developmental delay). A child under the age of 6 may be eligible for services if there is a strongly demonstrated potential the child is or will become developmentally disabled as determined by appropriate test. A child may also be eligible for DDD if he or she has not reached 50 percent of the developmental milestones expected for chronological age in one area of development or has not reached 25 percent of developmental milestones in two areas of development. The developmental domains are: physical development (fine motor, gross motor, vision, and hearing), cognitive development, speech and language development, self-help skills, or social-emotional skills. According to a key informant in the region, barriers specific to receiving a diagnosis of autism are limited availability of Developmental Pediatricians and/or Pediatric Psychiatrists, and waiting lists for those providers available of up to one year.

In FY 2015, 35 children aged 0 to 2, and 48 children aged 3-5 were served by DDD in the La Paz/Mohave Region (Table 56). The number of children referred to DDD has increased between FY2012 and FY2015 for both age groups, as did the number of children aged 0 to 2 served by DDD from 33 in FY2012 to 35 in FY2015, and the number served for older children (aged 3-5) (from 47 to 48). The number of children referred to DDD overall between FY2012 and FY2015 increased for those aged 0-2 but decreased slightly for the older age group. The pattern of service visits was also inconsistent between the two age groups, with service visits for the youngest children decreasing from 1,672 in FY2012 to 1,396 in FY2015, whereas service visits increased for children aged 3 to 5 over the same

period from 3,765 to 4,205. In FY2015, for children ages 0-2, with a reported 35 children served, this works out to about 40 visits per child. For children ages 3 to 5, with 48 children reported served, this equals about 88 visits per child.

Head Start, Early Head Start, and public preschool programs also support children who have disabilities. The number of preschoolers in special education in ADE schools with a special needs preschool has decreased between 2012 (n=258) to 2015 (n=194) in the La Paz/Mohave Region (Table 58). In October 2015, 208 preschool students were enrolled in special education preschool in the region, which represented 45 percent of students enrolled in preschool (Table 59). Among children who are in special education programs in public preschools in the region, the majority of children have either a developmental disability (44%), severe delay (35%), or a speech or language impairment (21%) (Figure 20). There are no children in regional schools with a singular diagnosis of a hearing impairment or vision impairment. This may be because a hearing or vision impairment can be associated with a comorbid diagnosis, such as a speech or motor delay, and therefore the child is classified under severe delay. WACOG Head Start also provides developmental screening and planning to children enrolled in centers throughout the region. For older children in the region, of the 7,229 children enrolled in kindergarten through third grade in October 2015, 11 percent were enrolled in special education services in school (Table 60). 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.

The Mohave County Department of Public Health (MCDPH) conducted a community assessment to identify needs and gaps in services of children and youth with special health care needs (CYSHCN) in 2014. Parents and caregivers of CYSHCN surveyed indicated a need for dental, speech therapy, occupational therapy, counseling services, respite care and specialized childcare. Parents and caregivers surveyed indicated higher levels of satisfaction with health care services (most were somewhat or very satisfied), compared to lower levels of satisfaction with educational services provided to their CYSHCN (half were somewhat or very dissatisfied). Almost all parents and caregivers indicated a barrier to navigating health care services for their CYSHCN was lack of knowledge to navigate the system, followed by access to care barriers created by insurance issues, cost as an obstacle to accessing services, and a lack of providers in the area. In terms of educational services, most parents and caregivers cited cost, lack of resources and the lack of specialty schools as barriers to accessing appropriate services for CYSHCN. <sup>121</sup>

Raising Special Kids held family forums in nine cities across Arizona, in 2015 and 2016, including Mohave County. Forums gathered information from parents about their experiences with developmental screening and follow-up care for their children. Lake Havasu City was one of five cities categorized as fully or partly rural. Key concerns in rural communities included <sup>122</sup>:

- Transportation, reliability and distance to appointments;
- Lack of specialty doctors to diagnose complicated issues;
- The need to travel to Phoenix and Flagstaff for all major procedures;
- Families frequently divided (stressed) as father works locally and mother has to travel and stay overnight to go to medical care and therapies;
- EMS and local ERs not always equipped for children;

- The need for additional specialists and medical facilities;
- Doctors unfamiliar with certain conditions; and
- Appointment coordination for multiple children.

Knowing the availability of providers serving children with special needs in the region is a starting place to determining what communities may be most in need of those professionals. Table 62 includes a listing of providers in the La Paz/Mohave Region serving young children aged birth to 5 in specialties such as occupational, speech and physical therapy, hearing services, vision services, and infant-toddler mental health.

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

	2) referred to AzEIP during FY	2) referred to AzEIP during FY	AzEIP during FY	2) served by AzEIP during FY	AzEIP during FY	Children (ages 0- 2) served by AzEIP during FY 2015
La Paz/Mohave Region	256	244	295	88	104	187
La Paz County	14 to 30	14 to 30	3 to 27	3 to 27	<25	3 to 27
Mohave County	251	235	294	88	102	185
ARIZONA	10,715	11,741	14,450	4,799	5,248	10,039

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

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

	children (ages	children (ages 0-2) referred	children (ages 0-2) referred	children (ages 0-2) referred	children (ages 3-5) referred	children (ages 3-5) referred	children (ages 3-5) referred	Number of children (ages 3-5) referred in FY2015
La Paz/Mohave Region	29	29	39	37	44	33	33	40
La Paz County	<25	<25	<25	<25	<25	<25	0	<25
Mohave County	28	29	39	37	44	33	33	40
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

	children (ages 0-2) screened	children (ages 0-2) screened	children (ages 0-2) screened	children (ages 0-2) screened	children (ages 3-5) screened	children (ages 3-5) screened	children (ages	Number of children (ages 3-5) screened in FY2015
La Paz/Mohave Region	<25	<25	<25	<25	<25	<25	<25	<25
La Paz County	<25	0	0	0	0	0	0	0
Mohave County	<25	<25	<25	<25	<25	<25	<25	<25
ARIZONA	732	314	216	238	669	731	727	958

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

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

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

	children (ages 0-2) served in	children (ages 3-5) served in	children (ages 3-5) served in	children (ages 3-5) served in				
La Paz/Mohave Region	33	35	35	35	47	50	43	48
La Paz County	<25	<25	<25	<25	<25	<25	<25	<25
Mohave County	32	35	35	35	47	49	42	47
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

	service visits (ages 0-2) in	service visits (ages 3-5) in	service visits (ages 3-5) in	service visits (ages 3-5) in	Number of service visits (ages 3-5) in FY2015			
La Paz/Mohave Region	1,672	1,513	2,178	1,396	3,765	3,962	4,184	4,205
La Paz County	144	62	<25	<25	53	81	68	<25
Mohave County	1,591	1,513	2,178	1,396	3,765	3,895	4,116	4,198
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: Number of Preschoolers in Special Education, 2012 to 2015

	Total number of ADE schools with special needs preschool	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
La Paz/Mohave Region Schools	11	258	236	194	194
Bouse Elementary District	0	0	0	0	0
Bullhead City School District	1	27	28	<25	<25
Colorado City Unified District	1	51	53	48	48
Hackberry School District	0	0	0	0	0
Kingman Unified School District	3	84	68	64	64
Lake Havasu Unified District	1	45	52	43	43
Littlefield Unified District	1	<25	<25	<25	<25
Mohave Valley Elementary District	1	45	32	<25	<25
Owens School District No.6	0	0	0	0	0
Quartzsite Elementary District	1	<25	0	0	0
Salome Consolidated Elementary District	1	<25	<25	0	0
Topock Elementary District	0	0	0	0	0
Wenden Elementary District	1	<25	0	<25	<25
Yucca Elementary District	0	0	0	0	0
La Paz/Mohave Region Charter Schools	0	0	0	0	0
La Paz County Schools	4	28	33	<25	<25
Mohave County Schools	9	255	235	197	197
All Arizona Schools	550	9,173	9,203	8,845	8,702

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

	Number of schools with	Number of students	Number of students in	Percent of students in
La Paz/Mohave Region Schools	pre-kindergarten	enrolled 464	special education 208	special education 45%
Bouse Elementary District	C	0	0	0
Bullhead City School District	1	23	<25	DS
Colorado City Unified District	1	62	52	84%
Hackberry School District	C	0	0	0
Kingman Unified School District	2	158	73	46%
Lake Havasu Unified District	1	125	47	38%
Littlefield Unified District	1	23	<25	DS
Mohave Valley Elementary District	1	30	<25	DS
Owens School District No.6	C	0	0	0
Quartzsite Elementary District	C	0	0	0
Salome Consolidated Elementary District	1	14	<25	DS
Topock Elementary District	1	17	0	0%
Wenden Elementary District	1	12	<25	DS
Yucca Elementary District	C	0	0	0
La Paz County Schools	3	37	<25	DS
Mohave County Schools	9	440	205	47%
All Arizona Schools	445	19,123	8,773	46%

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: 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
La Paz/Mohave Region Schools	7,229	786	11%
Bouse Elementary District	<25	<25	25%
Bullhead City School District	1,319	132	10%
Colorado City Unified District	189	30	16%
Hackberry School District	<25	<25	9%
Kingman Unified School District	2,052	274	13%
Lake Havasu Unified District	1,542	155	10%
Littlefield Unified District	124	<25	6%
Mohave Valley Elementary District	498	57	11%
Quartzsite Elementary District	93	<25	10%
Salome Consolidated Elementary District	48	<25	15%
Topock Elementary District	60	<25	5%
Wenden Elementary District	42	<25	17%
Yucca Elementary District	<25	<25	7%
La Paz/Mohave Region Charter Schools	1,213	99	8%
La Paz County Schools	838	139	17%
Mohave County Schools	7,396	813	11%
All Arizona Schools	342,307	33,269	10%

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

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

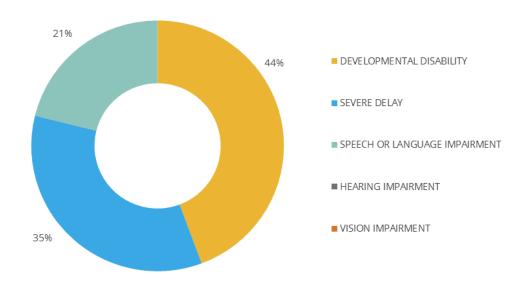
	Developmental Disability	Hearing Impairment	Severe Delay	Speech Or Language Impairment	Vision Impairment
La Paz/Mohave Region Schools	44%	0%	35%	21%	0%
Bullhead City School District	23%	0%	64%	14%	0%
Colorado City Unified District	85%	0%	6%	8%	0%
Kingman Unified School District	31%	0%	38%	31%	0%
Lake Havasu Unified District	35%	0%	42%	23%	0%
Littlefield Unified District	0%	0%	100%	0%	0%
Mohave Valley Elementary District	33%	0%	47%	20%	0%
Wenden Elementary District	0%	0%	0%	100%	0%
La Paz County Schools	36%	0%	14%	50%	0%
Mohave County Schools	44%	0%	34%	22%	0%
All Arizona Schools	41%	1%	21%	36%	1%

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

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

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

Figure 20. Types of Disabilities Among Preschoolers in Special Education, 2015



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: Pediatric Providers in Mohave and La Paz Counties Serving Children Ages 0-5 with Special Needs

Organization	Serving	Services Provided
A to Z Therapies	All of Mohave County excluding Colorado Strip and all of La Paz County	Services include pediatric psychology, occupational therapy, physical therapy, speech therapy, and developmental special instruction.
Arizona School for the Deaf & Blind (ASDB)	Southwest Regional Cooperative of ASDB, based out of Yuma, coordinates services at school districts in La Paz County and Mohave County as far north as Lake Havasu City. The North Central Regional Cooperative, based out of Flagstaff, serves Mohave County north of Lake Havasu City.	Provides services to students who are deaf/hard of hearing, blind/visually impaired, multiply sensory disabled, or deaf-blind at their local schools
Community Intervention Associates	La Paz County	Services include: individual and family services, psychiatric health, road to recovery, Meet Me Where I AM (MMWIA), and integrated physical health services.
Interagency Council	La Paz County, Lake Havasu City	Provides individual and family services including counseling to provide support for children (4 years-17 years) experiencing the effects of abusive behavior.
Milemarkers Therapy, Inc.	Lake Havasu City, Bullhead City	Services include speech therapy, physical therapy, occupational therapy, and music therapy for children.
Mohave Mental Health Clinic – Children's Clinics	Kingman, Bullhead City, Lake Havasu City	Behavioral health interventions including individual and family services. Services include assessment, psychiatric interventions, therapy, and counseling (provided in individual, family, and groups).
Southwest Behavioral Health Services	Kingman, Bullhead City, Lake Havasu City	Behavioral health interventions including individual and family services. Services address co-occurring substance abuse/behavioral health issues, crisis planning, skills training, personal care, homelessness support, counseling, and assisted medication administration.
The Learning Center for Families	Arizona Strip, Beaver Dam, Littlefield, Scenic, Desert Springs, Colorado City, Centennial Park and Cane Beds.	Services include occupational therapy, physical therapy, speech therapy, and developmental special instruction.
Therapy Accomplished	Lake Havasu City, Bullhead City, Fort Mohave, Mohave Valley, Golden Valley, Kingman	Provides physical therapy

 $Source: List \ developed \ through \ on-line \ resource \ search, including \ the \ Mohave \ County \ Special \ Needs \ Resource \ Guide, followed \ by \ review \ and \ input \ by$ regional key informants.



**CHILD HEALTH** 

## Why Child Health Matters

Health encompasses not only physical health, but also mental, intellectual, social and emotional wellbeing. Optimal development brings all of these facets together. A child's health begins with its mother's health before she becomes pregnant and is influenced by early prenatal care. 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. 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. 126,127,128

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. 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. Children who lack health insurance are also more likely to be hospitalized and to miss school. Children who lack health insurance are also more likely to be hospitalized.

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. Arizona became the only state without an active CHIP program. However, in May 2016, the Arizona legislature voted to lift the freeze on KidsCare, and in July 2016 applications began to be accepted for the first time in six years, with coverage beginning September 1, 2016. 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. The program is available for children in families with income up to 147 percent of FPL for those under 148 percent of FPL for those under 149 percent of

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

of health concerns for infants, including neonatal death, sudden infant death syndrome, and child abuse and neglect. Teenaged mothers (and fathers) themselves are less likely to complete high school or college, and more likely to require public assistance and to live in poverty than their peers who are not parents. 138,139,140

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

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>145</sup>

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

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

Immunization against preventable diseases is another factor that protects children from illness and potentially death. In order to assure community immunity (also known as "herd immunity"), which helps to protect unvaccinated children and adults from contracting vaccine- preventable diseases, rates of vaccination in a community need to remain high. Research shows that higher exemption rates from vaccines at the school-level have been associated with school-based outbreaks of preventable diseases such as measles and pertussis. 150

Oral health and good oral hygiene practices are also very important to children's overall health. According to the National Survey of Children's Health, the percentage of children in Arizona with excellent or very good oral health (65.7%) falls below the national level of 71.3 percent. Tooth decay and early childhood caries can have short and long term consequences including pain, poor appetite, disturbed sleep, lost school days, and reduced ability to learn and concentrate. More children in kindergarten in Arizona (52%) have tooth decay compared to children across the nation (36%). Within

Arizona, American Indian (76%) and Hispanic children (56%) are more likely to experience tooth decay than White children (34%).<sup>153</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>154</sup> and injuries are the leading cause of death in children in the United States. 155 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. 156 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. 157 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>158</sup>, as well as included it as part of their Arizona Injury Prevention Plan. 159

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. 160,161 Obesity can have negative consequences on physical, social, and psychological well-being that begin in childhood and continue into and throughout adulthood. 162 The first two years of life are seen as critical to the development of childhood obesity and its resultant negative consequences. Higher birth weight and higher infancy weight, as well as lower-socioeconomic status and low-quality mother-child relationships have all been shown to be related to higher childhood weight. One component of establishing a healthy weight – physical activity – also promotes improved visual-motor integration skills and object manipulation skills that in turn lead to improved executive function, social behaviors and ultimately school readiness for young children. 164 The availability and accessibility of recreational facilities and resources that promote physical fitness can affect the ability of both child and adult community members to reap the benefits of physical activity.

## What the Data Tell Us

#### Access to Care

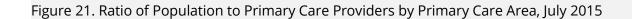
The Arizona Department of Health Services designates Primary Care Areas (PCAs) as geographically based areas in which most residents seek primary medical care from the same place. 165 There are seven primary care areas that coincide with the La Paz/Mohave Region: Quartzite, Parker, Colorado City, Kingman, Golden Valley, Bullhead City and Lake Havasu City. Each PCA receives a score based on 13 weighted items to provide a snapshot of the health of area residents. 166,xiii PCA cores can range from 14 to 75, with the lower score indicating fewer public health risk factors. <sup>167,168</sup> In the La Paz/Mohave Region, the Colorado City PCA had the highest score at 64, the Quartzite PCA had a score of 62, the Parker and Golden Valley PCAs both had a score of 40, both the Kingman and Lake Havasu City PCAs had a score of 32, and the Bullhead City PCA had the lowest score, 30. Figure 21 shows the ratio of population to primary care providers by PCA as of July 2015. In La Paz County, the Parker PCA had the lowest population-provider ratio, with 289 people per provider, while the Quartzsite PCA had the highest ratio in the La Paz/Mohave Region at 2,311 people per provider. In Mohave County, the Colorado City and Golden Valley PCAs had the highest ratios, with 1,851 and 1,816 people per provider respectively. According to a key informant in the region, children living in Colorado City with AHCCCS coverage must travel to Flagstaff for health care services, while those who are privately insured may access services in St. George, Utah. Only two PCAs in the region, the Kingman and Parker PCAs, had population-provider ratios lower than that seen statewide (449 to 1), indicating a potential need for more primary care providers in many areas of the region.

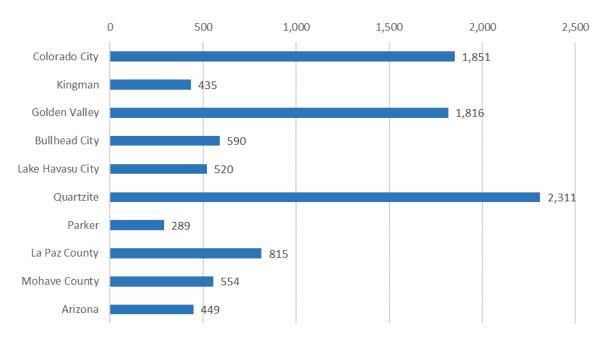
A key factor in health care is health insurance, and 14 percent of young children in the region were estimated to be uninsured, along with 17 percent of the total population in the La Paz/Mohave Region (Table 63). Both these proportions were slightly higher than across the state as a whole (10% 0-5 uninsured; 16% all ages uninsured). The percentages of the population uninsured varied somewhat among the sub-regions. Almost one-third of children in the Dolan Springs-Golden Valley (31%) and Colorado City-Centennial Park (28%) sub-regions and the Fort Mojave Indian Tribe (Arizona part) (28%) were uninsured, as were over a quarter of the total population in the Colorado City-Centennial Park and Littlefield-Beaver Dam sub-regions (26% each). The Littlefield-Beaver Dam, Quartzsite-Ehrenberg and Salome-Bouse-Wenden sub-regions all showed no young children uninsured, however these estimates are based on the American Community Survey, and the reliability of ACS estimates is lower for less populated areas, as these are.

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

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xiii The 13 items (according to the Arizona Administrative Code R9-24-203) are population to provider ratio, travel distance to primary care provider, transportation score, percent of population under 200 percent of the federal poverty level (FPL), percent of population between 100 and 200 percent of the FPL, uninsured births, ambulatory-care admissions, low birthweight births, lack of prenatal care, percentage of deaths before life expectancy, infant mortality rate, percent of minorities, elderly, and unemployed population, and whether the area as one or fewer full-time providers.





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

Note: A key informant noted that Lake Havasu City lost a long time pediatrician in February 2017.

Table 63: Estimated Proportion of Population Without Health Insurance

		Children (ages 0-5) without health insurance		Persons (all ages) without health insurance
La Paz/Mohave Region	12,683	14%	206,913	17%
Bullhead City area	2,878	10%	40,103	17%
Colorado City-Centennial Park area	1,237	28%	6,753	26%
Dolan Springs-Golden Valley area	366	31%	13,694	19%
Fort Mohave-Mohave Valley-Topock area	1,233	12%	22,280	20%
Kingman area	3,595	18%	51,683	16%
Lake Havasu City area	2,882	8%	56,109	14%
Littlefield-Beaver Dam area	146	0%	3,636	26%
Parker Strip-Cienega Springs area	87	10%	2,579	17%
Quartzsite-Ehrenberg area	65	0%	5,634	9%
Salome-Bouse-Wenden area	194	0%	4,442	13%
Fort Mojave Indian Tribe (Arizona part)	97	28%	1,060	19%
Fort Mojave Indian Tribe (entire)	149	31%	1,756	17%
La Paz County	1,069	7%	20,117	14%
Mohave County	12,539	15%	195,940	17%
ARIZONA	531,825	10%	6,453,706	16%

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

## Pregnancies and Birth

In 2014, 1,879 La Paz/Mohave Region residents gave birth (Table 64). This represented 2.2 percent of the births statewide. Given that La Paz/Mohave Region residents make up 3.3 percent of the state population (see Table 3), this was a slightly lower number of births than would be expected based on the size of the region's population. In keeping with the small growth in the projected number of births per year in La Paz County overall, and larger projected growth in Mohave County, the number of births in the region 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
La Paz/Mohave Region	1,879
La Paz County	213
Mohave County	1,833
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
La Paz/Mohave Region	N/A	N/A	N/A	N/A	N/A	N/A
La Paz County	212	207	213	219	225	232
Mohave County	1,844	2,089	2,360	2,564	2,689	2,790
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 1,879 mothers who gave birth in the La Paz/Mohave Region in 2014, the majority (74%) were White, non-Hispanic (Figure 22). Less than one-quarter (21%) of births were to Hispanic or Latina mothers, and five percent were to mothers who identified as American Indian (2%), Asian or Pacific Islander (2%), or Black or African American (1%). Compared to the state as a whole, mothers in the La Paz/Mohave Region were much less likely to be Latina (39% statewide), and more likely to be White (46% statewide). New mothers in the La Paz/Mohave Region had lower educational attainment than mothers statewide; 57 percent had a high school education or less (45% statewide), and 10 percent had attained a bachelor's degree or more (23% statewide) (Table 66). A similar proportion (33%) had some college or professional education compared to the state as a whole (31%).

The population of new mothers in the La Paz/Mohave Region differed somewhat from those in the county and statewide on other attributes. Over half (54%) of mothers were not married in the region (63% La Paz County, 54% Mohave County; 45% statewide) and 10 percent were in their teens (15% La

Paz County, 10% Mohave County; 8% statewide) (Table 67). In the La Paz/Mohave Region, almost two-thirds of births (64%) were to mothers relying on AHCCCS or Indian Health Service (IHS) coverage, which was lower than the proportion in La Paz County (77%) but higher than the statewide proportion of 55 percent.

A much higher proportion of mothers in the La Paz/Mohave Region reported smoking while pregnant (18.7%) than across the state (4.6%), and the region also falls far above the Healthy People 2020 goal of fewer than 1.4 percent of pregnant women smoking. A change to the birth certificate in 2014 led to a proportion of pregnant women's smoking status being reported as "unknown". If these unknowns are counted as non-smokers, the proportion of women reporting smoking while pregnant decreased to 13.4 percent. Therefore a range of values for 2014 is likely more accurate with between 13.4 and 18.7 percent of women reporting smoking while pregnant in 2014. Both values still fall far above the state percentage and Healthy People 2020 target. Pregnant women in Mohave County (19.0%) were more likely to report smoking than pregnant women in La Paz County (10.8%), and both counties fell above the state proportion and Healthy People target.

Along with smoking, another aspect of maternal health that is linked to both birth outcomes and a child's subsequent health is maternal obesity. Among Arizonan women overall, about 51 percent were overweight or obese before pregnancy in 2014. Among women who participate in WIC, this rate was higher – 58 percent, which is to be expected given that low-income women are more likely to be obese in the United States. It is the La Paz/Mohave Region, this rate was similar; 24 percent of women were overweight, and 32 percent were obese, for a total of 56 percent of women who were overweight or obese before becoming pregnant (Figure 23). The rate of obesity in the region dropped in 2013 to 24 percent but then rebounded to 32 percent in 2015, whereas the rate of obesity across the state has increased slightly but steadily since 2012 (see Figure 24); the state trajectory mirrors national trends as well. It

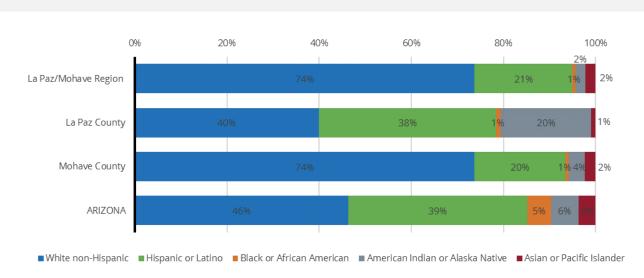


Figure 22: Race and Ethnicity of Mothers Giving Birth in 2014

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

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

	Less than high school		Some college or professional education	Bachelor's degree or more
La Paz/Mohave Region	21%	36%	33%	10%
La Paz County	30%	38%	22%	7%
Mohave County	21%	36%	33%	10%
ARIZONA	20%	25%	31%	23%

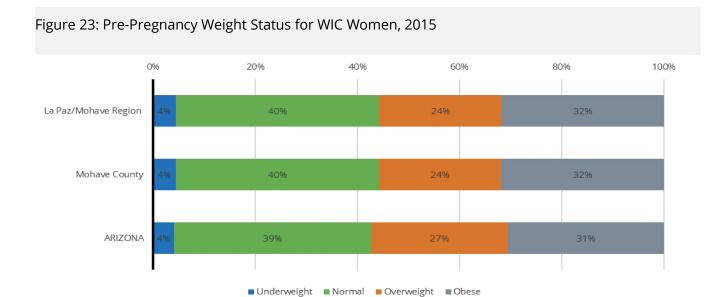
 $Source: Arizona\ Department\ of\ Health\ Services\ (2016).\ [Vital\ Statistics\ Births\ dataset].\ Unpublished\ data.$ 

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

Table 67: Other Characteristics of Mothers Giving Birth in 2014

			Mother was 17 or		Tobacco use during pregnancy
La Paz/Mohave Region	53.5%	10.1%	2.1%	64.3%	13.4% - 18.7%
La Paz County	62.9%	14.6%	4.2%	77.5%	10.8%
Mohave County	53.6%	10.0%	2.0%	64.1%	19.0%
ARIZONA	44.7%	7.6%	2.1%	54.5%	3.9% - 4.6%

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



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

Figure 24: Pre-Pregnancy Obesity Rates for WIC Women, 2012 to 2015

100% 80% 60% 40% 32% 32% 31% 29% 29% 29% 28% 28% 28% 28% 28% 27% 20% 0% La Paz/Mohave Region Mohave County Arizona ■ CY 2012 ■ CY 2013 ■ CY 2014 ■ CY 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. In 2012 and 2013, the percent of women with early prenatal care in the region was above 82 percent, meeting the Healthy People 2020 goal (Figure 25). 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 (15% for the region; 55% in La Paz County; 16% in Mohave County). Across the La Paz/Mohave Region in 2014, 69 percent of pregnant women obtained prenatal care during the first trimester, meaning that the Healthy People 2020 goal was not met (Table 68). In 2014 in La Paz County 54.2 percent of pregnant women obtained prenatal care during the first trimester with the same true for 69.1 percent in Mohave County of mothers (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. The decrease in the La Paz/Mohave Region was a slightly larger decline to that seen across the state (71.7% of births in 2014 were to mothers who began prenatal care in the first trimester, down from 82.6% in 2012).

Most mothers in the region are also receiving at least some form of prenatal care; only 6.5 percent of babies in the La Paz/Mohave Region were born to mothers who had had fewer than five prenatal care visits (Table 68). The proportion of mothers in the region with few prenatal visits was the same as that across the state (6.5%) and similar to Mohave County (6.3%), but higher in La Paz County (10.3%), potentially due to the distance to primary medical and obstetric care in that county.

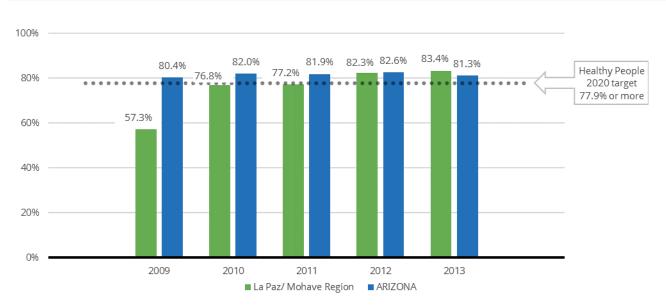


Figure 25: Percent of Births With Prenatal Care Begun in First Trimester 2009-2013

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 pregnant care by trimester is assessed; these structural changes mean that rates from 2014 onward are not directly comparable to earlier rates.

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		Percent of births with fewer than five prenatal	
La Paz/Mohave Region	1.3%	5.2%	18.1%	47.5%	27.6%	6.5%	69.0%
La Paz County	1.9%	8.5%	26.3%	30.0%	31.0%	10.3%	54.2%
Mohave County	1.4%	4.9%	18.1%	48.6%	27.0%	6.3%	69.1%
ARIZONA	2.1%	4.4%	14.5%	46.9%	30.7%	6.5%	71.7%

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

### **Birth Outcomes**

Babies in the La Paz/Mohave Region were doing somewhat better than babies born statewide in regard to perinatal health. In the region in 2014, 6.3 percent of babies were low birth weight (7.5% La Paz County; 6.2% Mohave County), compared to seven percent across the state. The percent of premature births in the region was 7.6 percent (8.9% La Paz County; 7.7% Mohave County), with 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 La Paz/Mohave Region has achieved both Healthy People 2020 goals (Figure 26; Figure 27). In addition, a smaller proportion (3.2%) of newborns in the region and both counties (4.7% La Paz County; 3.1% Mohave County), were admitted to an ICU than across the state (6.7%).

Infants participating in WIC in the La Paz/Mohave Region (2015: 72.2%) lag behind the Healthy People 2020 goal of 81.9 percent of babies ever being breastfed, but are slightly more likely to be breastfed than infants participating in WIC across the state Arizona (71.2%) (Figure 28); data on the complete (i.e., including those not participating in WIC) La Paz/Mohave Region infant population are unavailable. However, data from the National Immunization Survey on children born in 2013 estimated the Arizona statewide rate of infants ever-breastfed was 85.0 percent, suggesting that WIC participants are less likely to be breastfed than other infants. Thus, it is possible that the region overall does currently approach or meet the Healthy People 2020 goal. It is important to note that, although the rate among WIC participants (72.2%) in the region is below the target, it has increased by over 12 percentage points since 2013 (Figure 28).

In 2015, about three out of 100 newborns (3.1%) did not pass an initial hearing screen. However, only 0.5 percent of those screened required a diagnostic evaluation and a very small proportion, 0.3

xiv 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

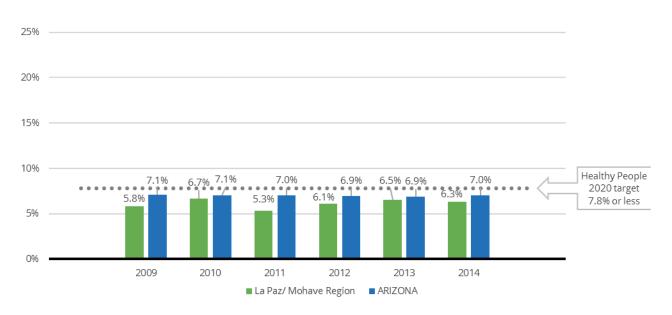
percent, were found to have confirmed hearing loss (Figure 29). According to a key informant in the region, newborns in need of a follow-up hearing evaluation are likely to have limited access to a pediatric audiologist in the region, and such a visit would likely require travel out of the region. In addition to travel, anesthesia may be required to receive an accurate hearing evaluation in newborns over two months old.

Table 69: Other Characteristics of Babies Born in 2014

	Baby had low birthweight (5.5 lb. or less)	target for low-			Newborns admitted to intensive care unit
La Paz/Mohave Region	6.3%		7.6%		3.2%
La Paz County	7.5%		8.9%		4.7%
Mohave County	6.2%		7.7%		3.1%
ARIZONA	7.0%	Fewer than 7.8%	9.0%	Fewer than 11.4%	6.7%

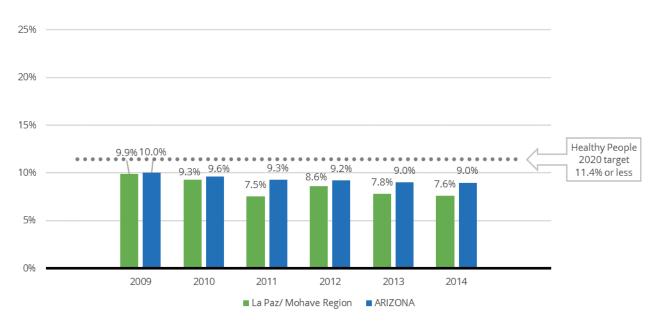
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 26: Percent of Babies Born in 2009-2014 With Low Birthweight (5.5 Pounds or Less)



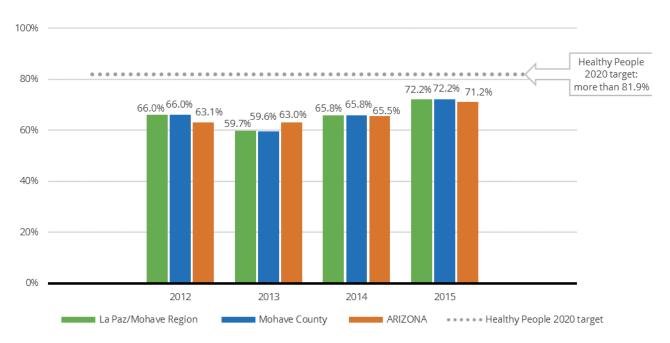
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 27: Percent of Babies Born Premature in 2009-2014 (37 Weeks or Less)



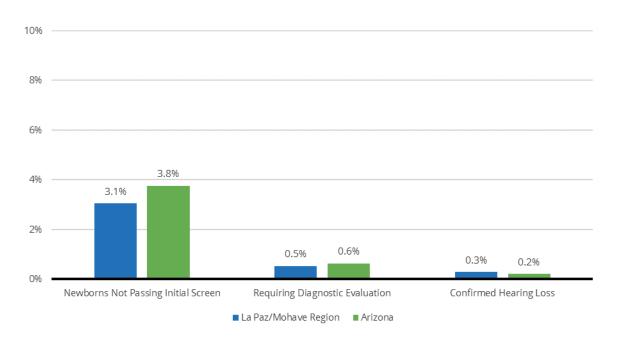
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 28: WIC Infants Who Were Ever Breastfed, 2012 to 2015



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

Figure 29: Newborn Hearing Screening Outcomes, 2015



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

#### **Immunizations**

While immunization rates vary by vaccine, over 94 percent of children in child care in the La Paz/Mohave Region had completed each of the three major (DTAP, polio, and MMR) vaccine series; the regional rates were above 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>173</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>xv</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. One exception to the extensive vaccine coverage is Hepatitis A; only 70 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>xvi</sup> Rates for the three major (DTAP, polio, and MMR) vaccine series

xv 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

x<sup>vi</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

for children in kindergarten fell slightly below the rates for children in child care (Table 71). Rates of personal exemptions for vaccinations among children in child care (2.8%) were lower than exemption rates at the state level (4%) whereas exemption rates in kindergarten (5.1%) were higher than those at the state level (4.7%) (Figure 30). In La Paz County, almost no children in child care or kindergarten had non-medical exemptions from vaccination.

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

La Paz/Mohave Region	Students enrolled 2,226	more DTAP	more Polio			Two Hep A	more Hep B	Varicella	exemption	Medical exemption 0.6%
La Paz County	93	94.6%	94.6%	95.7%	91.4%	77.4%	93.5%	98.9%	0.0%	0.0%
Mohave County	2,176	94.9%	96.0%	97.4%	95.9%	70.3%	95.1%	97.0%	2.9%	0.6%
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

		Four or more DTAP				One or more Varicella	Personal exemption	Medical exemption
La Paz/Mohave Region	1,868	92.7%	93.1%	92.7%	94.7%	95.4%	5.1%	0.4%
La Paz County	199	96.5%	96.5%	94.5%	99.0%	99.5%	0.5%	0.0%
Mohave County	1,831	92.6%	93.1%	92.9%	94.6%	95.4%	5.2%	0.4%
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.

10% 8% 6% 5.2% 5.1% 4.5% 3.5% 4% 2.9% 2.8% 2% 0.5% 0.0% La Paz/Mohave Region Arizona La Paz County Mohave County CHILDCARE EXEMPTIONS ■ KINDERGARTEN EXEMPTIONS

Figure 30: 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. The survey was designed to gather information from Arizona's kindergarten children regarding prevalence and severity of tooth decay, and included dental screening and parent/caregiver questionnaire component. In the La Paz/Mohave Region, 158 children were screened and 84 parents or caregivers answered at least one question on the questionnaire given with their child's screening. Untreated decay experience and need for dental care was reported for 36 percent of kindergarteners in the region, which was slightly higher than the state (27%). In overall decay experience, 62 percent of kindergarteners evidenced decay experience in the region, compared to Arizona's 52 percent. While the state has met its own 2020 benchmark (no more than 32% of children with untreated tooth decay) and is on track towards the Healthy People's 2020 target (26%), there remains a need for focused oral health efforts on primary prevention across the state.

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 that their typical peers, and face additional barriers to care including inaccessibility of dental offices and limited dentists willing to treat children with special healthcare needs.<sup>175</sup>

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

## Childhood Injury, Illness and Mortality

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

Additionally, local CFR Teams determine which deaths can be classified as maltreatment based on the actions or failures to take appropriate preventative action by a parent, guardian, or caretaker. In the 2015 review, 11 percent of all child fatalities were due to maltreatment and all of these deaths were determined to have been preventable. These maltreatment deaths are classified in one of three categories: homicide (e.g., abusive force trauma), natural (e.g., failure to obtain medical care or prenatal substance use that caused premature death), or accidental (e.g., unintentional injuries caused by negligence or impaired driving. 176

In 2015, La Paz County reported fewer than 25 deaths among its population of 3,693 children (aged 0-17) and Mohave County also reported fewer than 25 deaths among its population of 38,404 children (aged 0-17). The overall Arizona rate for 2015 was 47.3 child deaths per 100,000 residents. Across the state, the two leading causes of death were those classified as home-safety related (rate of 7.9 per 100,000 children) and maltreatment (rate of 5.3 per 100,000 children). Additionally, fatalities were overrepresented among African American children (9% of child deaths) and American Indian children (9% of child deaths).

## Weight Status

Based on data from the Centers for Disease Control and Prevention (CDC), adult obesity has remained stable overall in La Paz County (32%), but increased slightly in Mohave County between 2011 and 2013 (from 26.6% to 29.6%) (Table 72). This means that since 2012, Mohave County has met the Healthy People 2020 goal of having no more than 30.5 percent of the population have obesity viii, but La Paz County has not. Although adult obesity rates for both counties have been consistently higher than those for the state, state rates have also increased from 25.1 to 26.8 percent over the same period.

xviii 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.

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 La Paz/Mohave Region in 2015, 8.2 percent had obesity and an additional 13 percent had overweight (Figure 31). The obesity rate has been decreasing, dropping from 9.1 percent in 2012 to 8.2 percent in 2015 (Table 73). This pattern mirrors national patterns. Based on these data, the La Paz/Mohave Region is meeting the Healthy People 2020 target. It is also important to note that these data only reflect one segment of the population of the region, and low-income populations, i.e., those receiving WIC benefits, are at an elevated risk for obesity.

Data from the Indian Health Service for children from the Fort Mojave Indian Tribe receiving services at the Colorado Service Unit indicate that just over one-quarter (26.8%) of children (ages 2-5) from the Arizona portion of the Fort Mojave Indian Tribe had obesity. <sup>178,xix</sup>

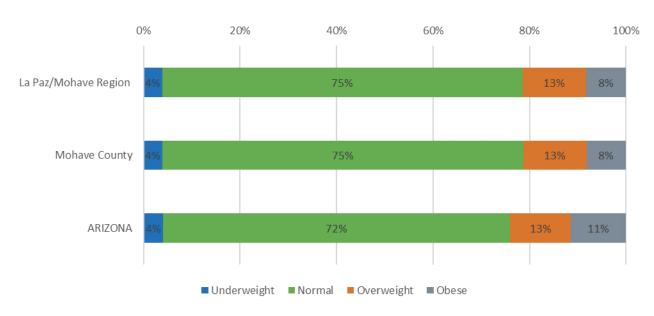
Table 72: Adult Obesity Rate, According to the CDC

	CDC adult obesity rate, 2011	CDC adult obesity rate, 2012	CDC adult obesity rate, 2013
La Paz/Mohave Region	N/A	N/A	N/A
La Paz County	32.0%	31.5%	32.0%
Mohave County	26.6%	28.1%	29.6%
ARIZONA	25.1%	26.0%	26.8%

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

 $<sup>^{</sup>xix}$  Please note that these data are for children who are 'active users', that is, they are members of the Fort Mojave Indian Tribe (birth to 5) who received services at least once at the IHS Colorado Service Unit during 10/1/2013 - 9/30/2015, regardless of their place of residence. This means that some of these children may not be living within the reservation boundaries but in the surrounding areas, which includes some towns in California. Personal Communication, Indian Health Service – Phoenix Area, September 2016.

Figure 31: WIC Children's Weight Status, 2015

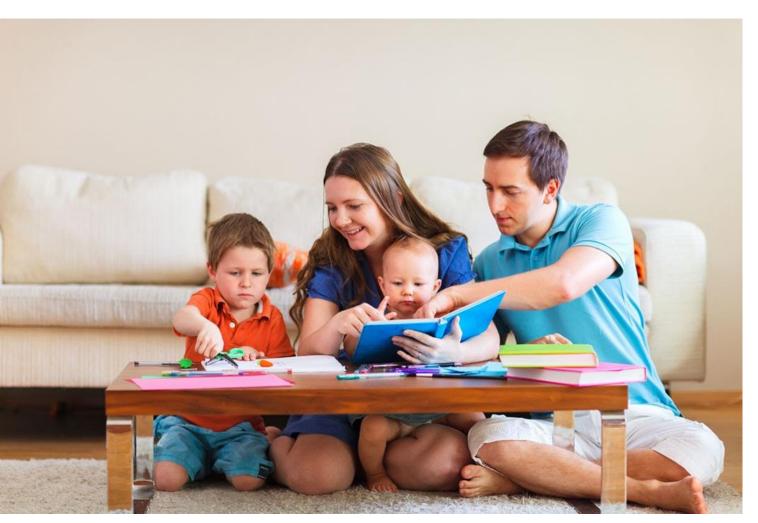


 $Source: Arizona\ Department\ of\ Health\ Services\ (2016).\ [WIC\ datasets].\ Unpublished\ data.$ 

Table 73: WIC Children's Obesity Rates, 2012 to 2015

	· · · · · · · · · · · · · · · · · · ·	Childhood obesity rate, 2013	,	Childhood obesity	Healthy People 2020 Target for Childhood Obesity
La Paz/Mohave Region	9.1%	9.1%	8.5%	8.2%	9.4%
Mohave County	9.1%	9.1%	8.5%	8.2%	9.4%
ARIZONA	12.7%	12.3%	11.1%	11.4%	9.4%

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



**FAMILY SUPPORT AND LITERACY** 

# Why Family Support and Literacy Matters

Parents, caregivers and families who provide positive and responsive relationships support optimal brain development during a child's first years 179,180 and promote better social, physical, academic, and economic outcomes later in that child's life. 181,182 Parental and family involvement is positively linked to academic skills and literacy in preschool, kindergarten, and elementary school. Literacy promotion is so central to a child's development that the American Academy of Pediatrics has identified it as a key issue in primary pediatric care, aiming to make parents more aware of their important role in literacy. 184 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>185</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. 186

Not all children are able to begin their lives in the most positive, stable environments. Adverse Childhood Experiences (ACEs)<sup>xx</sup> have been linked to risky health behaviors (such as smoking, drug use, and alcoholism), chronic health conditions (such as diabetes, depression, and obesity), poorer life outcomes (such as lower educational achievement and increased lost work time), and early death. 187 Children in Arizona are more likely to have experienced two or more ACEs (31.1%) than children across the country (21.1%). 188 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. 189 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>190</sup>

<sup>&</sup>lt;sup>xx</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. 191 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. 192 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. 193

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. 194 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>195</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. 196

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

Children exposed to alcohol and drugs neonatally also face behavioral and other concerns. Opiate use during pregnancy, both illegal and prescribed use, has been associated with neonatal abstinence syndrome (NAS), where infants born exposed to these substances exhibit withdrawal, creating longer hospital stays, increased health care costs and increased complications for infants born with NAS. 198 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. 199 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.

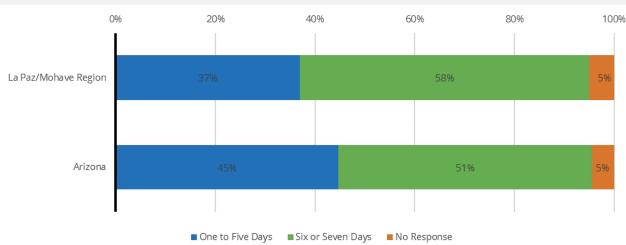
## What the Data Tell Us

## **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>200</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>201</sup>

In the La Paz/Mohave Region, 150 people responded to the 2012 First Things First Family and Community Survey. \*\*xi\* Among other topics, the 2012 survey collected data about parent and caregiver knowledge of children's early development and their involvement in a variety of behaviors known to contribute positively to healthy development. Families in the La Paz/Mohave Region were somewhat more likely to report reading to their children (58%), telling stories to their children (54%) and drawing with their child (50%) six or seven days a week compared to families across the state (51%, 51% and 47% respectively) (see Figure 32, Figure 33, and Figure 34). Over three-quarters (76%) of families in the La Paz/Mohave Region demonstrated an understanding that brain development can be affected prenatally or right from birth, slightly less than the proportion in the state as a whole (80%) (Figure 35).

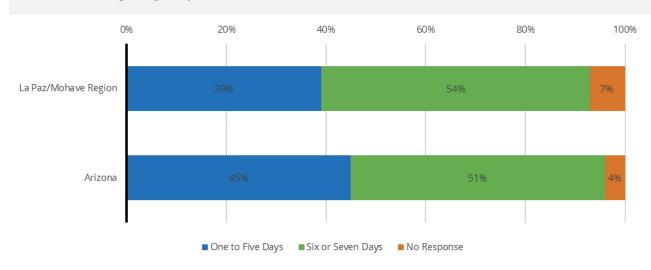
Figure 32: Responses to "During the past week, how many days did you or other family members read stories to your child?"



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

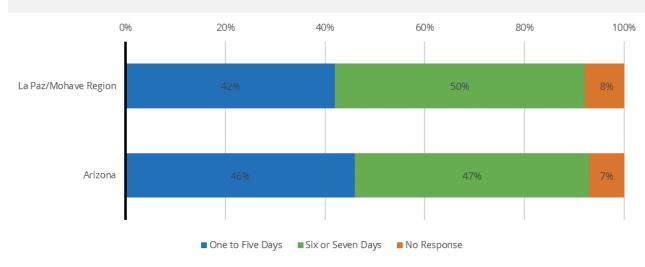
xxi The full methodology for the First Things First Family and Community Survey can be found in the Methods and Data Sources section of the Appendix.

Figure 33: 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 34: Responses to "During the past week, how many days did your child scribble, pretend draw, or draw with you or another family member?"



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

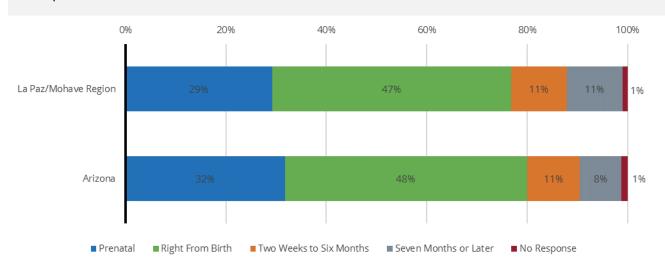


Figure 35: Responses to "When do you think a parent can begin to significantly impact a child's brain development?"

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. 202 According to this latest report, of 78 reports of abuse and neglect received during that period for La Paz County, 11 percent resulted in a removal from the home (Table 74). In Mohave County, of 806 reports, 115 (14%) resulted in a removal from the home; these numbers reflect all children, not just those children aged birth to 5. The proportion of reports resulting in removal was similar (12%) across the state. However, over the last seven reporting periods, there has been a marked increase in the number of substantiated cases resulting in removal in both counties. In La Paz County, while the number of substantiated cases has remained below 10, the number increased by a factor of nine since the April 1-September 30, 2015 reporting period (Figure 36). In Mohave County, the most notable increase happened in the reporting period ending in September 30, 2016, when there were 115 substantiated cases resulting in removal up from 18 in the prior period (Figure 36). For substantiated reports of maltreatment during that period, most (100% La Paz County; 84% Mohave County) were cases of neglect, followed by physical (14% Mohave County) and sexual abuse (2% Mohave County) (Table 75).

Annual reports of child abuse and neglect were also provided by the Fort Mojave Indian Tribe's Social Services Department. In FY2014/2015 (October 2014–September 2015), 48 referrals were received, most involving neglect, physical and sexual abuse. In the following fiscal year (October 2015 – September 2016) the number of referrals fell sharply to 24, with most referrals involving neglect or

physical abuse. Data was also provided on the number of children in foster care. In 2014/2015, there were 64 children in foster care, 12 of whom were under the age of 6 (19%). In 2015/2016, fewer children were in foster care overall (n=55), although the proportion that were under the age of 6 increased (n=15, 27%). In both periods, there were fewer than 10 tribal foster homes licensed by the Fort Mojave Indian Tribe; there were also fewer than 10 non-tribal foster homes licensed by the Fort Mojave Indian Tribe in each reporting year.<sup>203</sup>

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 to 5,669 during April 1-September 30, 2016. The total number of children entering out-of-home care in La Paz County (n=23) and Mohave County (n=229) for the April 1- September 30, 2016 reporting period is higher than the number of removals resulting from substantiated reports of abuse (n<10 La Paz County; n=115 Mohave County) 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 76). Over time, the number of children entering out-of-home care in La Paz and Mohave Counties has fluctuated, but has shown an uptick in both counties as of the last reporting period (see Figure 37).

A key informant was able to provide county level data on children involved with the courts in both Mohave and La Paz Counties. In Mohave County, data was available on the number of dependency cases for children under six years of age (data specific to this age range is not available in DCS child welfare reports). A dependency case involves the assertion that a parent is unfit or unable to care for a child, and the child is thereby removed from the home. The placement for these children in not known, and not all are placed in foster care. This data does indicate an increase from 2011 through 2014 in the number of dependency cases involving young children in Mohave County, with decreases occurring in 2015, and another likely increase in 2016 (the 9 months of data available for 2016 is nearing the full number of cases in 2015) (see Table 77). In La Paz County, different information was available about out of home placements. As of October 2016, there were 69 children in non-delinquent juvenile programs. These children have been removed from their homes and placed in out-of-home placements and are wards of the court. This number is for all children under the age of 18, not just children aged birth to five.

According to the Department of Child Safety (DCS), there is a priority to place children who have been removed from their homes in settings that are as family-like as possible. In the spring of 2016, almost four-fifths (79%) of children in out-of-home care had been placed with relatives or in licensed foster care homes. The remaining children would be placed in congregate care, which includes emergency shelters, group homes, and residential treatment centers. The use of congregate care is influenced by an inadequate supply of foster care homes across the state, and inadequate access to behavioral health services that would support placement in family settings. The use of congregate care has also increased for the youngest children, 12 and under, during the same time period where congregate placement decreased for older children.

Maps prepared for foster care recruitment purposes were provided by a key informant on the number of children needing a foster family within Rational Service Areas (RSAs) within La Paz and Mohave

xxii Data provided by a key informant through personal correspondence.

Counties. XXIII These RSAs correspond to the Arizona Department of Health Service's Primary Care Areas. As of March 31, 2016, in Mohave County, between 11 and 25 children were in need of a foster family in the Kingman and Bullhead City RSAs, and between one and 10 children were in need in the Golden Valley and Lake Havasu City RSAs. In La Paz County, the need was lower with between one and 10 children needing a foster family in the Quartzsite RSA (which makes up most of the county), and no children in need of a foster family in the Parker RSAs.

The inadequate supply of foster care homes across the state has been an ongoing issue. Factors impacting this deficit include the Department of Child Safety (DCS) not recruiting enough licensed foster homes through foster care licensing agencies to care for children with special needs or that are able to take sibling groups. Insufficient training of foster care families to manage the behaviors of children in their care, inadequate oversight of foster home recruitment and retention, inadequate support of foster families and the need for improved communication with DCS, and child-placing agencies were also cited as factors limiting the number of available foster care homes. <sup>206</sup>

A survey of former foster families included several recommendations for addressing this dearth of foster care homes, including focusing agency efforts on retention of existing foster parents, assessing reasons why foster parents cease their role so these reasons can be addressed, increasing support for foster families including the availability of respite care for foster parents, financial support, and improved respect and appreciation from state child welfare and licensing agencies.<sup>207</sup>

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

An asset in the region is the Mohave County Infant and Toddler Mental Health Court Team. The Court Team's strategy seeks to improve outcomes for infants, toddlers and their families involved in the child welfare system in order to reduce or prevent future court involvement. Activities of the Court Teams include training on child welfare issues throughout the region, shared planning and regular consultation of those agencies working with a child and family involved in the child welfare system.

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xxiii Data provided by a key informant through personal correspondence.

Table 74: Department of Child Safety Reports and Removals, April to September 2016

	Number of reports received,	assigned, April to	Number of reports with removal, April to September 2016	Removal rate
La Paz/Mohave Region	N/A	N/A	N/A	N/A
La Paz County	78	66	7	11%
Mohave County	806	797	115	14%
ARIZONA	24,787	24,403	2,967	12%

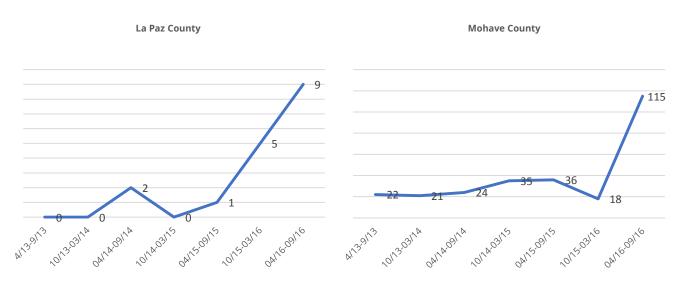
Source: Department of Child Safety (2016). Child welfare reporting requirements semi-annual report for the period of April 1, 2016 through September 30, 2016. Tables 5, 15. Retrieved from https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirments\_Apr16\_Sept16.pdf

Table 75: Department of Child Safety Substantiated Maltreatment Reports, April to September 2016

	Number of substantiated maltreatment reports	Neglect	Physical Abuse	Sexual Abuse	Emotional Abuse
La Paz/Mohave Region	N/A	N/A	N/A	N/A	N/A
La Paz County	9	100%	0%	0%	0%
Mohave County	115	84%	14%	2%	0%
ARIZONA	2,823	87%	10%	2%	0%

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

Figure 36. Total number of reports assigned for investigation resulting in substantiation, April 2013-September 2016



 $Source: Department \ of \ Child \ Safety \ (2016). \ Child \ welfare \ reporting \ requirements \ semi-annual \ reports. \ https://dcs.az.gov/data/dcs-documents$ 

Table 76: Children Entering Out-of-Home Care, April to September 2016

		removal within the previous 24	Percent of children with a prior removal within the previous 24 months
La Paz/Mohave Region	N/A	N/A	N/A
La Paz County	23	0	0%
Mohave County	229	18	8%
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

Figure 37. Number of children entering out-of-home care, April 2013-September 2016



Source: Department of Child Safety (2016). Child welfare reporting requirements semi-annual reports. https://dcs.az.gov/data/dcs-documents

Table 77: Number of Dependency Cases in Mohave County Courts (age birth to 5)

	2011	2012	2013	2014	2015	1st 9 months of 2016
Mohave County	107	120	170	221	184	170

 $Source: Dependency\ case\ data\ obtained\ from\ key\ informant\ via\ personal\ correspondence.$ 

## **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. In fiscal year 2015, one domestic violence shelter in La Paz County, Colorado River Regional Crisis Shelter, served 110 people, 34 (31%) of whom were children. In Mohave County, three organizations, Kingman Aid to Abused People, Sally's Place – Interagency Council Lake Havasu City, and WestCare Arizona served 321 people, 106 (33%) of whom were children (Table 79). The average length of stay for those served in La Paz County was 34 days, shorter than the statewide average of 39 days. The average length of stay at shelters in Mohave County ranged from 23 to 97 days. Additionally, 124 calls were made to hotline and information and referral (I&R) numbers in La Paz County, and 652 calls were made in Mohave County, representing four percent of such calls statewide (Table 78).

Table 78: Domestic Violence Shelters, FY2015

		Number of adults served			Average length	Number of hours of support	Number of hotline and information-and- referral (I&R) calls
La Paz/Mohave Region	N/A	N/A	N/A	N/A	N/A	N/A	N/A
La Paz County	110	76	34	3,742	34 days	1,817	124
Mohave County	321	215	106	10,785	50 days	1,728	652
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

### **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. XXXIV La Paz County is served by the South GSA, which is serviced by Cenpatico Integrated Care, and Mohave County is served by the North GSA, which is serviced by Health Choice Integrated Care. Prior to October 2015, La Paz County was serviced by Cenpatico Behavioral Health Services (CBHS), and Mohave County was served by the Northern Arizona Behavioral Health Authority (NARBHA). The data received for this report is for the period before the change to HCIC and Cenpatico Integrated Care.

In 2015, 853 pregnant or parenting women received publically-funded behavioral health services in the La Paz/Mohave Region, the vast majority of whom resided in Mohave County (Table 79). This represents a decrease of 16 percent from the 1,021 women who received services in 2012, a smaller decrease than across the state overall (-24% from 2012 to 2015). The number of children ages birth to 5 receiving behavioral health services in the La Paz/Mohave Region showed an opposite trend, and actually increased from 2012 (n=459) to 2015 (n=504), amounting to a 10 percent increase (Table 80). This represents roughly 10 percent of young children in poverty in the La Paz/Mohave Region (compared to about 9 percent of young children in poverty receiving services statewide). It is estimated that about 13 percent of low-income children aged 6 to 11 years old covered by Medicaid have mental health problems<sup>212</sup>, suggesting that although there is improving coverage in the La Paz/Mohave Region, there may be an unmet need for services for about 200 additional young children.<sup>xxv</sup> In addition, the number of children served in La Paz County actually decreased from 2012

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

xxv Representing the difference between the 504 low-income children (10%) currently served, and the estimated 700 (13%) likely in need.

to 2015 (-26%), while the number of children served in Mohave County increased (+11%) (Table 80), indicating a particular need in La Paz County.

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 La Paz/Mohave 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.

Community members surveyed as part of the Kingman Regional Health Center and Mohave County Department of Public Health's 2016 Community Health Needs Assessment ranked drug addiction as the top health challenge, followed by obesity and overweight and mental health. \*xxvi\* Similarly, respondents in focus groups conducted as part of the Needs Assessment, identified mental health and substance abuse as the major health concerns facing the county. The lack of affordable, quality and compassionate services for addressing mental health and substance use issues was cited as a key barrier to addressing this top health concern. Again, key informants interviewed also identified substance use and mental health as the most pressing health concern facing the county. The consensus among community members providing perspectives for the Needs Assessment is striking.

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>

xxvi Kingman Regional Health Center and Mohave County Department of Public Health. Community Health Needs Assessment 2016 Draft. Provided by a key informant via personal correspondence.

Table 79: Number of Pregnant or Parenting Women Receiving Behavioral Health Services, 2012 to 2015

	2012	2013	2014		Change from 2012 to 2015
La Paz/Mohave Region	1,021	886	882	853	-16%
La Paz County	<25	<25	<25	<25	DS
Mohave County	1,018	880	875	850	-17%
ARIZONA	19,134	17,731	13,657	14,546	-24%

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

Table 80: Number of Children (Ages 0 to 5) Receiving Behavioral Health Services, 2012 to 2015

	2012	2013	2014		Change from 2012 to 2015
La Paz/Mohave Region	459	496	548	504	10%
La Paz County	35	39	38	26	-26%
Mohave County	452	492	543	500	11%
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\*\*xvii

 $<sup>^{</sup>xxvii}$  The majority of this section of the report was prepared by the First Things First Communications Division.

# Why Communication, Public Information, and Awareness Matter

Public awareness of the importance of early childhood development and health is a crucial component of efforts to build a comprehensive, effective early childhood system in Arizona. Building public awareness and support for early childhood is a foundational step that can impact individual behavior as well as the broader objectives of system building. For the general public, information and awareness is the first step in taking positive action in support of children birth to 5, whether that is influencing others by sharing the information they have learned within their networks or taking some higher-level action such as elevating the public discourse on early childhood by encouraging increased support for programs and services that impact young children. For parents and other caregivers, awareness is the first step toward engaging in programs or behaviors that will better support their child's health and development.

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

There is no one single communications strategy that will achieve the goal of making early childhood an issue that more Arizonans value and prioritize. Therefore, integrated strategies that complement and build on each other are key to any successful strategic communications effort. Employing a range of communications strategies to share information – from traditional broad-based tactics such as earned media to grassroots, community-based tactics such as community outreach – ensures that diverse audiences are reached more effectively wherever they are at across multiple mediums. Other communications strategies include: strategic consistent messaging, brand awareness, community awareness tactics such as distribution of collateral and sponsorship of community events, social media, and paid media which includes both traditional and digital advertising. Each of these alone cannot achieve the desired outcome of a more informed community, so a thoughtful and disciplined combination of all of these multiple information delivery vehicles is required. The depth and breadth of all elements are designed to ensure multiple touch-points and message saturation for diverse audiences that include families, civic organizations, faith communities, businesses, policymakers and more.

# What the Data Tell Us

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

Results of these statewide efforts from SFY2011 through SFY2016 include:

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

- The placement of more than 2,400 stories about early childhood in media outlets statewide;
- Increased digital engagement through online platforms for early childhood information, with particular success in the growth of First Things First Facebook Page Likes, which grew from just 3,000 in 2012 to 124,000 in 2016.
- Statewide paid media campaigns about the importance of early childhood from FY10 through
  FY15 included traditional advertising such as television, radio and billboards as well as digital
  marketing. These broad-based campaigns generated millions of media impressions over that
  time frame; for example in FY15 alone, the media campaign yielded over 40 million media
  impressions.

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

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

Table 81. First Things First Engagement of Early Childhood supporters, SFY2014 through SFY2016

La Paz/Mohave Region	Friends 688		Champions 19
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

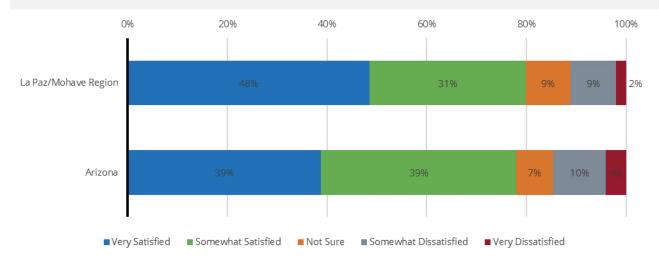
annual report) and also has instituted a quarterly email newsletter for policymakers and their staff with the latest news regarding early childhood.

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.

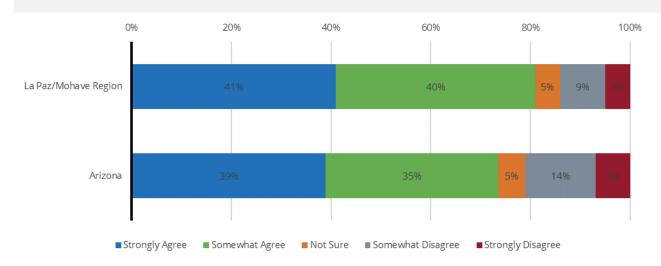
Another source of information on parents' perceptions of communication and information in the region comes from the 2012 First Things First Family and Community Survey. In addition to measuring parent knowledge, skills, and behaviors related to their young children, the 2012 First Things First Family and Community Survey collected data on parents' perceptions regarding resources available to young children and their families across Arizona. Results from the survey demonstrated that residents of the La Paz/Mohave Region had higher levels of satisfaction with available information and resources, and agreement with ease of locating services than residents elsewhere in the state. Almost half (48%) of La Paz/Mohave Region respondents indicated they were "very satisfied" with the community information and resources available to them about their children's development and health, compared to 39 percent of respondents across the state (see Figure 38). Four out of five (81%) La Paz/Mohave Region respondents "strongly" or "somewhat agreed" that it is easy to locate services that they want or need, compared to 74 percent of respondents across the state (see Figure 39). In the La Paz/Mohave region, 43 percent of parents expressed some level of satisfaction while 34 percent of parents expressed some level of dissatisfaction (see Figure 40). Satisfaction rates in the region were similar to those across Arizona, although a lower proportion of La Paz/Mohave respondents were very dissatisfied (5%) compared to other Arizona residents (11%).

Figure 38: Responses to "How satisfied are you with the community information and resources available to you about children's development and health?"



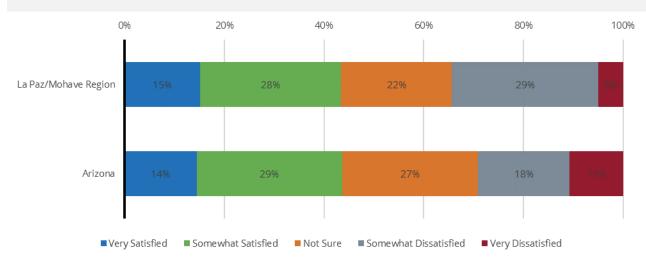
Source: First Things First (2014). [2012 Family and Community Survey dataset]. Unpublished data.

Figure 39: 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 40: 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 Matters**

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

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

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

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

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

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

### Coordination and Collaboration Survey:

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

The Coordination and Collaboration survey asked system partners about their organization's role in the Early Childhood System; the system building efforts within each area of the Early Childhood System in the region (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.

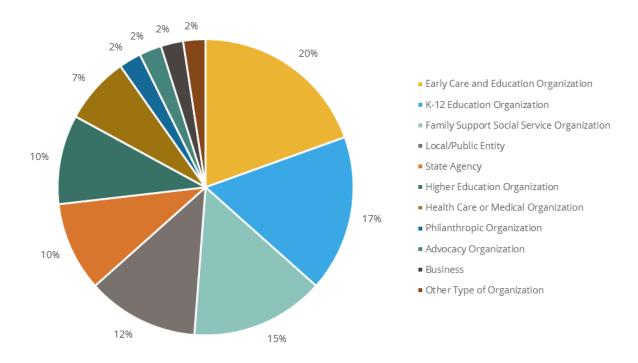
# What the Data Tell Us

The results are based on the responses from 41 respondents that participated in the survey from the La Paz/Mohave Region out of 90 that were contacted to participate, for a 46 percent overall survey response rate. However, not all respondents answered each question, so the number of respondents varies by question. Each figure or table indicates the number of people responding to that particular question.

Respondents represented many sectors of the early childhood system in the region. The most common organization type among respondents was Early Care and Education (20%), followed by K-12 Education (17%), Family Support/Social Service agencies (15%), and Local/Public Entities (12%) (Figure 41).

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

Figure 41. Sectors with which organizations work (N=41)

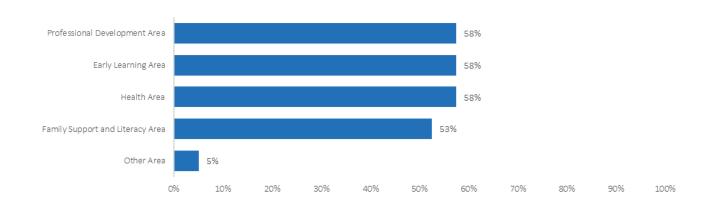


Note: The percentages above may not add to 100% due to rounding.

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

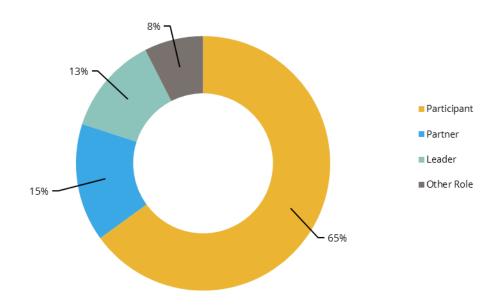
The majority of respondents (89%) consider themselves to be a part of the early childhood system in the La Paz/Mohave Region. Although they were from diverse types of organizations, respondents were equally likely to report engaging with Professional Development, Early Learning and Health (58% each) (Figure 42). Almost as many respondents (53%) reported engaging with Family Support and Literacy.

Figure 42. Area(s) of the early childhood system that organizations engage with (N=40)



When asked about their organization's role in the development and advancement of the early childhood system in the La Paz/Mohave Region, respondents most commonly viewed their organization's role as a Participant (65%), i.e., one of many community organizations involved in supporting the early childhood system (Figure 43). Fewer than one in six (15%) described their organization's role as Partner, i.e., part of a group responsible for co-convening and/or facilitation and one of many community members involved in a community-based initiative. Thirteen percent indicated their organization was a Leader, i.e., they take the lead for convening and facilitating a group of community members. Eight percent of respondents considered their organization's role in the development and advancement of the Early Childhood System as something "other" than the already-defined roles of Participant, Partner, or Leader. Those respondents defined their role as a provider of counseling services, a manager of special needs services or as a primary care physician.

Figure 43. Role of organization in the development and advancement of the Early Childhood System in La Paz/Mohave County (N=40)



### 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 La Paz/Mohave 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 La Paz/Mohave Region has founded a variety of countywide initiatives to enhance the early childhood system in the region including:

### Connecting children in foster care with early learning programs:

Convene system partners to identify barriers and challenges to children in foster care participating in quality early learning programs and working to address those barriers.

Multiple agencies' collaboration on children with special needs, early intervention, and Child Find: Raise awareness of existing resources and developing additional opportunities for children to be screened and referred for assessment and services through joint planning by system partners.

### Home Visitation Collaborative:

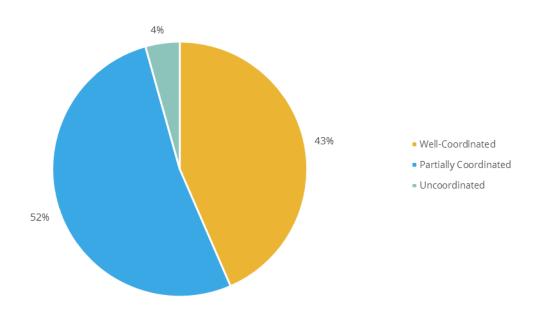
Help to clarify service areas and eligibility, coordinating referrals across programs and ensuring families have access to the most appropriate programs to meet the needs of the families.

### La Paz Mohave Oral Health

Promote health (including physical, mental and oral health, nutrition, and social and emotional well-being) by including health as a central focus of all early childhood services and connecting families with appropriate and timely health information and resources.

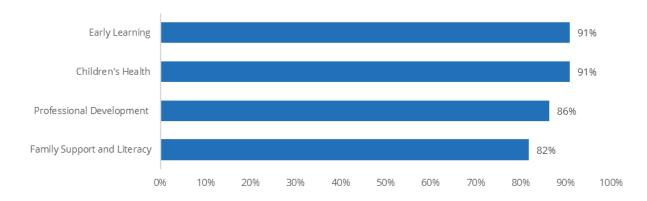
A majority (52%) of survey respondents described the early childhood system in the La Paz/Mohave Region as a partially coordinated system, with less than half of respondents (43%) describing the system as a well-coordinated system, and four percent (1 respondent) viewing the early childhood system as a group of separate, uncoordinated system partners working in isolation (Figure 44).

Figure 44. Describe the Early Childhood System in La Paz/Mohave Region (N=23)



The majority of respondents reported that the early childhood system in the La Paz/Mohave Region effectively addresses the needs of young children and their families (Figure 45). Nearly all respondents (91%) agreed that young children's early learning and health needs are effectively addressed by the system in the region. In addition, more than four in five respondents felt that professional development (86%) and family support and literacy (82%) needs were effectively addressed.

Figure 45. Percent agreeing that the Early Childhood System in La Paz/Mohave Region effectively addresses the needs of young children and their families across key areas (N=22)



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 46).

Figure 46. The five levels of the Continuum of Collaboration

No Interaction	Networking	Cooperation	Coordination	Collaboration
Lower Intensity			H	igher Intensity

These stages, as described by Frey and colleagues, <sup>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 La Paz/Mohave Region for each area of the Early Childhood System. Just over half of the respondents chose to complete this section (n=22). In accordance with respondents' view of the early childhood system as a partially coordinated system (Figure 44), the results did not indicate strong support for a high level of collaboration, the highest and

most intense level of system partners working together along the Continuum of Collaboration. The most *collaboration* among partners in the La Paz/Mohave Region reportedly happened within the area of Early Learning, where 23% of respondents indicated that *collaboration* was occurring. Fourteen percent of respondents assigned the level of *collaboration* to each of the three other system areas, Family Support and Literacy, Health, and Professional Development (Figure 47).

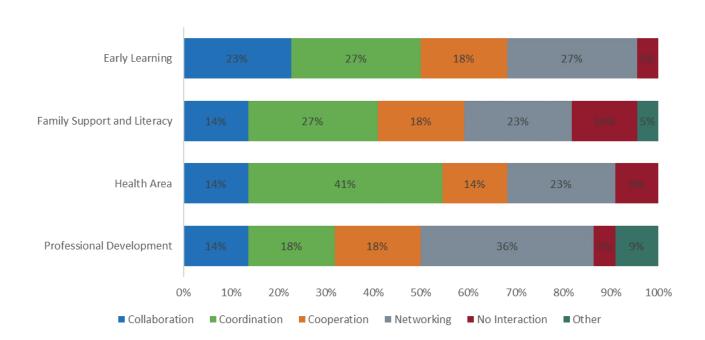


Figure 47. Continuum of Collaboration in the Early Childhood System Areas (n=22)

Across two areas (Health and Family Support and Literacy), the greatest proportion 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 47). Networking, a relationship of low intensity, characterized by bringing individuals or organizations together for relationship building and information sharing, was more frequently indicated in the area of Professional Development (36%) than in other areas. Networking equaled *coordination* in the area of Early Learning (27% for each).

### Sectors involved in the Early Childhood Building

Within each of the four areas of the Early Childhood System, survey participants were asked to indicate which sectors are involved in building systems for that area. In the area of Family Support and Literacy, respondents felt that Early Care and Education (76%), Family Support/Social Service (71%), and State (71%) agencies were most involved in system building work in La Paz/Mohave Region (Figure 48).

<sup>&</sup>lt;sup>xxx</sup> Note that only 16 to 17 participants completed this portion of the survey.

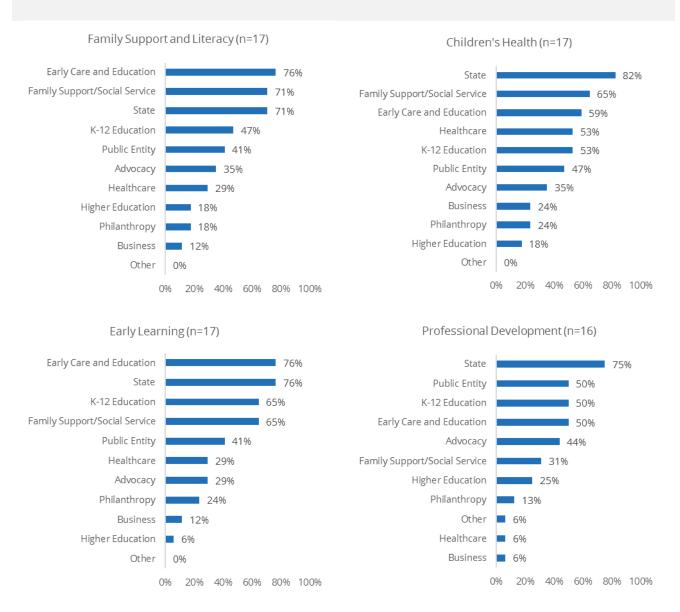
In the area of Children's Health, respondents indicated that State (82%), Family Support/Social Service (65%), and Early Care and Education (59%) sectors were the most engaged in systems buildings.

In the area of Early Learning, three-quarters of respondents (76%) noted that the Early Care and Education and State sectors played a role in systems building. A majority of respondents also indicated engagement by K-12 Education and Family Support and Social Service sectors (65% each).

Finally, in the area of Professional Development, the highest proportion of participants (75%) indicated that State Agencies were involved, followed by Public Entities, K-12 Education and Early Care and Education (50% each) sectors.

Across all four areas, the Business, Philanthropy, and Higher Education sectors played fairly small roles in system building work in the La Paz/Mohave Region (Figure 48). Business was most important for Children's Health, where 24 percent of respondents indicated its involvement. Philanthropy was rated equally important for Children's Health and Early Learning, where 24 percent of participants indicated its involvement. Higher Education was the most engaged in work around Professional Development, where 25 percent of respondents noted contribution from that sector.

Figure 48. Sectors involved in/engaged in system building work in La Paz/Mohave Region

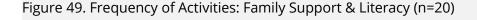


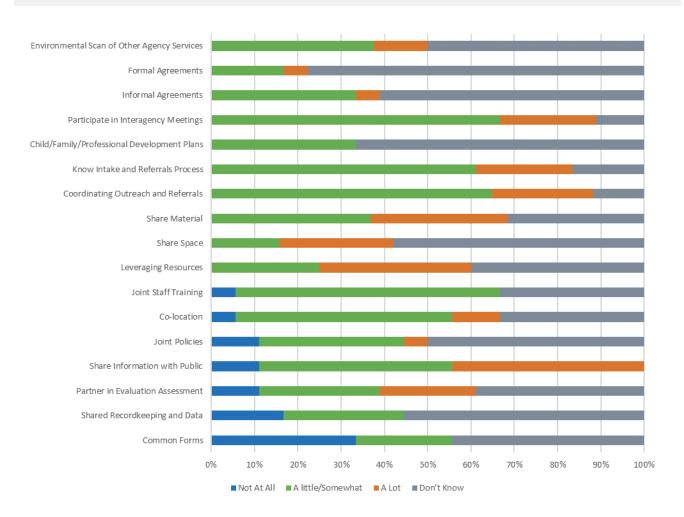
The following data reflect questions asking respondents about how frequently key activities that are known indicators of collaborative work were occurring. It should be noted that many of those who agreed to take the survey opted not to respond to this portion of the survey. \*\*xxi\*\* Of those who did respond, many indicated that they did not know the answer for many activities.

Based on the answers of those who did respond (n=18 to 20, depending on the question), activities that system partners within Family Support and Literacy are using include: a shared approach to informing the public of available services, coordination of outreach and referrals, knowledge of other programs'

xxxii Based on the pool of 90 organizations and agencies who were sent the survey, this portion of the survey has a response rate of 20-23%.

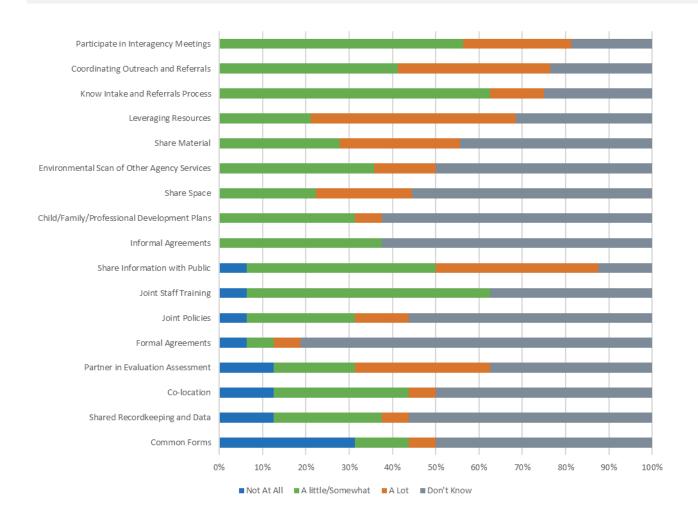
intake requirements/referral process, participation in interagency meeting, shared development of program materials, and leveraging resources/funding across partners (Figure 49). Areas where there is a low perceived level of activity include: using common forms (e.g., intake and/or referral forms), shared recordkeeping and data, having formal and informal agreements, and developing child and family service plans and/or professional development plans.





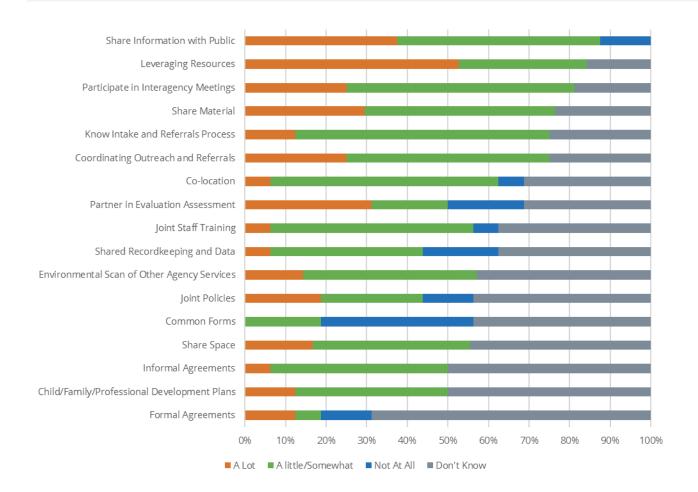
Activities that system partners within the Children's Health area are using include: a shared approach to informing the public of available services, leveraging resources/funding across partners, coordination of outreach and referrals, participation in interagency meeting, and knowledge of other programs' intake requirements/referral process (Figure 50). Areas where there is a low perceived level of activity include: having formal and informal agreements and using common forms (e.g., intake and/or referral forms).

Figure 50. Frequency of Activities: Children's Health (n=19)

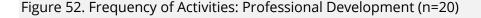


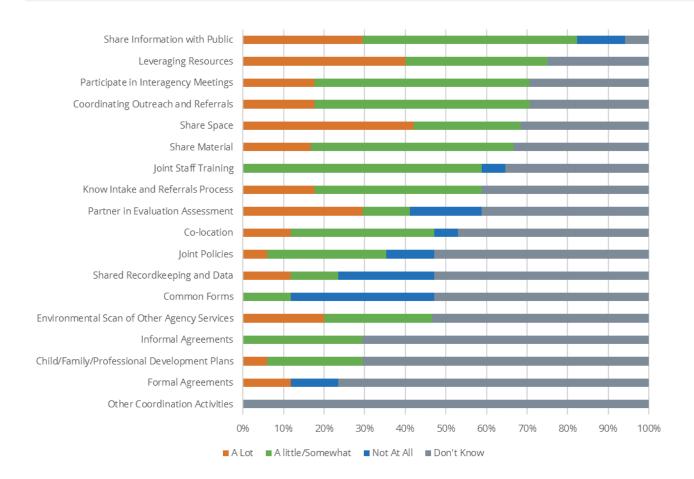
Activities that system partners within the Early Learning area are perceived to be actively engaged in include: shared approach to informing the public of available services, leveraging resources/funding across partners, shared development of program materials, participation in interagency meeting, coordination of outreach and referrals, and knowledge of other programs' intake requirements/referral process (Figure 51). Activities where there is a low perceived level of use include: using common forms (e.g., intake and/or referral forms) and having formal agreements.

Figure 51. Frequency of Activities: Early Learning (n=19)



Activities that system partners within the Professional Development area are perceived to be actively engaged in include: using shared approaches to informing the public of available services, leveraging resources/funding across partners, sharing space, knowledge of other programs' intake requirements/referral process, and coordinating outreach and referrals (Figure 52). Activities where there is a low perceived level of use include: using common forms (e.g., intake and/or referral forms), having formal agreements, and shared recordkeeping and data.





Commonalities that emerged across all four topic areas were that respondents expressed relatively little use of common forms (e.g., intake and/or referral forms) and formal agreements. These activities may be opportunities for system partners to collaborate on in the future.

### **Barriers and Future Directions**

Participants were also asked to reflect on barriers in moving the system forward with other Early Childhood System Partners. The most commonly cited barrier was geographic, that is, the challenges of serving an area with high travel times and limited access to rural communities. Another common theme was the fact that the region is comprised of two separate counties (La Paz County and Mohave County) and this creates lack of knowledge about "what services are available and who is eligible." Relatedly, multiple respondents cited lack of consistent communication between agencies and programs as a contributing factor to this gap of knowledge. It was also mentioned that parent/family participation and retention are barriers, as well as a lack of mental health consultants. According to one respondent, a barrier was also the absence of a "common language when working with children and their families."

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 region. Noted contributions included improving communication between entities, conducting meetings with participants from multiple professions, holding multi-agency conferences (e.g., Infant Toddler Mental Health Conference) and events (e.g., Week of the Young Child).

Additional ideas for ways that the Regional Partnership Council could support Early Childhood System Building and partner collaboration efforts in the region included, holding quarterly forums to provide information on all early childhood trainings and opportunities, sharing resources more regularly across agencies, and promoting more collaborative activities among early childhood agencies to strengthen relationships between organizations. Moving beyond providing information and trainings was also a recommendation to move collaboration efforts forward. One respondent pointed out that there should be a consideration of "what the specific collaborative results have been in terms of forwarding outcomes of regionally funded strategies."



**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 La Paz/Mohave 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 qualitative data gathered through discussion with key informants in the region. A summary of identified regional assets is included below.

### **Economic Characteristics**

- Unemployment rates have been dropping steadily in La Paz County, Mohave County and the state since 2010. In 2016, the unemployment rate in La Paz County was six percent and in Mohave County 6.6 percent, compared to 5.3 percent for the state.
- Of the 86,921 occupied housing units in the La Paz/Mohave Region, 69 percent are occupied by home-owners (compared to 63% across the state), with over 80 percent of homes owneroccupied in the Dolan Springs-Golden Valley, Littlefield-Beaver Dam, Quartzite-Ehrenberg and Salome-Bouse-Wenden sub-regions.

### **Early Learning**

• An increase in the number of children receiving DES child care subsidies (2013=756, 2015=1,150), accompanied with a decrease in the waitlist numbers for those subsidies (2013=281, 2015=185), in the region.

### Child Health

- A low proportion of babies born with low birth-weight (region=6.3%; state 7%) or premature (region=7.6%; state 9%), meeting the Healthy People 2020 targets.
- Increases in the rate of breast-feeding among WIC participants in the region (+12% since 2013).
- High rates of immunizations for the three major (DTAP, polio, and MMR) vaccine series in child care and Kindergarten in the region.
- A decrease in the obesity rate among children participating in WIC (2012=9.1%; 2015=8.2%), which meets the Healthy People 2020 target.

### **Family Support and Literacy**

- A decrease in annual reports of child abuse and neglect for the Fort Mojave Indian Tribe;
   October 2014–September 2015 (48 referrals received), October 2015–September 2016 (24 referrals received).
- The work of the Mohave County Infant and Toddler Mental Health Court Team which seeks to improve outcomes for infants, toddlers and their families involved in the child welfare system in order to reduce or prevent future court involvement.

An increase in the number of children ages birth to 5 receiving behavioral health services in the region (+10%), although this increase only applies to Mohave County.

## Communication, Public Information, and Awareness

Over 700 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

- Ten of 23 respondents (43%) to the Coordination and Collaboration Survey described the early childhood system in the La Paz/Mohave Region as a well-coordinated system. An additional 12 respondents (52%) described it as a partially coordinated system.
- The La Paz/Mohave Region has founded a variety of countywide initiatives to enhance the early childhood system including; connecting children in foster care with early learning programs, multiple agencies' collaboration on children with special needs, early intervention, and Child Find, the Home Visitation Collaborative and La Paz Mohave Oral Health.

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 three large cities in Mohave County and the town of Parker in La Paz County are more likely to have resources and opportunities for young children and their families, there are continuing needs across all sub-regions of the La Paz/Mohave Region. These areas run the risk of being overlooked for services if only regional or county-level "averages" are examined. Many of these have been recognized as ongoing issues by the La Paz/Mohave Regional Partnership Council and are being addressed by current First Things First-supported strategies in the region. These include:

- A need for additional child care capacity The available child care capacity in the region (between four and seven children in the region for every available child care slot), the proportion of working parents (63% of young children live in homes where all parents are in the labor force), the length of wait lists for Head Start programs and high levels of poverty in the region, all point to a shortage of affordable and accessible early care and education opportunities in the region.
- The need for additional resources for children with special needs With approximately three percent of young children in the region receiving early intervention services, and 11 percent of children in kindergarten through third grade enrolled in special education services in school, it seems that increased availability of and access to early intervention services in children's youngest years may be needed.
- An increase in the number of substantiated cases of abuse and neglect Over the last seven Department of Child Safety (DCS) reporting periods, there has been a marked increase in the number of substantiated cases of abuse and neglect resulting in removal from the home. In La Paz County, while the number of substantiated cases has remained below 10, the number increased by a factor of nine since the April 1-September 30, 2015 reporting period. In Mohave County, the most notable increase happened in the reporting period ending in September 30,

2016, when there were 115 substantiated cases resulting in removal up from 18 in the prior period. This is coupled with an overall increase in the number of children entering out of home care in both counties, and a need for additional foster homes in the region.

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

### **Population Characteristics**

- In four sub-regions and the Fort Mojave Indian Tribe, [Quartzite-Ehrenberg (71%), Fort Mojave Indian Tribe (Arizona part) (70%), Littlefield-Beaver Dam (65%), Bullhead City and Parker-Strip-Cienega Springs (both 57%)], more than half of young children live with a single parent.
- Approximately a quarter of the grandchildren living with their grandparents in the Kingman and Lake Havasu City sub-regions are being raised with no parent present.

### **Economic Characteristics**

- There is a high proportion of young children living in poverty in the region, particularly in the Colorado City-Centennial Park (61%), Dolan Springs-Golden Valley (58%), Salome-Bouse-Wenden (49%), and Fort Mohave-Mohave Valley-Topock (47%) sub-regions.
- Almost two-thirds of families (63%) in the region with children aged four and under live below 185 percent of the FPL, higher than the 49 percent across the state.
- There have been substantial decreases in TANF (-45%), SNAP (-16%) and WIC (2012=71%; 2015=54%) participation in the region.
- Decreases in the number of meals provided by the Summer Food Service Program in Mohave County (-6%) and the Child and Adult Care Food Program in La Paz County only (-24%).

# **Early Learning**

- There is a high ratio of young children to available child care slots (4 to 7 children per available slot) in the region indicating a need for additional capacity.
- Single parent homes have a lower median income, resulting in a higher proportion of their income being spent on child care. In four sub-regions and the Fort Mojave Indian Tribe, more than half of children live with a single parent [Quartzite-Ehrenberg (71%), Fort Mojave Indian Tribe (Arizona part) (70%), Littlefield-Beaver Dam 65%, Bullhead City and Parker-Strip-Cienega Springs (both 57%)], increasing the proportion of household income that would need to be spent on child care in those areas.
- Early intervention services to prevent and address developmental delay are provided to approximately three percent of children aged birth through 2 years in the La Paz/Mohave Region; an estimated 700 children in the region who would benefit from early intervention services are not receiving them.

## Child Health

- High population to health care provider ratios in the region. Only the Kingman (435 to 1) and Parker (289 to 1) Primary Care Areas (PCAs) have a lower ratio than across the state (449 to 1). Five other PCAs in the region have a higher ratio indicating a need for more primary care providers.
- Fourteen percent of young children in the region were estimated to be uninsured, compared to 10 percent across the state. Almost one-third of children in the Dolan Springs-Golden Valley (31%) and Colorado City-Centennial Park (28%) sub-regions and the Fort Mojave Indian Tribe (Arizona part) (28%) were uninsured.
- A high proportion of mothers in the La Paz/Mohave Region reported smoking while pregnant (region= 13.4%-18.7%; Arizona=3.9%-4.6%).

### Family Support and Literacy

- Over the last seven Department of Child Safety (DCS) reporting periods, there has been a marked increase in the number of substantiated cases of abuse and neglect resulting in removal from the home. In La Paz County, while the number of substantiated cases has remained below 10, the number increased by a factor of nine since the April 1-September 30, 2015 reporting period. In Mohave County, the most notable increase happened in the reporting period ending in September 30, 2016, when there were 115 substantiated cases resulting in removal up from 18 in the prior period.
- Increases in the number of children entering out of home care in both La Paz (up from 10 to 23 over last two DCS reporting periods) and Mohave (up from 166 to 229 over last two DCS reporting periods) Counties.
- A decrease in the number of pregnant or parenting women receiving publically-funded behavioral health services in the La Paz/Mohave Region (2012=1,021; 2015=853).

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 La Paz/Mohave Regional Partnership Council and staff, local providers, and other community stakeholders in the region. Families are drawn to the La Paz/Mohave 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 La Paz/Mohave Region.

# **APPENDICES**

# **Table of Regional Strategies**

# La Paz/Mohave Regional Partnership Council Planned Strategies for Fiscal Year 2017

<b>Strategy</b> Quality First	Strategy description  Quality First – a signature program of First Things First – partners with regulated early childhood providers to make quality improvements that research proves help children birth to 5 thrive, such as education for	
	teachers to expand their expertise in working with young children. It also supports parents with information about what to look for in quality early childhood programs that goes beyond health and safety to include a nurturing environment that supports their child's learning. Quality First includes multiple components to support early care and education program quality improvement, including: valid and reliable program assessment, on-site technical assistance, and financial incentives. The Quality First Academy is included to support the assessors and technical assistance providers in their work with program staff.	
Court Teams	The intent of this evidence-informed strategy is to improve outcomes for infants and toddlers and their families involved in the child welfare system in order to reduce or prevent future court involvement. The expected result is that informed local communities can strengthen the support and care for infants, toddlers and their families in the Juvenile Court system. This is accomplished through training, shared planning, systems improvement and regular consultation of those agencies working with a child and family. Court Team implementation may include recommending and referring infants, toddlers and families for services, but does not directly provide these services.	
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, 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.	
Community Based Professional Development Early Care and Educational 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.	
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.	
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.	

# **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>216</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>217</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 La Paz/Mohave 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 La Paz/Mohave Region. The most recent and most reliable ACS data are averaged over the past five years; those are the data included in this report. They are based on surveys conducted from 2010 to 2014. In general, the reliability of ACS estimates is greater for more populated areas. Statewide estimates, for example, are more reliable than county-level estimates.

### **Data Suppression**

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

For some data, an exact number was not available because it was the sum of several numbers provided by a state agency, and some numbers were suppressed in accordance with agency guidelines. In these cases, a range of possible numbers is provided, where the true number lies within that range. For example, for data from the sum of a suppressed number of children ages 0-12 months, 13 children ages 13-24 months, and 12 children ages 25-35 months, the entry in the table would read "26 to 34." This is because the suppressed number of children ages 0-12 months is between one and nine, so the possible range of values is the sum of the two known numbers plus one to the sum of the two known numbers plus nine. Ranges that include numbers below the suppression threshold of less than ten or twenty-five may still be included if the upper limit of the range is above ten or twenty-five. Since a range is provided rather than an exact number, the confidentiality of program participants is preserved.

### **Reporting Data over Time**

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

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

#### School District Data

A number of educational indicators were included in this report based on data received from the ADE at the school level. These data were then aggregated by region (e.g., the sum of all students in special education preschool in the region) and by regional portions of districts (e.g., the sum all students in special education preschool in a particular school district in the region) as well as by the county and state. Since ADE school districts do not follow FTF regional boundaries, district data may not represent the school district as a whole but rather the portion of that district which falls within a given region. School districts that straddle regional boundaries can be identified in Figure 14. For these districts, only the data for schools falling within regional boundaries was included in the district calculation. Data for charter schools were aggregated to a single number for all charter school located within a given region.

### **Child Care Capacity Calculations**

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

providers, Head Start centers, or Public School providers. Unlicensed or unregulated care providers could not be included in calculations of child care capacity as information on the location and capacity of these providers is not collected in a systematic way at a county or state level.

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

### **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 La Paz/Mohave Regional Partnership Council has identified the following topics as priority areas child care providers, pediatric health care providers serving children with special needs and foster care.

In the fall of 2016, a participatory Data Interpretation Session was held to review preliminary results of the data received, compiled and analyzed as of June 2016. Regional Partnership Council members and other participating key stakeholders were involved in facilitated discussion to allow them to share their local knowledge and perspective in interpreting the available data. The La Paz/Mohave Region Data Interpretation Session was held in Lake Havasu City on September 28, 2016 and included invited community members as well as the members of the Regional Partnership Council, the Regional Director and the Senior Director. Feedback from participating session members are included as key informant citations within the report, as appropriate. A separate Data Interpretation Session was held with representatives of the Fort Mojave Indian Tribe to review data specific to the tribe. This session was held December 8, 2016, facilitated in-person by Senior Director of Tribal Affairs of First Things First, and attended by regional FTF staff members. Members of the CRED team attended by phone.

## 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>218</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 La Paz/Mohave 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. In addition, the survey collected information on behavioral and demographic characteristics associated with this condition. Healthy Smiles Healthy Bodies included the following primary components – (1) a dental screening and (2) an optional parent/caregiver questionnaire. During the 2014-2015 school year, Healthy Smiles Healthy Bodies collected information from children at 84 non-reservation district and charter schools throughout Arizona. A total of 3,630 kindergarten children in Arizona received a dental screening. In the La Paz/Mohave Region, 158 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. 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

xxxxii 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.

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

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

the sample resulting in 104 schools representing 99 sampling intervals, of which 84 agreed to participate.

# **Survey Limitations**

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

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

# **Coordination and Collaboration Survey Methods**

System partners in 18 First Things First county-based regions were asked by First Things First to participate in the Coordination and Collaboration Survey in an effort to learn more about how system partners view their role in the region's early childhood system and to what extent they collaborate and coordinate with other system partners. Ten regions elected to conduct region-specific surveys including, Cochise, Coconino, Gila, Graham/Greenlee, La Paz/Mohave, Navajo/Apache, Pinal, Santa 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. Tribal contacts (organizations/ stakeholders) in nested tribes were deliberately excluded because First Things First did not have tribal approvals.

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

### Possible stakeholder areas:

- Potential Categories
- Higher Education
- K-12 Education
- Community Family Support Programs
- Public/Community Health Programs

- Child Care/Early Learning/Head Start programs
- Professional Development
- State/City/County Governments
- Public Library
- Philanthropy/Foundations
- Faith Based Organizations
- Military
- Coalition/Networking groups (including Read On)
- Community Service Groups
- FTF Grant Partner
- Other

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

# REFERENCES

<sup>1</sup>U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. (2014). Child Health USA 2014: Population characteristics. Retrieved from https://mchb.hrsa.gov/chusa14/population-characteristics.html

<sup>&</sup>lt;sup>2</sup> Arizona Department of Health Sciences. (2015). Arizona Maternal Child Health Needs Assessment. Retrieved from http://azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/title-v/needs-assessment2015.pdf

<sup>&</sup>lt;sup>3</sup> Fremstad, S. & Boteach, M. (2015). Valuing all our families: Progressive policies that strengthen family commitments and reduce family disparities. Washington, DC: Center for American Progress. Retrieved from https://cdn.americanprogress.org/wp-content/uploads/2015/01/FamilyStructure-report.pdf

<sup>&</sup>lt;sup>4</sup> Kidsdata.org. (n.d.). Summary: Family structure. Retrieved from: http://www.kidsdata.org/topic/8/family-structure/summary

<sup>&</sup>lt;sup>5</sup> Vandivere, S., Yrausquin, A., Allen, T., Malm, K., and McKlindon, A. (2012). Children in nonparental care: A review of the literature and analysis of data gaps. Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Retrieved from http://aspe.hhs.gov/basic-report/children-nonparental-care-review-literature-and-analysis-data-gaps

<sup>&</sup>lt;sup>6</sup> Department of Health and Human Services, Administration for Children and Families, and Children's Bureau. (2016). Site visit report: Arizona Kinship Navigator Project. Retrieved from https://www.childwelfare.gov/pubPDFs/azkinship.pdf

<sup>&</sup>lt;sup>7</sup> American Association for Marriage and Family Therapy. (2015). Grandparents raising grandchildren. Retrieved from http://www.aamft.org/imis15/AAMFT/Content/Consumer\_Updates/Grandparents\_Raising\_Grandchildren.aspx

<sup>&</sup>lt;sup>8</sup> Halgunseth, L. (2009). Family engagement, diverse families and early childhood education programs: An integrated review of the literature. Young Children, 64(5), pp. 56-68.

<sup>&</sup>lt;sup>9</sup> The Build Imitative. (2013). Importance of Home Language Series. Retrieved from http://www.buildinitiative.org/WhatsNew/ViewArticle/tabid/96/ArticleId/209/Importance-of-Home-Language-Series.aspx

<sup>&</sup>lt;sup>10</sup> U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. (n.d.). The benefits of bilingualism. Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/tta-system/cultural-linguistic/docs/benefits-of-being-bilingual.pdf

<sup>&</sup>lt;sup>11</sup> Shields, M. & Behrman, R. (2004). Children of immigrant families: Analysis and recommendations. The Future of Children, 14(2). Retrieved from: https://www.princeton.edu/futureofchildren/publications/docs/14\_02\_1.pdf

<sup>&</sup>lt;sup>12</sup> U.S. Department of Health & Human Services, Administration for Native Americans. (n.d.) Native Languages. For more information, visit http://www.acf.hhs.gov/programs/ana/programs/native-language-preservation-maintenance

<sup>&</sup>lt;sup>13</sup> U.S. Census (2016). 2010 Decennial Census, SF2, Table PCT19. Retrieved from http://factfinder.census.gov

<sup>&</sup>lt;sup>14</sup> Scott, J., Faulkner, M., Cardoso, J. B., & Burstain, J. (2014). Kinship Care and Undocumented Latino Children in the Texas Foster Care System: Navigating the Child Welfare - Immigration Crossroads. Child Welfare, 93(4), 53-69.

<sup>&</sup>lt;sup>15</sup> Cuddeback, G. S. (2004). Kinship family foster care: A methodological and substantive synthesis of research. Children and youth services review, 26(7), 623-639.

<sup>&</sup>lt;sup>16</sup> Brooks-Gunn, J. & Duncan, G. (1997). The effects of poverty on children. Children and Poverty, 7(2), 55-71.

<sup>&</sup>lt;sup>17</sup> McLoyd, V. (1998). Socioeconomic disadvantage and child development. American Psychologist, 53(2), 185-204. doi:10.1037/0003-066X.53.2.185

<sup>&</sup>lt;sup>18</sup> Ratcliffe, C. & McKernan, S. (2012). Child poverty and its lasting consequences. Low-Income Working Families Series, The Urban Institute. Retrieved from http://www.urban.org/research/publication/child-poverty-and-its-lasting-consequence/view/full\_report

<sup>&</sup>lt;sup>19</sup> Duncan, G., Ziol-Guest, K., & Kalil, A. (2010). Early-childhood poverty and adult attainment, behavior, and health. Child Development, 81(1), 306–325. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8624.2009.01396.x/full

<sup>&</sup>lt;sup>20</sup> Gupta, R., de Wit, M., & McKeown, D. (2007). The impact of poverty on the current and future health status of children. Pediatrics & Child Health, 12(8), 667-672.

- <sup>21</sup> Wagmiller, R. & Adelman, R. (2009). Children and intergenerational poverty: The long-term consequences of growing up poor. New York, NY: National Center for Children in Poverty. Retrieved from http://www.nccp.org/publications/pub\_909.html
- <sup>22</sup> Annie E. Casey Foundation. (2016). Arizona 2016 Kids Count Profile. Retrieved from http://www.aecf.org/m/databook/2016KC\_profiles\_AZ.pdf
- <sup>23</sup> National Center for Children in Poverty. (2014). Arizona demographics for low-income children. Retrieved from http://www.nccp.org/profiles/AZ\_profile\_6.html
- 24 Ibid.
- <sup>25</sup> Isaacs, J. (2013). Unemployment from a child's perspective. Retrieved from http://www.urban.org/UploadedPDF/1001671-Unemployment-from-a-Childs-Perspective.pdf
- <sup>26</sup> McCoy-Roth, M., Mackintosh, B., & Murphey, D. (2012). When the bough breaks: The effects of homelessness on young children. Child Health, 3(1). Retrieved from: http://www.childtrends.org/wp-content/uploads/2012/02/2012-08EffectHomelessnessChildren.pdf
- <sup>27</sup> Schwartz, M. & Wilson, E. (n.d.). Who can afford to live in a home?: A look at data from the 2006 American Community Survey. U.S. Census Bureau. Retrieved from https://www.census.gov/housing/census/publications/who-can-afford.pdf
- <sup>28</sup> Federal Interagency Forum on Child and Family Statistics. (2015). America's children: Key national indicators for well-being, 2015. Washington, DC: U.S. Government Printing Office. Retrieved from https://www.childstats.gov/pdf/ac2015/ac\_15.pdf
- <sup>29</sup> Children's Action Alliance. (2016). TANF: What is it? Retrieved from http://azchildren.org/wp-content/uploads/2016/03/TANF-Data-Snapshot.pdf
- <sup>30</sup> Rose-Jacobs, R., Black, M., Casey, P., Cook, J., Cutts, D., Chilton, M., Heeren, T., Levenson, S., Meyers, A., & Frank, D. (2008). Household food insecurity: Associations with at-risk infant and toddler development. Pediatrics, 121(1), 65-72. Retrieved from http://pediatrics.aappublications.org/content/121/1/65.full.pdf
- <sup>31</sup> Ryan-Ibarra, S., Sanchez-Vaznaugh, E., Leung, C., & Induni, M. (2016). The relationship between food insecurity and overweight/obesity differs by birthplace and length of residence. Public Health Nutrition, 1-7. Retrieved from https://www.cambridge.org/core/journals/public-health-nutrition/article/div-classtitlethe-relationship-between-food-insecurity-and-overweightobesity-differs-by-birthplace-and-length-of-us-residencediv/4BEE4D6C09F9FFCABEE404F9E313BE7C
- <sup>32</sup> Food Research and Action Center. (2013). SNAP and Public Health: The role of the Supplemental Nutrition Assistance Program in improving the health and well-being of Americans. Retrieved from http://frac.org/pdf/snap\_and\_public\_health\_2013.pdf
- 33 Ibid.
- <sup>34</sup> U.S. Department of Agriculture, Food, and Nutrition Service. (2015). National School Lunch Program (NSLP). Retrieved from https://www.fns.usda.gov/nslp/national-school-lunch-program-nslp
- <sup>35</sup> For more information on Summer Food Service Program, see http://www.azsummerfood.gov/
- <sup>36</sup> U.S. Department of Agriculture, Food, and Nutrition Service. (2015). National School Lunch Program (NSLP). Retrieved from https://www.fns.usda.gov/nslp/national-school-lunch-program-nslp
- <sup>37</sup> For more information on the CACFP, visit http://www.azed.gov/health-nutrition/cacfp/
- <sup>38</sup> Bruening, K.S., Gilbride, J.A., Passannante, M.R., & McClowry, S. (1999). Dietary intake and health outcomes among young children attending 2 urban day-care centers. Journal of the American Dietetic Association, 99, 1529-1523.
- <sup>39</sup> Ritchie, L. D., Boyle, M., Chandran, K., Spector, P., Whaley, S.E., James, P., ... Crawford, P. (2012). Participation in the Child and Adult Care Food Program is associated with more nutritious foods and beverages in child care. Childhood Obesity, 8, 224–229.
- <sup>40</sup> Korenman, S., Abner, K.S., Kaestner, R., & Gordon, R.A. (2013). The Child and Adult Care Food Program and the nutrition of preschoolers. Early Childhood Research Quarterly, 28, 325–336.
- <sup>41</sup> Ibid
- <sup>42</sup> For more information on the Arizona WIC Program, visit http://azdhs.gov/prevention/azwic/
- <sup>43</sup> Arizona Department of Health Services, Unpublished data.

- <sup>44</sup> Carlson, S. & Neuberger, Z. (2015). WIC Works: Addressing the nutrition and health needs of low-income families for 40 years. Washington, DC: Center on Budget and Policy Priorities. Retrieved from http://www.cbpp.org/research/food-assistance/wic-works-addressing-the-nutrition-and-health-needs-of-low-income-families
- <sup>45</sup> Children's Action Alliance (2016). TANF: What is it? Retrieved from http://azchildren.org/wp-content/uploads/2016/03/TANF-Data-Snapshot.pdf
- <sup>46</sup> Reilly, T., and Vitek, K. (2015). TANF cuts: Is Arizona shortsighted in its dwindling support for poor families? Retrieved from https://morrisoninstitute.asu.edu/sites/default/files/content/products/TANF.doc\_0.pdf
- <sup>47</sup> Floyd, I., Pavetti, L., and Schott, L. (2015). How states use federal and state funds under the TANF block grant. Retrieved from http://www.cbpp.org/research/family-income-support/how-states-use-federal-and-state-funds-under-the-tanf-block-grant
- <sup>48</sup> Mathur, A. & McCloskey, A. (2016). The concerning drop in workforce participation and role of family-friendly policies. Forbes, May. Retrieved from: http://www.forbes.com/sites/aparnamathur/2016/05/25/the-concerning-drop-in-workforce-participation-and-role-of-family-friendly-policies/#332a339e2c44
- <sup>49</sup> United States Department of Agriculture. Definitions of Food Security. https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx
- <sup>50</sup> Feeding America (2016). Map the meal gap 2016: Highlights of findings for overall and child food insecurity. http://www.feedingamerica.org/hunger-in-america/our-research/map-the-meal-gap/2014/map-the-meal-gap-2014-exec-summ.pdf
- $^{51}\ http://www.feedingamerica.org/hunger-in-america/our-research/map-the-meal-gap/2014/AZ\_AllCounties\_CDs\_MMG\_2014.pdf$
- <sup>52</sup> http://www.feedingamerica.org/hunger-in-america/our-research/map-the-meal-gap/2014/AZ\_AllCounties\_CDs\_CFI\_2014.pdf
- $^{53}$  For more information on the Summer Food Service Program in Arizona, visit http://www.azsummerfood.gov/
- <sup>54</sup> United States Department of Agriculture (2016). Summer Food Service Program (SFSP): How to become a sponsor. Retrieved from https://www.fns.usda.gov/sfsp/how-become-sponsor
- <sup>55</sup> Ackerman, D. & Barnett, W. (2005). Prepared for kindergarten: What does "readiness" mean? New Brunswick, NJ: National Institute for Early Education Research. Retrieved from http://www.tats.ucf.edu/docs/report5.pdf
- <sup>56</sup> National Education Goals Panel. (1995). Reconsidering children's early development and learning: Toward common views and vocabulary. Washington, DC: National Education Goals Panel. Retrieved from http://govinfo.library.unt.edu/negp/reports/child-ea.htm
- <sup>57</sup> Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M., Espinosa, L., Gormley, W.,...Zaslow, M. (2013). Investing in our future: The evidence base on preschool education. Society for Research in Child Development. Retrieved from https://www.fcd-us.org/assets/2013/10/Evidence20Base20on20Preschool20Education20FINAL.pdf
- <sup>58</sup> Reach Out and Read. (2010). Help your child succeed in school: Build the habit of good attendance early. Attendance Works: Advancing Student Success by Reducing Chronic Absence. Retrieved from http://www.attendanceworks.org/wordpress/wp-content/uploads/2010/06/Attendance\_1PG\_0911\_FINAL.pdf
- <sup>59</sup> Dahlin, M. & Squires, J. (2016). Pre-K attendance: Why it's important and how to support it. Center on Enhancing Early Learning Outcomes. Retrieved from http://nieer.org/wp-content/uploads/2016/09/ceelo\_fastfact\_state\_ece\_attendance\_2016\_02\_01\_final\_for\_web.pdf
- <sup>60</sup> Lesnick, J., Goerge, R., Smithgall, C., & Gwynne, J. (2010). Reading on grade level in third grade: How is it related to high school performance and college enrollment? Chicago, IL: Chapin Hall at the University of Chicago. Retrieved from https://www.chapinhall.org/sites/default/files/Reading\_on\_Grade\_Level\_111710.pdf
- <sup>61</sup> Hernandez, D. (2011). Double jeopardy: How third-grade reading skills and poverty influence high school graduation. New York, NY: The Annie E. Casey Foundation. Retrieved from http://files.eric.ed.gov/fulltext/ED518818.pdf
- <sup>62</sup> For more information on Move on When Reading, visit http://www.azed.gov/mowr/
- <sup>63</sup> For more information on the AIMS test, visit http://arizonaindicators.org/education/aims
- <sup>64</sup> Arizona Department of Education. (n.d.). Assessment: AzMERIT. Retrieved from http://www.azed.gov/assessment/azmerit/

- <sup>65</sup> Arizona State Board of Education. (2015). AzMERIT Cut Scores. Arizona Department of Education. Retrieved from https://cms.azed.gov/home/GetDocumentFile?id=57f689b5aadebf0a04b267c9
- <sup>66</sup> Arizona Department of Education. (n.d.). Understanding AzMERIT results and score reporting (PowerPoint presentation). Retrieved from http://www.azed.gov/assessment/azmerit/
- <sup>67</sup> AZMERIT. (2016). AZMERIT Reporting Guide. Arizona Department of Education. Retrieved from http://www.azed.gov/assessment/files/2016/04/azmerit-spring-2016-reporting-quide\_042716.pdf
- <sup>68</sup> First Things First. (2012). Read all about it: School success rooted in early language and literacy. Retrieved from http://www.azftf.gov/WhoWeAre/Board/Documents/Policy\_Brief\_Q1-2012.pdf
- <sup>69</sup> Child Trends Data Bank. (2015). Parental education: Indicators on children and youth. Retrieved from http://www.childtrends.org/wp-content/uploads/2012/04/67-Parental\_Education.pdf
- <sup>70</sup> The Annie E. Casey Foundation. (2013). The first eight years: Giving kids a foundation for lifetime success. Retrieved from http://www.aecf.org/m/resourcedoc/AECF-TheFirstEightYearsKCpolicyreport-2013.pdf
- <sup>71</sup> Lynch. J. & Kanlan. G. (2000). Socioeconomic factors. In: Berkman LF and Kawachi I. (Eds.). Social Epidemiology, 13–35. New York: Oxford University Press, 2000.
- $^{72}$  Information on individual schools is available through the Arizona Department of Education's website: http://www.azed.gov/researchevaluation/aims-assessment-results/.
- <sup>73</sup> National Center for Education Statistics (2016). The Nation's Report Card: 2015 Arizona Reading State Snapshot Report. Retrieved from: https://nces.ed.gov/nationsreportcard/subject/publications/stt2015/pdf/2016008AZ4.pdf
- <sup>74</sup> John Hopkins University. 2012. The Importance of Being in School: A Report on Absenteeism in the Nation's Public Schools. Retrieved from http://new.every1graduates.org/wp-content/uploads/2012/05/FINALChronicAbsenteeismReport\_May16.pdf
- <sup>75</sup> Bureau of Labor Statistics, Employment Projections, Earnings and unemployment rates by educational attainment, 2015. Retrieved from: https://www.bls.gov/emp/ep\_chart\_001.htm
- <sup>76</sup> Housing Assistance Council (2013). Housing on Native American Lands. Washington, DC. Retrieved from: http://www.ruralhome.org/storage/documents/rpts\_pubs/ts10\_native\_lands.pdf
- $^{77}$  Center on the Developing Child at Harvard University. (2010). The foundations of lifelong health are built in early childhood. Retrieved from http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf
- <sup>78</sup> Fernald, A., Marchman, V., & Weisleder, A. (2013). SES differences in language processing skill and vocabulary are evident at 18 months. Developmental Science, 16(2), 234-248. Retrieved from: http://onlinelibrary.wiley.com/doi/10.1111/desc.12019/pdf
- <sup>79</sup> Lee., V. & Burkam, D. (2002). Inequality at the Starting Gate: Social background Differences in Achievement as Children Begin School. Washington, DC: Economic Policy Institute.
- NICHD Early Child Care Research Network. (2002). Early child care and children's development prior to school entry: Results from the NICHD study of early child care. American Educational Research Journal, 39(1), 133–164. Retrieved from http://www.jstor.org/stable/3202474
- <sup>81</sup> Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M., Espinosa, L., Gormley, W.,...Zaslow, M. (2013). Investing in our future: The evidence base on preschool education. Ann Arbor, MI: Society for Research in Child Development. Retrieved from https://www.fcd-us.org/assets/2013/10/Evidence20Base20on20Preschool20Education20FINAL.pdf
- <sup>82</sup> U.S. Department of Education. (2015). A matter of equity: Preschool in America. Retrieved from https://www2.ed.gov/documents/early-learning/matter-equity-preschool-america.pdf
- <sup>83</sup> The Annie E. Casey Foundation. (2013). The first eight years: Giving kids a foundation for lifetime success. Retrieved from http://www.aecf.org/m/resourcedoc/AECF-TheFirstEightYearsKCpolicyreport-2013.pdf
- <sup>84</sup> White House Council of Economic Advisors. (2014). The economics of early childhood investments. Retrieved from https://www.whitehouse.gov/sites/default/files/docs/early\_childhood\_report1.pdf
- $^{85}$  The Heckman Equation. (2013). The Heckman Equation brochure. Retrieved from http://heckmanequation.org/content/resource/heckman-equation-brochure-0

# <sup>90</sup> U.S. Department of Education. (2015). A matter of equity: Preschool in America. Retrieved from https://www2.ed.gov/documents/early-learning/matter-equity-preschool-america.pdf

<sup>&</sup>lt;sup>86</sup> Campbell, F., Conti, G., Heckman, J., Moon, S., Pinto, R., Pungello, L., & Pan, Y. (2014). Abecedarian & health: Improve adult health outcomes with quality early childhood programs that include health and nutrition. University of Chicago: The Heckman Equation. Retrieved from http://heckmanequation.org/content/resource/research-summary-abecedarian-health

<sup>&</sup>lt;sup>87</sup> Schweinhart, L.J., Montie, J., Xiang, Z., Barnett, W.S., Belfield, C.R., & Nores, M. (2005). Lifetime Effects: The High/Scope Perry Preschool Study Through Age 40. Ypsilanti, Mich.: High–Scope Press.

<sup>&</sup>lt;sup>88</sup> White House Council of Economic Advisors. (2014). The economics of early childhood investments. Retrieved from https://www.whitehouse.gov/sites/default/files/docs/early\_childhood\_report1.pdf

<sup>&</sup>lt;sup>89</sup> National Public Radio, Robert Wood Johnson Foundation, and Harvard T.H. Chan School of Public Health. (2016). Child care and health in America. Retrieved from http://www.npr.org/documents/2016/oct/Child-Care-and-Development-Report-2016.pdf

<sup>&</sup>lt;sup>91</sup> Child Care Aware® of America. (2014). Parents and the high cost of child care: 2014 report. Retrieved from https://www.ncsl.org/documents/cyf/2014\_Parents\_and\_the\_High\_Cost\_of\_Child\_Care.pdf

<sup>92</sup> For more information on child care subsidies see https://www.azdes.gov/child care/

<sup>&</sup>lt;sup>93</sup> Malik, R., Hamm, K., Adamu, M., & Morrissey, T. (2016). Child care deserts: An analysis of child care centers by ZIP code in 8 states. Center for American Progress. Retrieved from https://www.americanprogress.org/issues/early-childhood/reports/2016/10/27/225703/child-care-deserts/

<sup>&</sup>lt;sup>94</sup> National Public Radio. Robert Wood Johnson Foundation. and Harvard T.H. Chan School of Public Health. (2016). Child care and health in America. Retrieved from http://www.npr.org/documents/2016/oct/Child-Care-and-Development-Report-2016.pdf

<sup>&</sup>lt;sup>95</sup> Arizona Early Childhood Development and Health Board (First Things First). (2016). 2016 Annual Report. Phoenix, AZ: First Things First. Retrieved from http://www.azftf.gov/WhoWeAre/Board/Documents/FY2016\_Annual\_Report.pdf

<sup>&</sup>lt;sup>96</sup> Arizona Early Childhood Development and Health Board (First Things First). (2016). 2016 Annual Report. Phoenix, AZ: First Things First. Retrieved from http://www.azftf.gov/WhoWeAre/Board/Documents/FY2016\_Annual\_Report.pdf

<sup>&</sup>lt;sup>97</sup> Arizona Early Childhood Development and Health Board (First Things First). (2013). Arizona's unknown education issue: Early learning workforce trends. Phoenix, AZ: First Things First. Retrieved from https://www.azftf.gov/WhoWeAre/Board/Documents/FTF-CCReport.pdf

<sup>&</sup>lt;sup>98</sup> First Things First and the Build Initiative. (2015). Arizona Early Childhood Center and Professional Development Network: Two-year strategic plan. Retrieved from http://docplayer.net/4478479-Arizona-early-childhood-career-and-professional-development-network.html

<sup>&</sup>lt;sup>99</sup> First Things First. (2017). Arizona Early Childhood Career and Professional Developmental Network: About us. Retrieved from http://azearlychildhood.org/about-us/About%20The%20Network

<sup>&</sup>lt;sup>100</sup> U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. (2013). The national survey of children with special health care needs: Chartbook 2009-2010. Rockville, MD: U.S. Department of Health and Human Services. Retrieved from https://mchb.hrsa.gov/cshcn0910/more/pdf/nscshcn0910.pdf

<sup>&</sup>lt;sup>101</sup> U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. (2013). The national survey of children with special health care needs: Chartbook 2009–2010. Rockville, MD: U.S. Department of Health and Human Services. Retrieved from https://mchb.hrsa.gov/cshcn0910/more/pdf/nscshcn0910.pdf

<sup>&</sup>lt;sup>102</sup> Austin, A., Herrick, H., Proescholdbell, S., & Simmons, J. (2016). Disability and exposure to high levels of adverse childhood experiences: Effect on health and risk behavior. North Carolina Medical Journal, 77(1), 30–36. doi: 10.18043/ncm.77.1.30. Retrieved from http://www.ncmedicaljournal.com/content/77/1/30.full.pdf+html

<sup>&</sup>lt;sup>103</sup> Kistin, C., Tompson, M., Cabral, H., Sege, R., Winter, M., & Silverstein, M. (2016). Subsequent maltreatment in children with disabilities after an unsubstantiated report for neglect. JAMA 2016, 315(1), 85–87. doi: 10.1001/jama.2015.12912.

<sup>&</sup>lt;sup>104</sup> Arizona Denartment of Health Sciences. (2015). Arizona Maternal Child Health Needs Assessment. Retrieved from http://azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/title-v/needs-assessment2015.pdf

- <sup>105</sup> The National Early Childhood Technical Assistance Center. (2011). The importance of early intervention for infants and toddlers with disabilities and their families. Office of Special Education Programs and U.S. Department of Education. Retrieved from http://www.nectac.org/~pdfs/pubs/importanceofearlyintervention.pdf
- <sup>106</sup> Hebbeler, K., Spiker, D., Bailey, D., Scarborough, A., Mallik, S., Simeonsson,...Nelson, L. (2007). Early intervention for infants and toddlers with disabilities and their families: Participants, services, and outcomes. Menlo Park, CA: SRI International. Retrieved from https://www.sri.com/sites/default/files/publications/neils\_finalreport\_200702.pdf
- <sup>107</sup> Diefendorf, M. & Goode, S. (2005). The long term economic benefits of high quality early childhood intervention programs. Chapel Hill, NC: National Early Childhood Technical Assistance Center (NECTAC), and Early Intervention & Early Childhood Special Education.
  Retrieved from http://ectacenter.org/~pdfs/pubs/econbene.pdf
- 108 For more information on AZ FIND, visit http://www.azed.gov/special-education/az-find/
- 109 For more information on AzEIP, visit https://www.azdes.gov/azeip/
- $^{110}$  For more information on DDD, visit https://www.azdes.gov/developmental\_disabilities/
- <sup>111</sup> Arizona department of Economic Security. Child Care Market Rate Survey, 2014. Retrieved from https://des.az.gov/sites/default/files/legacy/dl/MarketRateSurvey2014.pdf
- $^{112}$  Center for American Progress. 2016. Child Care Deserts: An Analysis of Child Care centers by ZIP Code in 8 States. Retrieved from https://www.americanprogress.org/issues/early-childhood/reports/2016/10/27/225703/child-care-deserts/
- <sup>113</sup> Fort Mojave Indian Tribe Child Care Development Fund 2016 Supplemental Narrative Report. Obtained through personal correspondence.
- <sup>114</sup> U.S. Department of Health and Human Services, Child Care Bureau (2008). Child Care and Development Fund: Report of state and territory plans: FY 2008-2009. Section 3.5.5 Affordable co-payments, p. 89. Retrieved from http://www.researchconnections.org/childcare/resources/14784/pdf
- <sup>115</sup> Arizona Department of Economic Security. (2017). Child care: Child care waiting list. Retrieved from https://des.az.gov/services/basic-needs/child-care/child-care-waiting-list
- <sup>116</sup> Whitebook and Sakai (2003). Turnover begets turnover: An examination of job and occupational instability among child care center staff. Early Childhood Research Quarterly, 18, pp. 273–293.
- $^{117}$  The Individuals with Disabilities Education Improvement Act (IDEA 2004) Public Law 10/- 446. Retrieved from http://cpacinc.org/wp-content/uploads/2009/11/IDEA\_facts.pdf
- <sup>118</sup> Early Intervention Program for Infants and Toddlers with Disabilities (Part C of IDEA). Retrieved from http://ectacenter.org/partc/partc.asp
- <sup>119</sup> The National Early Childhood Technical Assistance Center. The Importance of Early Intervention for Infants and Toddlers with Disabilities and Their Families. July 2011. Retrieved from http://www.nectac.org/~pdfs/pubs/importanceofearlyintervention.pdf
- <sup>120</sup> Rosenberg, S., Zhang, D. & Robinson, C. (2008). Prevalence of developmental delays and participation in early intervention services for young children. Pediatrics, 121(6) e1503–e1509. doi:10.1542/peds.2007-1680
- <sup>121</sup> Mohave County Department of Public Health. Children and Youth with Special Health Care Needs: A Mohave County Community Assessment. August 2014. Provided by the Regional Director.
- 122 Raising Special Kids Family Forums summary PowerPoint, Provided by the Regional Director.
- <sup>123</sup> Center on the Developina Child at Harvard University. (2010). The foundations of lifelona health are built in early childhood. Retrieved from http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf
- <sup>124</sup> The Future of Children. (2015). Policies to promote child health. Policies to Promote Child Health, 25(1), Spring 2015. Woodrow Wilson School of Public and International Affairs at the Princeton University and the Brookings Institution. Retrieved from http://futureofchildren.org/publications/docs/FOC-spring-2015.pdf
- <sup>125</sup> Center on the Developina Child at Harvard University. (2010). The foundations of lifelona health are built in early childhood. Retrieved from http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf
- 126 Maternal and Child Health Bureau, Health Resources and Services Administration, U.S. Department of Health and Human Services. (n.d.) Prenatal services. Retrieved from http://mchb.hrsa.gov/programs/womeninfants/prenatal.html

- <sup>127</sup> Patrick. D. L., Lee. R. S., Nucci. M., Grembowski. D., Jolles. C. Z., & Milarom. P. (2006). Reducina oral health disparities: A focus on social and cultural determinants. BMC Oral Health, 6(Suppl 1), S4. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2147600/
- <sup>128</sup> Council on Children with Disabilities. Section on Developmental Behavioral Pediatrics. Bright Futures Steering Committee. and Medical Home Initiatives for Children with Special Needs Project Advisory Committee. (2006). Identifying infants and young children with developmental disorders in the medical home: An algorithm for developmental surveillance and screening. Pediatrics, 118(1), 405-420. Doi: 10.1542/peds.2006-1231. Retrieved from http://pediatrics.aappublications.org/content/118/1/405.full
- 129 Yeung, L., Coates, R., Seeff, L., Monroe, J., Lu, M., & Boyle, C. (2014). Conclusions and future directions for periodic reporting on the use of selected clinical preventive services to improve the health of infants, children, and adolescents—United States. MMWR, 63(Suppl-2), 99–107. Retrieved from https://www.cdc.gov/MMWR/pdf/other/su6302.pdf
- <sup>130</sup> Yeung, LF, Coates, RJ, Seeff, L, Monroe, JA, Lu, MC, & Boyle, CA. (2014). Conclusions and future directions for periodic reporting on the use of selected clinical preventive services to improve the health of infants, children, and adolescents—United States. Morbidity and Mortality Weekly Report 2014, 63(Suppl-2), 99-107. Retrieved from http://www.cdc.gov/mmwr/pdf/other/su6302.pdf
- <sup>131</sup> The Henry J. Kaiser Family Foundation (2016). Key facts about the uninsured population. The Kaiser Commission on Medicaid and the Uninsured. Retrieved from http://kff.org/uninsured/fact-sheet/key-facts-about-the-uninsured-population/
- <sup>132</sup> Child Trends Databank. (2016). Health care coverage: Indicators on children and youth. Health Care Coverage, 2016. Retrieved from http://www.childtrends.org/wp-content/uploads/2016/05/26\_Health\_Care\_Coverage.pdf
- <sup>133</sup> Brooks, T., Heberlein, M., & Fu, J. (2014). Dismantling CHIP in Arizona: How losing KidsCare impacts a child's health care costs. Children's Action Alliance. Retrieved from http://ccf.georgetown.edu/wp-content/uploads/2014/05/Dismantling-CHIP-in-Arizona.pdf
- <sup>134</sup> Children's Action Alliance. (2016). 2016 Priority legislation affecting children and families. Retrieved from: http://azchildren.org/wp-content/uploads/2016/05/2016-Priority-Legislation-Affecting-Children-and-Families.pdf
- <sup>135</sup> Innes, S. (2016). Arizona sign-ups for KidsCare health insurance begin July 26. Arizona Daily Star. Retrieved from http://tucson.com/news/local/arizona-sign-ups-for-kidscare-health-insurance-begin-july/article\_8b980b76-81f5-5631-96e6-086e394ecfd9.html
- <sup>136</sup> Wells, D. (2016). Restoring KidsCare: Annual and long-term benefits far exceed cost to the state. Phoenix, AZ: Grand Canyon Institute. Retrieved from http://grandcanyoninstitute.org/wp-content/uploads/2016/04/GCI\_Policy\_Kids\_Care\_EconomicBenefitsFarExceedStateCosts\_Apr13\_2016.pdf
- <sup>137</sup> Hoffman, S. D., & Maynard, R. A. (Eds.). (2008). Kids having kids: Economic costs and social consequences of teen pregnancy (2nd ed.). Washington, DC: Urban Institute Press.
- <sup>138</sup> Centers for Disease control and Prevention. Teen Pregnancy. About Teen Pregnancy. Retrieved from: http://www.cdc.gov/teenpregnancy/aboutteenpreg.htm
- $^{139}$  Diaz, C. & Fiel, J. (2016). The effect(s) of teen pregnancy: Reconciling theory, methods, and findings. Demography, 53(1), 85–116. doi: 10.1007/s13524-015-0446-6. Retrieved from http://link.springer.com/article/10.1007/s13524-015-0446-6
- $^{140}\ Youth.gov.\ (2016).\ Pregnancy\ prevention: Adverse\ effects.\ Retrieved\ from\ http://youth.gov/youth-topics/teen-pregnancy-prevention/adverse-effects-teen-pregnancy$
- <sup>141</sup> Declercq, E., MacDorman, M., Cabral, H., & Stotland, N. (2016). Prepregnancy body mass index and infant mortality in 38 U.S. States, 2012–2013. Obstetrics and Gynecology, 127(2), 279–287. doi: 10.1097/AOG.00000000001241. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/26942355
- <sup>142</sup> Tyrrell, J., Richmond, R., Palmer, T., Feenstra, B., Rangarajan, J., Metrustry, S.,...Freathy, R. (2016). Genetic evidence for causal relationships between maternal obesity-related traits and birth weight. JAMA 2016, 315(11), 1129-1140. doi:10.1001/jama.2016.1975. Retrieved from http://jamanetwork.com/journals/jama/fullarticle/2503173
- <sup>143</sup> Mayo Clinic. (n.d.). In-depth: How could obesity affect my baby? Healthy Lifestyle, Pregnancy week by week. Retrieved from http://www.mayoclinic.org/healthy-lifestyle/pregnancy-week-by-week/in-depth/pregnancy-and-obesity/art-20044409?pg=2
- <sup>144</sup> U.S. Department of Health and Human Service. (2010). A Report of the Surgeon General: How Tobacco Smoke Causes Disease: What It Means to You. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. Retrieved from: <a href="https://www.ncbi.nlm.nih.gov/books/NBK53017/">https://www.ncbi.nlm.nih.gov/books/NBK53017/</a>

- <sup>145</sup> Arizona Department of Health Sciences. (2015). Arizona Maternal Child Health Needs Assessment. Retrieved from http://azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/title-v/needs-assessment2015.pdf
- <sup>146</sup> Arizona Department of Health Sciences. (2015). Arizona Maternal Child Health Needs Assessment. Retrieved from http://azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/title-v/needs-assessment2015.pdf
- <sup>147</sup> Eidelman, A., Schanler, R., Johnston, M., Landers, S., Noble, L., Szucs, K., & Viehmann, L. (2012). Breastfeeding and the use of human milk. Pediatrics, 129(3), e827-e841. American Academy of Pediatrics. doi:10.1542/peds.2011-3552
- <sup>148</sup> Healthy People 2020. (n.d.). Maternal, infant, and child health: Objectives. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives#4834
- <sup>149</sup> Arizona Department of Health Sciences. (2015). Arizona Maternal Child Health Needs Assessment. Retrieved from http://azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/title-v/needs-assessment2015.pdf
- <sup>150</sup> Omer, S. B., Salmon, D. A., Orenstein, W. A., deHart, M. P., & Halsey, N. (2009). Vaccine refusal, mandatory immunization, and the risks of vaccine-preventable diseases. The New England Journal of Medicine, 360(19), 1981-1988. doi:10.1056/NEJMsa0806477
- <sup>151</sup> Data Resource Center for Child & Adolescent Health. (n.d.). 2011/12 NSCH National Chartbook Profile for Nationwide vs. Arizona. Child and Adolescent Health Measurement Initiative. Retrieved from http://www.childhealthdata.org/browse/data-snapshots/nsch-profiles?geo=1&geo2=4&rpt=16
- <sup>152</sup> Çolak, H., Dülgergil, Ç. T., Dalli, M., & Hamidi, M. M. (2013). Early childhood caries update: A review of causes, diagnoses, and treatments. Journal of Natural Science, Biology, and Medicine, 4(1), 29–38. http://doi.org/10.4103/0976-9668.107257
- <sup>153</sup> Arizona Early Childhood Development and Health Board (First Things First). (2016). Taking a bite out of school absences: Children's oral health report 2016. Retrieved from http://azftf.gov/WhoWeAre/Board/Documents/FTF\_Oral\_Health\_Report\_2016.pdf
- <sup>154</sup> Danesco, E., Miller, T., & Spicer, R. (2000). Incidence and costs of 1987-1994 childhood injuries: Demographic breakdowns. Pediatrics, 105(2) E27. Retrieved from http://pediatrics.aappublications.org/content/105/2/e27.long
- <sup>155</sup> National Vital Statistics System, National Center for Health Statistics, and Centers for Disease Control and Prevention. (2013). 10 leading causes of death by age group, United States-2013. National Center for Injury Prevention and Control. Retrieved from: http://www.cdc.gov/injury/images/lc-charts/leading\_causes\_of\_death\_by\_age\_group\_2013-a.gif
- <sup>156</sup> Arizona Denartment of Health Services. (2015). Special emphasis report: Infant and early childhood injury. 2014. Retrieved from http://azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/injury-prevention/2014-infact-childhood-injury.pdf
- <sup>157</sup> Center for Disease Control and Prevention. National Center for Iniurv Prevention and Control. and Division of Unintentional Iniurv Prevention. (2012). National action plan for child iniurv prevention: An agenda to prevent iniuries and promote the safety of children and adolescents in the United States. Atlanta. GA: Center for Disease Control and Prevention. Retrieved from <a href="https://www.cdc.gov/safechild/pdf/National\_Action\_Plan\_for\_Child\_Injury\_Prevention.pdf">https://www.cdc.gov/safechild/pdf/National\_Action\_Plan\_for\_Child\_Injury\_Prevention.pdf</a>
- <sup>158</sup> Arizona Devartment of Health Services. (2011). Bureau of Women's and Children's Health: Strateaic vlan 2011-2015. Retrieved from http://www.azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/2011-2015\_BWCH-Strategic-Plan.pdf
- <sup>159</sup> Office of Iniury Prevention. Bureau of Women's and Children's Health. and Arizona Denartment of Health Services. (2012). Arizona iniury prevention plan. Phoenix. AZ: Arizona Denartment of Health Services. Retrieved from http://www.azdhs.aov/documents/prevention/womens-childrens-health/reports-fact-sheets/injury-prevention/az-injury-surveillance-prevention-plan-2012-2016.pdf
- <sup>160</sup> Frvar. C.. Carroll. M.. & Oaden. C. (2016). Prevalence of underweight amona children and adolescents aged 2-19 years: United States, 2963-2965 through 2013-2014. National Center for Health Statistics: Health E-Stats. Retrieved from https://www.cdc.gov/nchs/data/hestat/underweight\_child\_13\_14/underweight\_child\_13\_14.pdf
- <sup>161</sup> Frvar. C., Carroll. M., & Oaden. C. (2016). Prevalence of underweight amona children and adolescents aged 2-19 years: United States, 2963-2965 through 2013-2014. National Center for Health Statistics: Health E-Stats. Retrieved from https://www.cdc.gov/nchs/data/hestat/underweight\_child\_13\_14/underweight\_child\_13\_14.pdf
- <sup>162</sup> Chamut. J.P. & Tremblav. A.. (2012). Obesity at an early age and its impact on child development. Child Obesity: Encyclopedia on Early Childhood Development. Retrieved from http://www.child-encyclopedia.com/sites/default/files/textes-experts/en/789/obesity-at-anearly-age-and-its-impact-on-child-development.pdf

- <sup>163</sup> Robert Wood Johnson Foundation. (2016). The impact of the first 1.000 days on childhood obesity. Healthy Eating Research: Building evidence to prevent childhood obesity. Retrieved from http://healthyeatingresearch.org/wp-content/uploads/2016/03/her\_1000\_days\_final-1.pdf
- <sup>164</sup> MacDonald. M.. Linscomb. S.. McClelland. M.. Duncan. R.. Becker. D.. Anderson. K.. & Kile. M. (2016). Relations of preschoolers' visual-motor and object manimulation skills with executive function and social behavior. Research Quarterly for Exercise and Sport, 87(4), 396-407. doi: 10.1080/02701367.2016.1229862. Retrieved from http://www.tandfonline.com/doi/pdf/10.1080/02701367.2016.1229862?needAccess=true
- <sup>165</sup> For a map of Arizona Primary Care Areas, visit http://azdhs.gov/documents/prevention/health-systems-development/data-reports-maps/maps/azpca.pdf
- <sup>166</sup> Arizona Department of Health Services (2016). Data documentation: sources and field descriptions. Retrieved from http://www.azdhs.gov/documents/prevention/health-systems-development/data-reports-maps/reports/datadocu.pdf
- <sup>167</sup> Payson Primary Care Area Statistical Profile 2015. Retrieved from http://azdhs.gov/documents/prevention/health-systems-development/data-reports-maps/primary-care/gila/23.pdf
- <sup>168</sup> Globe Primary Care Area Statistical Profile 2015. Retrieved from http://azdhs.gov/documents/prevention/health-systems-development/data-reports-maps/primary-care/gila/24.pdf
- <sup>169</sup> Department of Health & Human Services (March 2016). Addendum to the Health Insurance Market Places 2016 Open Enrollment Period: Final Enrollment Report. Retrieved from: https://aspe.hhs.gov/sites/default/files/pdf/188026/MarketPlaceAddendumFinal2016.pdf
- <sup>170</sup> Branum, A., Kirmeyer, S., & Gregory, E. (2016). Prepregnancy body mass index by maternal characteristics and state: Data from the birth certificate, 2014. National Vital Statistics Reports, 65(6). Hyattsville, MD: National Center for Health Statistics, 2016. Retrieved from https://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65\_06.pdf
- <sup>171</sup> Ogden, C., Lamb, M., Carroll, M., & Flegal, K. (2010). Obesity and socioeconomic status in adults: United States, 2005–2008. NCHS Data Brief, 50(51), 1-8. Hyattsville, MD: U.S. Department of Health & Human Services. Retrieved from https://www.cdc.gov/nchs/data/databriefs/db50.pdf
- <sup>172</sup> Branum, A., Kirmeyer, S., & Gregory, E. (2016). Prepregnancy body mass index by maternal characteristics and state: Data from the birth certificate, 2014. National Vital Statistics Reports, 65(6). Hyattsville, MD: National Center for Health Statistics, 2016. Retrieved from https://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65\_06.pdf
- <sup>173</sup> Healthy People 2020. (2015). Immunization and infectious diseases. Washington, DC: U.S. Department of Health and Human Services. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases/objectives
- $^{174}$  First Things First (2016). Taking a bite out of school absences. Children's Oral Health Report 2016.
- 175 National Maternal and Child Oral Health Resource Center. Oral Health for Children and Adolescents with Special Health Care Needs Challenges and Opportunities. Retrieved from http://www.mchoralhealth.org/PDFs/SHCNfactsheet.pdf
- <sup>176</sup> Arizona Child Fatality Review Program. (2016). Twenty-third annual report. Retrieved from http://azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/child-fatality-review-annual-reports/cfr-annual-report-2016.pdf
- <sup>177</sup> Pan, L., Freedman, D., Sharma, A., Castellanos-Brown, K., Park, S., Smith, R., & Blanck, H. (2016). Trends in obesity among participants aged 2-4 years in the special supplemental nutrition program for women, infants, and children—United States, 2000-2014. Morbidity and Mortality Weekly, 65(45), 1256-1260. U.S. Department of Health & Human Services. Retrieved from https://www.cdc.gov/mmwr/volumes/65/wr/mm6545a2.htm#suggestedcitation
- $^{178}$  Source: Phoenix Area Indian Health Service (2016). [Maternal and Child Health Dataset]. Unpublished Data
- <sup>179</sup> Evans. G. & Kim. P. (2013). Childhood noverty. chronic stress. self-regulation. and coping. Child Development Perspectives, 7(1), 43-48. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/cdep.12013/abstract
- <sup>180</sup> Shonkoff, J. P., & Fisher, P. A. (2013). Rethinking evidence-based practice and two-generation programs to create the future of early childhood policy. Development and Psychopathology, 25, 1635–1653. Retrieved from http://journals.cambridge.org/download.php?file=%2FDPP%2FDPP25\_4pt2%2FS0954579413000813a.pdf&code=aeb62de3e0ea8214329e7a 33e0a9df0e
- <sup>181</sup> Maanuson. K. & Duncan. G. (2013). Parents in noverty. In Bornstein. M., Handbook of parenting: Biology and ecology of parenting vol. 4: Social conditions and applied parenting. New Jersey: Lawrence Erlbaum.

- <sup>182</sup> Center on the Developina Child at Harvard University. (2010). The foundations of lifelona health are built in early childhood. Retrieved from http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf
- <sup>183</sup> Van Voorhis. F., Maier. M., Enstein, J., & Llovd. C. (2013). The impact of family involvement on the education of children ages 3 to 8: A focus on the literacy and math achievement outcomes and social-emotional skills. MDRC: Buildina Knowledge to Improve Social Policy. Retrieved from http://www.p2presources.com/uploads/3/2/0/2/32023713/family\_outcomes.pdf
- <sup>184</sup> American Academy of Pediatrics. (n.d.). Pediatric Professional Resource: Evidence supporting early literacy and early learning. Retrieved from https://www.aap.org/en-us/Documents/booksbuildconnections\_evidencesupportingearlyliteracyandearlylearning.pdf
- <sup>185</sup> For more information on Read On Arizona, visit http://readonarizona.org/
- 186 Reach Out and Read. (n.d.). "Programs Near You." Retrieved from http://www.reachoutandread.org/resource-center/find-a-program/
- $^{187}$  Centers for Disease Control and Prevention. (n.d.). Division of Violence Prevention: About adverse childhood experiences. Retrieved from https://www.cdc.gov/violenceprevention/acestudy/about\_ace.html
- <sup>188</sup> Data Resource Center for Child & Adolescent Health. (2012). 2011/2012 National charthook profile for nationwide vs. Arizona. Retrieved from http://www.childhealthdata.org/browse/data-snapshots/nsch-profiles?geo=1&geo2=4&rpt=16
- <sup>189</sup> Chanlin Hall Center for Children (2015). Arizona Department of Child Safety independent review. Chicago, IL: Chaplin Hall at the University of Chicago. Retrieved from https://dcs.az.gov/sites/default/files/media/AZ\_Dept\_of\_Child\_Safety\_Independent\_Review\_0.pdf
- <sup>190</sup> As shown by the National Child Welfare Outcomes data for Arizona. retrieved from http://cwoutcomes.acf.hhs.aov/data/output/arizona.html [National Child Welfare. (n.d.), National Child Welfare Outcomes data for Arizona. Retrieved from http://cwoutcomes.acf.hhs.gov/data/output/arizona.html]??
- <sup>191</sup> Child Welfare Information Gateway (2013) Lona-term consequences of child abuse and neglect. Washington, DC: Children's Bureau. Retrieved from https://www.childwelfare.gov/pubpdfs/long\_term\_consequences.pdf
- <sup>192</sup> Hart. B. (2016). Juvenile justice in Arizona: The fiscal foundations of effective policy. Children's Action Alliance and ASU Morrison Institute for Public Policy. Retrieved from http://azchildren.org/wp-content/uploads/2016/01/JUVENILE-JUSTICE-IN-AZ.pdf
- 193 Ibid
- <sup>194</sup> The National Child Traumatic Stress Network. (n.d.). Children and domestic violence. Retrieved from http://www.nctsn.org/content/children-and-domestic-violence
- <sup>195</sup> Holt. S. Bucklev. H.. & Whelan. S. (2008). The impact of exposure to domestic violence on children and vouna people: A review of the literature. Child Abuse & Neglect, 32(8), 797-810. Retrieved from http://www.sciencedirect.com/science/article/pii/S0145213408001348
- <sup>196</sup> Arizona Denartment of Health Sciences. (2015). Arizona Maternal Child Health Needs Assessment. Retrieved from http://azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/title-v/needs-assessment2015.pdf
- <sup>197</sup> Zero to Three Infant Mental Health Task force Steering Committee, 2001
- <sup>198</sup> Arizona Department of Health Sciences. (2015). Arizona Maternal Child Health Needs Assessment. Retrieved from http://azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/title-v/needs-assessment2015.pdf
- <sup>199</sup> Gunn. J., Rosales. C., Center. K., Nunez. A., Gibson. S., Christ. C., & Ehiri. J. (2016). Prenatal exposure to cannabis and maternal and child health outcomes: A systematic review and meta-analysis. BMJ Onen, 2016. Retrieved from http://bmjopen.bmj.com/content/bmjopen/6/4/e009986.full.pdf
- <sup>200</sup> National Institute for Literacy. Developing Early Literacy. Report of the National Early Literacy Panel. 2008. Retrieved from https://lincs.ed.gov/publications/pdf/NELPReport09.pdf
- <sup>201</sup> National Institute for Literacy. Developing Early Literacy. Report of the National Early Literacy Panel. 2008. Retrieved from https://lincs.ed.gov/publications/pdf/NELPReport09.pdf
- <sup>202</sup> Department of Child Safety. Semi-annual Report for the Period of April 1, 2016 through September 30, 2016. Retrieved from https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirments\_Apr16\_Sept16.pdf
- <sup>203</sup> Fort Mojave Indian Tribe Child Abuse and Neglect Report 2014/2015 and 205/2016, obtained via personal correspondence.

- <sup>204</sup> Arizona Department of Child Safety. Child Welfare Reporting Requirements Semi-annual Report for the Period of October 1, 2015 through March 31, 2016. Retrieved from https://dcs.az.gov/sites/default/files/DCS%20Semi%20Annual%20Child%20Welfare%20Reporting%20Requirments\_10-1-15\_3-31-16\_Final.pdf
- <sup>205</sup> State of Arizona, Office of the Auditor General. Special Report: Arizona Department of Child Safety Children Support Services Emergency and Residential Placements. October 2014. Retrieved from https://repository.asu.edu/attachments/144910/content/14-107\_Report.pdf
- <sup>206</sup> State of Arizona, Office of the Auditor General. Special Report: Arizona Department of Child Safety Children Support Services Emergency and Residential Placements. October 2014. Retrieved from https://repository.asu.edu/attachments/144910/content/14-107\_Report.pdf
- <sup>207</sup> Arizona State University, Center for Applied Behavioral Health Policy. 2014. Voluntary Closure Study: Former Foster Care Families in Arizona. Retrieved from https://dcs.az.gov/sites/default/files/media/FinalReportVoluntaryClosureStudy\_20140410.pdf
- <sup>208</sup> Chapin Hall Centre for Children. Arizona Department of Child Safety Independent Review. June 26, 2015. Retrieved from https://dcs.az.gov/sites/default/files/media/AZ\_Dept\_of\_Child\_Safety\_Independent\_Review\_0.pdf
- <sup>209</sup> State of Arizona, Office of the Auditor General. Arizona Department of Child Safety—Children Support Services—Emergency and Residential Placements Auditor General Report No. 14-107– Initial Follow-Up Report. February 2016. Retrieved from https://www.azauditor.gov/sites/default/files/14-107\_Init\_Followup.pdf
- <sup>210</sup> 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
- <sup>211</sup> Ibid
- <sup>212</sup> Howell, E. (2004). Access to Children's Mental Health Services under Medicaid and SCHIP. Washington, DC: Urban Institute. Retrieved from: http://www.urban.org/sites/default/files/alfresco/publication-pdfs/311053-Access-to-Children-s-Mental-Health-Services-under-Medicaid-and-SCHIP.PDF
- <sup>213</sup> Arizona Department of Health Services. AHCCCS. Comprehensive Medical & Dental Program. (2015). SB1375 Report. Retrieved from https://www.azahcccs.gov/Members/Downloads/Resources/SB1375Report10-1-15.pdf
- <sup>214</sup> Zero to Three Policy Center. Infant and Childhood Mental Health: Promoting Health Social and Emotional Development. (2004). Retrieved from
- http://main.zerotothree.org/site/DocServer/Promoting\_Social\_and\_Emotional\_Development.pdf?docID=2081&AddInterest=1144
- <sup>215</sup> Frey, B. B., Lohmeier, J. H., Lee, S. W., & Tollefson, N. (2006). Measuring collaboration among grant partners. American Journal of Evaluation, 27(3), 383–392.
- <sup>216</sup> U.S. Census Bureau. (2000). Factfinder for the nation: History and organization. Issued May 2000, CFF-4. Retrieved from http://www.census.gov/history/pdf/cff4.pdf
- <sup>217</sup> U.S. Census Bureau. (2013). American Community Survey: Information guide. Retrieved from http://www.census.gov/content/dam/Census/programs-surveys/acs/about/ACS\_Information\_Guide.pdf.
- <sup>218</sup> CIVITAS Initiative, ZERO TO THREE, and BRIO Corporation, Researched by DYG, Inc. 2000. What Grown-ups Understand About Child Development: A National Benchmark Survey. Online, INTERNET, 06/20/02. http://www.civitasinitiative.com/html/read/surveypdf/survey\_public.htm