



Northwest Maricopa



2018 NEEDS AND ASSETS REPORT

NORTHWEST MARICOPA REGIONAL PARTNERSHIP COUNCIL 2018 NEEDS AND ASSETS REPORT

Prepared by

Community Research, Evaluation, and Development (CRED)
John and Doris Norton School of Family and Consumer Sciences
College of Agriculture and Life Sciences
University of Arizona

Funded by

First Things First Northwest Maricopa Regional Partnership Council

LETTER FROM THE CHAIR

January 18, 2018

Message from the Chair:

Since the inception of First Things First, the Northwest Maricopa 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 Northwest Maricopa Regional Council would like to thank our Needs and Assets vendor, John and Doris Norton School of Family and Consumer Sciences, for their knowledge, expertise and analysis of the Northwest Maricopa region. Their partnership has been crucial to our development of this report and to our understanding of the extensive information contained within these pages.

As we move forward, the First Things First Northwest Maricopa 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,

A handwritten signature in black ink that reads "Deborah J. Pischke, EdD". The signature is written in a cursive, flowing style.

Dr. Deborah Pischke, Chair

NORTHWEST MARICOPA REGIONAL PARTNERSHIP COUNCIL

14050 North 83rd Avenue, Bldg. A-140
Peoria, Arizona 85381
Phone: 602.771.4960
Fax: 623.486.0557

Dr. Deborah Pischke, Chair

Jannelle Radoccia, Vice Chair

Patrick Contrades

Chuck Fitzgerald

Erin Hart

Margaret Morales

Fran Pearson

Dr. Stephen Poling

James P. Scott

Lynda Vescio, Esq.

Report Prepared by:

Community Research, Evaluation, and Development (CRED)
John and Doris Norton School of Family and Consumer Sciences
College of Agriculture and Life Sciences
University of Arizona

PO Box 210078,
Tucson, AZ 85721-0462

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 Northwest Maricopa 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 Northwest Maricopa 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 Northwest Maricopa region. This information may also be useful to stakeholders in our area as they work to enhance the resources available to young children and their families and as they make decisions about how best to support children birth to 5 years old in our area.

Acknowledgments:

We want to thank the Arizona Department of Economic Security and the Arizona Child Care Resource and Referral, the Arizona Department of Health Services, the Arizona Department of Education, the Census Bureau, the Arizona Department of Administration- Employment and Population Statistics, and the Arizona Health Care Cost Containment System for their contributions of data for this report, and their ongoing support and partnership with First Things First on behalf of young children.

To the current and past members of the Northwest Maricopa 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 Northwest Maricopa Region.

Population Characteristics

According to the U.S. Census, in 2010, 55,078 children under the age of six resided in the Northwest Maricopa Region representing approximately eight percent of the region's total population. This ranged from less than one percent of young children living in the Sun City West sub-region, to a high of 13 percent living in El Mirage. Forty-eight percent of young children in the region are non-Hispanic white and most of the rest (40%) are Hispanic or Latino, lower than that for Maricopa County as a whole (46%). Five percent are African American, three percent are Asian or Pacific Islander, and one percent are American Indian. Across the region, there is considerable variation in the racial and ethnic composition of young children within communities.

Based on data from the 2010 U.S. Census, in the Northwest Maricopa Region, 15 percent of households have at least one child under 6 years old. The largest concentration of these families are in El Mirage, where three in ten households have a young child, and Waddell, where almost one in four household does. As expected, the retirement communities of Sun City and Sun City West have relatively few households with young children. According to the American Community Survey (ACS), 35 percent of children in the region live with a single parent, which is slightly lower than the percentage statewide (38%). The proportion of young children (ages 0-5) living in a grandparent's household is 12 percent in both the region and in the entire county. Forty-eight percent of children ages birth to 17 living with grandparents in the region live in multigenerational homes where the grandparent has assumed responsibility for the child, despite the presence of a parent, and 14 percent of these children who live with their grandparents do not have a parent present in the household. A particularly high percentage of children ages 0-17 living with their grandparents do not have a parent present in the Wickenburg (65%), Youngtown (37%), and Peoria (23%) sub-regions.

In the Northwest Maricopa Region, 81 percent of residents age 5 and older speak English at home with Spanish (14%) being the second most common home language. Three percent of households in the region are classified as limited-English-speaking, which is lower than the proportion of households with that designation statewide (5%); Aguila (22%) has the greatest proportion of such households. The percent of kindergarten through third grade students in the region who are English Language Learners (7%) is less than the county (11%) or statewide (10%) rates.

Economic Characteristics

The median income for all Maricopa County families is \$64,072. The median income for families with two parents and children under age 18 is more than \$15,000 higher (\$79,792), and single-parent families make substantially less. The median income for households run by a single female in Maricopa County is \$27,792; the median income for households led by single males is almost 40 percent greater (\$38,614). Fourteen percent of the total (all-age) population of the region lives in poverty, and 25 percent of the population aged birth to 5 lives in poverty in the region. While poverty is relatively rare in some areas—such as Waddell (6% of young children in poverty)—more than half of the children under six in Aguila (75%) and Wickenburg (56%) live in poverty. Forty-three percent of families in the region with children aged four and under live below 185 percent of the FPL (that is, they earned less than \$3,677 a month for a family of four), which is slightly less than the 46 percent in the county and 49 percent across the state. Across the sub-regions, a majority of families with children ages 0 to 4 earn less than 185 percent of the FPL in Wickenburg (90%), Aguila (88%), El Mirage (52%), and Glendale (54%). 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 (-32%) and statewide (-39%).

Unemployment rates have been dropping steadily in both Maricopa County and the state since 2010. In 2015, the unemployment rate in Maricopa County was approximately 5 percent. Nearly two-thirds (62%) of young children in the region live in a home where all the parents participate in the labor force.

Twenty-five percent of children (those under 18 years old) in the county are food insecure, slightly lower than the state's 27 percent. While the number of young children participating in SNAP has declined since 2012, this program still supports over 23,000 children annually in the Northwest Maricopa Region. WIC enrollment has also declined slightly from 2012 (53% of children under five) to 2015 (49%). About half of all public- and charter-school students in the region have been eligible for free or reduced-price lunch since 2012, lower than across the state.

Of the estimated 262,027 occupied housing units in the region, 69 percent are occupied by homeowners, higher than countywide (61%) or statewide (63%). Residents of the region have a similar housing cost burden to residents of the state as a whole: 34 percent of the region's housing units require their residents to contribute more than 30 percent of their household income toward housing.

Educational Indicators

In the 2014-2015 school year, 41 percent of Northwest Maricopa Region students attained a proficient or highly proficient score on the third grade math assessment, which was the same passing rate as across Arizona as a whole (41%). Performance on the English Language Arts (ELA) test was similar, with 43 percent of students in the region demonstrating proficiency, higher than the 40 percent across the state.

Rates of chronic absences among children in first through third grade in the region were similar in 2014 (33%) and 2015 (37%) and to the state as a whole (34% and 36%, respectively). The high school drop-out rate in region remained stable at two percent between 2012 and 2015. Four-year graduation rates in the region (2014: 85%) are consistently higher than those in Arizona as a whole (2014: 76%). Adults aged 25 and older in the region are similarly likely to have a bachelor's degree or higher (25%) compared to adults across Arizona. One community, Aguila, had much higher rates of adults who did not complete high school (59%), as compared to the region, county and state.

Early Learning

According to the most recent data available in 2015 and 2016, there were 234 registered child care and early education providers in the Northwest Maricopa Region, approved to serve up to 14,813 children. The vast majority of these are located in Glendale; none are located in Sun City West. In the region, there are approximately 31,800 children with all parents in the labor force but only 14,813 child care and early education slots available. Of the 234 known child care providers in the region, about one third (n=78) are participating in the Quality First program, and most of these programs (31) have a 3-star rating, which is given to programs that "meet quality standards."

Families in Maricopa County are paying the same proportion of their overall income for a child care slot as other families statewide. Single parent homes, particularly those with a single female householder, have a lower median income, resulting in a higher proportion of their income being spent on child care. The number of children receiving a Department of Economic Security (DES) subsidy increased from 2,698 in 2014 to 3,898 in 2015.

In the Northwest Maricopa Region and across Arizona, more children were referred to and served by the Arizona Early Intervention Program (AzEIP) in FY2015 than in either of the two years prior. In 2015, 1,258 children ages 0 to 2 were served through the AzEIP program, which is nearly double the number served in the region in the years prior.

Between 2012 and 2015, the number of children ages 0-2 and 3-5 being referred to the Division of Developmental Disabilities (DDD) in region has increased; over 600 children were referred in 2015. Similar numbers (670) of children ages 0-5 were served by DDD during that time, nearly equally split between 0-2 and 3-5 year-old groups. The number of preschoolers in special education in ADE schools in the region has remained fairly constant over the past four years. Among the approximately 1,300 children enrolled in ADE special education preschools, 41 percent have speech or language impairment, 36 percent have a developmental disability, and most others have a severe delay (22%). Over 3,800 students in kindergarten through third grade are enrolled in special education in the region, representing 11 percent of all students, a slightly higher proportion than in Maricopa County schools overall (9%).

Child Health

Seven percent of young children in the Northwest Maricopa Region are estimated to be uninsured, along with 14 percent of the total population in the region. Thirty-eight percent of children in the Wickenburg community and 15 percent in the Wittmann community had no health insurance.

In 2014, Northwest Maricopa Region residents gave birth to 8,453 babies, which was 15 percent of all babies born in Maricopa County and 10 percent of all births in the state. Of the over 8,400 mothers who gave birth in the region in 2014, 56 percent were non-Hispanic White, 33 percent were Hispanic or Latina, six percent were Black or African American, four percent were Asian or Pacific Islander, and one percent were American Indian or Alaska Native. New mothers in the region had a slightly higher level of educational attainment (58% had some education beyond high school) than all mothers in the state (54% post-high school). About four in 10 mothers (42%) in the region were not married (43% Maricopa County, 45% statewide) and seven percent were in their teens (7% county, 8% statewide). A similar proportion of mothers in the region reported smoking (4.9%) as compared to the county (3.7%) or state (4.6%). Fifty-five percent of women participating in WIC were overweight or obese before becoming pregnant, compared to 58 percent statewide, and the rate of pre-pregnancy obesity in the region and the state has increased slightly but steadily since 2012. Nearly all mothers received at least some form of prenatal care, and only four percent of babies in the region were born to mothers who had had fewer than five prenatal care visits

In the region in 2014, 7.0 percent of babies were low birth weight, compared to seven percent across the state. The percent of premature births was slightly higher in the region (9.5%) than in the state (9.0%). Infants participating in WIC in the region being breastfed (2015: 68.9%) lag behind the Healthy People 2020 goal of 81.9 percent of babies ever being breastfed as well as the proportion across the state (71.2%).

Although immunization rates vary by vaccine, over 90 percent of children in child care and kindergarten in the Northwest Maricopa Region had completed each of the three major (DTAP, polio, and MMR) vaccine series. Rates of personal exemptions for vaccinations among children in child care (3.2%) and kindergarten (4.1%) in the region were lower than exemption rates at the county (3.9% and 4.9% respectively) and state level (3.5% and 4.7% respectively).

Untreated decay experience and need for dental care was reported for 27 percent of kindergarteners in the region, which was the same as the state (27%). In overall decay experience, 50 percent of kindergarteners in the region had decay experience compared to Arizona's 52 percent.

Among children participating in WIC in the Northwest Maricopa Region in 2015, 10.2 percent had obesity and an additional 10 percent had overweight. Promisingly, the proportion of children with obesity decreased between 2012 and 2015, dropping from 12.1 percent in 2012 to 10.2 percent in 2015.

Family Support and Literacy

Of 14,350 reports of abuse and neglect of children birth to 17 received during the April 1-September 30, 2015 reporting period for Maricopa County, 1,709 (12%) resulted in a removal from the home. The proportion of reports resulting in removal were the same (12%) as across the state as a whole. In fiscal year 2015, 10 domestic violence shelters in Maricopa County served 3,934 people, 2,100 (53%) of whom were children.

In 2015, 1,664 pregnant or parenting women received publically funded behavioral health services in the region; a decrease of 34 percent from the 2,540 women who received services in 2012. The number of children ages birth to 5 receiving behavioral health services in the region also decreased by seven percent, from 2012 (n=943) to 2015 (n=881).

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 Northwest Maricopa Region, these efforts have resulted in the recruitment of 1,536 Friends, 136 Supporters and 51 Champions during the period of FY2014 through 2016. In addition to these strategic communications efforts, First Things First has also led a concerted effort of policymaker awareness-building throughout the state. Furthermore, the Arizona Early Childhood Alliance represent the united voice of the early childhood community in advocating for early childhood programs and services. Finally, FTF recently launched enhanced online information for parents of young children, including the more intentional and strategic placement of early childhood content and resources in the digital platforms that today's parents frequent.

System Coordination among Early Childhood Programs and Services

A majority (61%, n=28) of 46 survey respondents described the early childhood system in Maricopa County as a partially coordinated system, with more than one in five respondents (22%, n=10) describing the system as a well-coordinated system, and the remaining 17 percent (8 respondents) describing the system as uncoordinated. A majority of respondents (78%, n=36) agreed that young children's family support and literacy needs are effectively addressed by the early childhood system in the region. In addition, 67, 65 and 64 percent of respondents felt that professional development, early learning and children's health needs are effectively addressed.

2018 NEEDS AND ASSETS REPORT

About This Report

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

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

Description of the Region

The First Things First regional boundaries were initially established in 2007, creating 31 regions. For fiscal year 2015, the boundaries were modified and the number of regions was reduced to 28. The Northwest Maricopa Regional Partnership Council provides services within the cities of Aguila, El Mirage, Glendale, Luke Air Force Base, Morristown, Peoria, Sun City, Sun City West, Surprise, Waddell, Wickenburg, Wittmann and Youngtown. The ZIP codes associated with those cities are: 85301, 85302, 85303, 85305, 85307, 85308, 85309, 85310, 85320, 85335, 85342, 85345, 85351, 85355, 85358, 85361, 85363, 85372, 85373, 85374, 85375, 85376, 85378, 85379, 85381, 85382, 85383, 85385, 85387, 85388 and 85390. The area also includes the portions of ZIP codes 85304 and 85306 within Glendale city limits.

For this report, the region is divided into 12 sub-regions. Each sub-region is defined as one or more Zip Code Tabulation Areas (ZCTAs), as defined by the U. S. Census Bureau for reporting purposes.

The **Aguila** sub-region is defined as the 85320 ZCTA, in the northwest corner of the county. It includes the unincorporated place of Aguila and the surrounding area. Aguila is the least populated of the 12 sub-regions.

The **El Mirage** sub-region (ZCTA 85335) lies entirely within the city of El Mirage.

Glendale is the most populous sub-region. It includes eleven ZCTAs (85037, 85301, 85302, 85303, 85304, 85305, 85306, 85307, 85308, 85309, and 85310). This sub-region includes the majority of the city of Glendale as well as small parts of the cities of Phoenix, Peoria, and El Mirage. Parts of the 85304, 85306, and 85308 ZCTAs lie in the Phoenix North First Things First Region. Most of the 85037 ZCTA lies in the Phoenix South Region.

The **Morristown** sub-region is the 85342 ZCTA. It includes the unincorporated place of Morristown and some nearby area.

The **Peoria** sub-region is comprised of four ZCTAs: 85345, 85381, 85382, and 85383. The majority of the city of Peoria lies in this sub-region, along with a small part of the city of Glendale and some unincorporated land. Peoria is the second most populous sub-region.

The sub-regions of **Sun City** (ZCTAs 85351 and 85373) and **Sun City West** (ZCTA 85375) are mostly the unincorporated retirement communities with few families with young children. The 85373 ZCTA, however, includes an area north of Beardsley Road which is populated by families with young children.

Surprise is the third most populous of the sub-regions. It includes the ZCTAs of 85374, 85379, 85387, and 85388. Almost all of the city of Surprise lies in this sub-region.

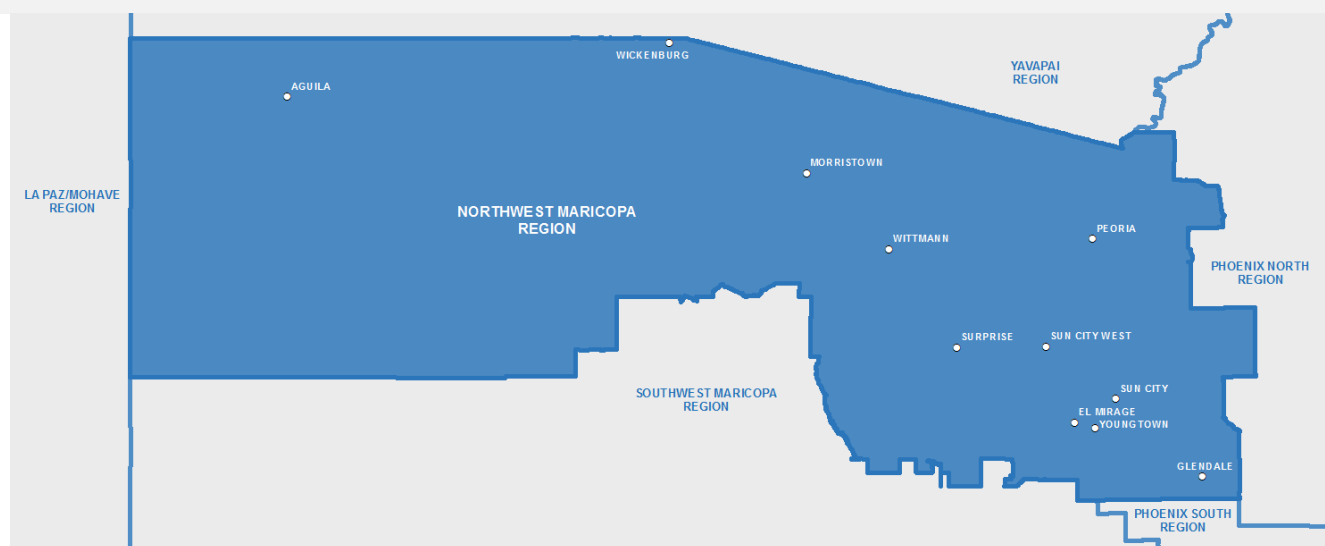
The 85355 ZCTA defines the sub-region of **Waddell**. It includes the unincorporated place of Waddell, some nearby unincorporated land, and a small part of the city of Glendale.

The sub-region of **Wickenburg** is ZCTA 85390. It includes the town of Wickenburg and some unincorporated areas around it.

The **Wittmann** sub-region includes the greater part of the 85361 ZCTA and a small part of the 85396 ZCTA. (The majority of 85396 and a small part of 85361 are in the Southwest Maricopa First Things First Region.) This sub-region includes the unincorporated place of Wittmann and neighboring areas.

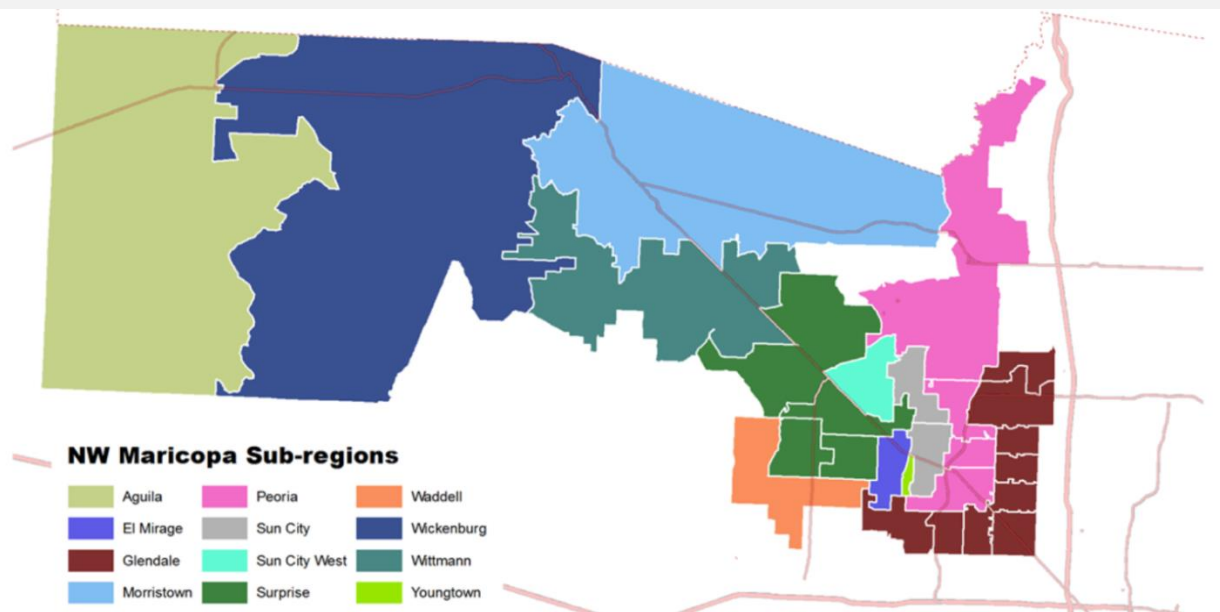
Finally, the **Youngtown** sub-region is identified as ZCTA 85363. The entire town of Youngtown is in this sub-region.

Figure 1. The Northwest Maricopa First Things First Region



Source: First Things First (2016).

Figure 2. The Twelve Northwest Maricopa Sub-Regions



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

An understanding of the supports and resources *within* a family is also key to helping young children achieve the best possible developmental outcomes.^{3,4} Children living with and being cared for by someone other than their parents, such as relatives or close friends, is known as kinship care and is increasingly common.⁵ Children living in kinship care can arrive in those situations for a variety of reasons including a parent's absence for work, military service, chronic illness, incarceration, or due to abuse, neglect, or homelessness, among others. Children in kinship care often face special needs as a result of trauma, and these families often require additional support and assistance to help children adjust and provide the best possible home environment.⁶ Caring for young children may pose a particular challenge for aging grandparents, as they often lack information on resources, support services, benefits, and policies available to aid in their caregiving role.⁷ Understanding the makeup of families in a region can help better prepare child care, school and agency staff to engage with diverse families in ways that support positive interactions with staff and within families to enhance each child's early learning.⁸

Recognizing variations in regional language use and proficiency is also important to ensuring appropriate access to services and resources and identifying needed supports. Mastery of the language spoken in the home is related to school readiness and academic achievement.⁹ Those children who engage in dual language learning have cognitive, social-emotional and learning benefits in early school and throughout their lifetimes.¹⁰ Although dual language learning is an asset, some children come from limited English speaking households (that is, a household where none of the adult members speak English very well). Language barriers for these families can limit access to health care and social services, and can provide challenges to communication between parents and teachers, doctors and other providers, which can affect the quality of services children receive.¹¹ Assuring that early childhood resources and services are available in a language accessible to the child and caregivers is essential. Although Spanish is the most common second language spoken, Arizona is also home to a large number of Native American communities and other groups whose primary language is not English.

What the Data Tell Us

Demographics

According to the U.S. Census, 55,078 children under the age of six resided in the Northwest Maricopa Region (see Table 1) as of April 1, 2010. Overall, the region population was 683,160 in 2010 (see Table 3), meaning that 8 percent of residents are young children. This ranged from less than 1 percent of young children living in the Sun City West sub-region, to a high of 13 percent living in El Mirage.

In Maricopa County as a whole, the number of young children (ages 0 to 5) grew by 17 percent from 2000 (289,759) to 2010 (339,217). Much of this growth occurred in the Northwest Maricopa Region. The total number of young children in Surprise, for example, increased from 2,617 in 2000 to 11,184 in 2010. (Table 2).ⁱ

The overall population of Maricopa County is projected to grow by about 48 percent over the next several decades, but the population of young children is projected to grow somewhat less steeply, by 35 percent (Table 4 and Table 5).

Forty-eight percent of young children in the Northwest Maricopa Region are non-Hispanic white and most of the rest (40%) are Hispanic or Latino. Five percent are African American, three percent are Asian or Pacific Islander, and one percent are American Indian. This is a lower percentage of Hispanic and Latino children than reside in Maricopa County as a whole (46%) (Table 7). Across the region, there is considerable variation in the racial and ethnic composition of young children within communities. For example, in Aguila the majority (85%) of young children are Latino; in Glendale, 7 percent of young children are African-American. In Morristown, Surprise, Waddell, and Wittmann, over 60 percent of the young children are non-Hispanic white. Compared to children, a smaller proportion of adults (20% of those aged 18 and older) identify as Hispanic across the region (Table 6).

Arizona is also increasingly a home to those displaced from other parts of the world. The national Office of Refugee Resettlement compiles an annual report of refugee arrival data by country of origin and state of resettlement.ⁱⁱ The number of refugees resettled in Arizona has increased steadily over time, with 744 refugee entrants to Arizona in 1981, and 4,833 in 2016 (county level resettlement data are not currently available). The country of origin of resettled refugees has changed over time, with the largest number of entrants in the last decade coming from countries such as Burma, the Democratic Republic of Congo, Cuba, Iraq, and Somalia.ⁱⁱⁱ In Arizona, most refugees are resettled in the greater Phoenix and Tucson areas, and so it is likely that refugee families may be among those served in the Northwest Maricopa Region.¹²

ⁱ We cannot calculate the population of the Northwest Maricopa Region at the time of the 2000 U. S. Census, because the region was not yet defined.

ⁱⁱ For more information, visit <https://www.acf.hhs.gov/orr/resource/refugee-arrival-data>

ⁱⁱⁱ For more information, visit https://des.az.gov/sites/default/files/REFREPT_Dec2016.pdf

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
Northwest Maricopa Region	55,078	8,584	8,891	9,319	9,491	9,371	9,422
Aguila	103	17	23	14	21	16	12
El Mirage	4,049	605	671	697	702	664	710
Glendale	23,676	3,898	3,881	4,068	3,933	3,968	3,928
Morristown	116	17	16	16	28	18	21
Peoria	12,352	1,886	1,946	2,018	2,158	2,155	2,189
Sun City	787	118	127	155	134	126	127
Sun City West	33	5	4	8	4	7	5
Surprise	11,490	1,681	1,857	1,914	2,079	1,967	1,992
Waddell	899	146	112	157	150	165	169
Wickenburg	440	55	84	84	58	89	70
Wittmann	530	62	77	98	117	87	89
Youngtown	603	94	93	90	107	109	110
Maricopa County	339,217	54,300	55,566	57,730	58,192	56,982	56,447
ARIZONA	546,609	87,557	89,746	93,216	93,880	91,316	90,894

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

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

	Number of children (ages 0-5) in 2000 Census	Number of children (ages 0-5) in 2010 Census	Percent change in population (ages 0-5), 2000 to 2010
Northwest Maricopa Region	N/A	55,078	N/A
Maricopa County	289,759	339,217	Up 17%
ARIZONA	459,141	546,609	Up 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
Northwest Maricopa Region	683,160	55,078	8%
Aguila	1,181	103	9%
El Mirage	31,787	4,049	13%
Glendale	268,312	23,676	9%
Morristown	1,534	116	8%
Peoria	158,086	12,352	8%
Sun City	45,145	787	2%
Sun City West	26,709	33	0%
Surprise	120,935	11,490	10%
Waddell	8,733	899	10%
Wickenburg	7,902	440	6%
Wittmann	6,680	530	8%
Youngtown	6,156	603	10%
Maricopa County	3,817,117	339,217	9%
ARIZONA	6,392,017	546,609	9%

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

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

	2015	2020	2025	2030	2035	2040
Northwest Maricopa Region	N/A	N/A	N/A	N/A	N/A	N/A
Maricopa County	328,794	353,910	384,475	413,097	431,970	444,864
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
Northwest Maricopa Region	N/A	N/A	N/A	N/A	N/A	N/A
Maricopa County	4,076,438	4,480,899	4,885,981	5,280,059	5,665,917	6,030,950
ARIZONA	6,758,251	7,346,787	7,944,753	8,535,913	9,128,899	9,706,815

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

Table 6. Race and Ethnicity of the Adult Population (Ages 18 and Older) in the 2010 Census

	Number of persons (ages 18 and older)	Hispanic or Latino	White alone (not Hispanic or Latino)	American Indian alone (not Hispanic or Latino)	African-American alone (not Hispanic or Latino)	Asian or Pacific Islander (not Hispanic or Latino)
Northwest Maricopa Region	512,786	20%	72%	1%	4%	3%
Aguila	890	51%	46%	1%	1%	0%
El Mirage	20,512	43%	46%	1%	6%	2%
Glendale	194,234	27%	61%	1%	5%	4%
Morristown	1,199	10%	86%	2%	0%	1%
Peoria	116,481	16%	76%	1%	3%	3%
Sun City	43,007	3%	94%	0%	1%	1%
Sun City West	26,615	1%	96%	0%	1%	1%
Surprise	87,852	15%	76%	0%	4%	3%
Waddell	6,044	18%	74%	0%	4%	3%
Wickenburg	6,474	12%	86%	1%	0%	0%
Wittmann	4,880	19%	77%	1%	1%	1%
Youngtown	4,598	27%	65%	1%	4%	3%
Maricopa County	2,809,256	25%	64%	1%	4%	4%
ARIZONA	4,763,003	25%	63%	4%	4%	3%

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

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

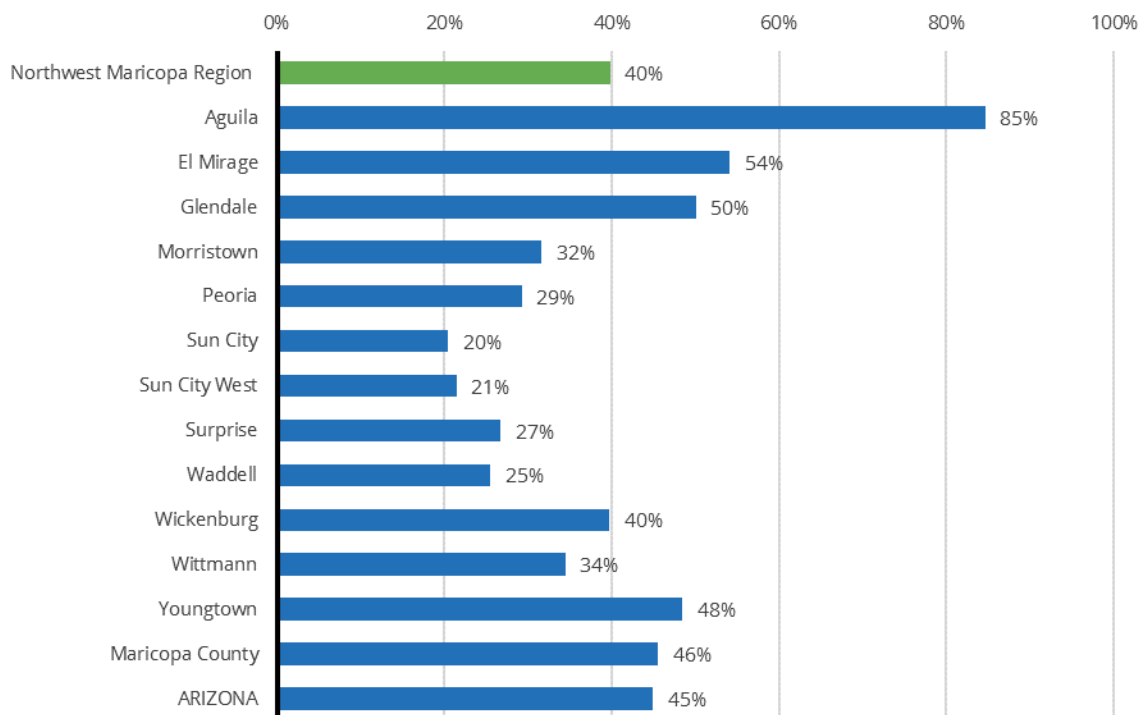
Table 7. Race and Ethnicity of the Population of Children (Ages 0 to 4) in the 2010 Census

	Population of children (ages 0-4)	Hispanic or Latino	White alone (not Hispanic or Latino)	American Indian	African-American	Asian or Pacific Islander
Northwest Maricopa Region	45,656	40%	48%	1%	5%	3%
Aguila	91	85%	12%	5%	0%	0%
El Mirage	3,339	54%	35%	1%	5%	1%
Glendale	19,748	50%	36%	2%	7%	3%
Morristown	95	32%	63%	1%	0%	0%
Peoria	10,163	29%	58%	1%	4%	3%
Sun City	660	20%	74%	0%	2%	2%
Sun City West	28	21%	68%	0%	0%	4%
Surprise	9,498	27%	61%	1%	5%	2%
Waddell	730	25%	63%	1%	4%	2%
Wickenburg	370	40%	57%	1%	0%	0%
Wittmann	441	34%	62%	2%	1%	0%
Youngtown	493	48%	43%	1%	4%	3%
Maricopa County	282,770	46%	40%	3%	6%	4%
ARIZONA	455,715	45%	40%	6%	5%	3%

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

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

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, in the Northwest Maricopa Region, 15 percent of households have at least one child under 6 years old (Table 8). The largest concentration of these families are in El Mirage, where three in ten households have a young child, and Waddell, where almost one in four household does. As expected, the retirement communities of Sun City and Sun City West have relatively few households with young children.

According to the American Community Survey, 35 percent of children in the Northwest Maricopa Region live with a single parent, which is slightly lower than the proportion statewide (38%) (Figure 4). Nearly half (48%) of the young children in Aguila live with a single parent. The rates in El Mirage (42%) and Glendale (40%) are also higher than the state rate. An estimated 80 percent of children in the Morristown sub-region live in a two-parent home.

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 Maricopa County, 0.9 percent of families are same-sex households, the same as in Arizona as a whole.¹³

About 3 percent of children ages 0 to 5 in the Northwest Maricopa Region are in kinship or other family arrangements, with extended families, friends, and non-relatives caring for them. Children living with adults other than their parents is especially common in the Aguila (17%) and Waddell (6%) sub-regions.

The proportion of young children (ages 0-5) living in a grandparent's household is 12 percent in both the region and in the entire county (Figure 5). It is important to note that these households may be multigenerational—the

grandparent is considered the head of the household—but the child’s parent may also live there. Table 9 provides more information about the estimated 13,031 children ages 0 to 17 living with grandparents in the Northwest Maricopa Region.^{iv} For 48 percent of these children, the grandparent is responsible for the child; for 14 percent, the grandparent is responsible and the child’s parent is not present in the household. A particularly high percentage of children ages 0-17 living with their grandparents do not have a parent present in the Wickenburg (65%), Youngtown (37%), and Peoria (23%) sub-regions.

Families may live in multigenerational households to share the costs of housing and child care, or grandparents may step in when parents are unable to care for children. Given particularly high percentages of grandparents involved in the care of grandchildren in several communities, additional supports for grandparents raising grandchildren may be needed.

There are fewer children living with foreign-born parents in the region (24%) compared to the county (31%). (See Table 10.) The percentages of children living with a foreign-born parent are higher in the sub-regions of Aguila (nearly all), Glendale (34%), and Morristown (31%).

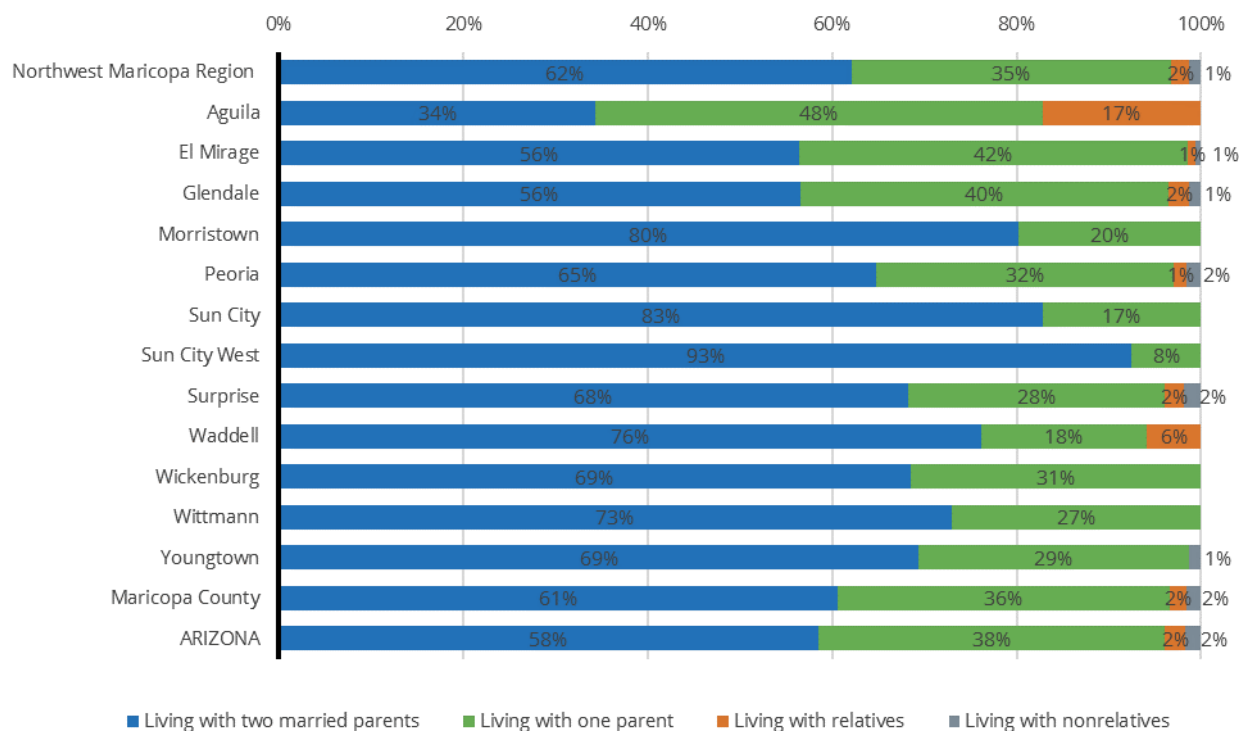
^{iv} Please note that Figure 5 and Table 9 are based on different data sources—and refer to different age groups—so they are not directly comparable.

Table 8. Composition of Households in the 2010 Census

	Total number of households	Total number of households with child(ren) under 6 years old	Percent of households with child(ren) under 6 years old	Households with child(ren) under 6 years old, husband-wife householders	Households with child(ren) under 6 years old, single male householder	Households with child(ren) under 6 years old, single female householder
Northwest Maricopa Region	260,731	39,424	15%	67%	11%	22%
Aguila	401	65	16%	60%	11%	29%
El Mirage	9,414	2,816	30%	65%	11%	23%
Glendale	94,292	16,896	18%	60%	13%	27%
Morristown	633	79	12%	70%	10%	20%
Peoria	58,436	9,049	15%	71%	9%	19%
Sun City	26,109	554	2%	78%	9%	13%
Sun City West	16,013	25	0%	60%	8%	32%
Surprise	44,440	8,232	19%	76%	8%	16%
Waddell	2,728	621	23%	82%	7%	11%
Wickenburg	3,544	308	9%	60%	15%	25%
Wittmann	2,251	368	16%	68%	13%	18%
Youngtown	2,470	411	17%	65%	14%	21%
Maricopa County	1,411,583	238,955	17%	66%	11%	22%
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

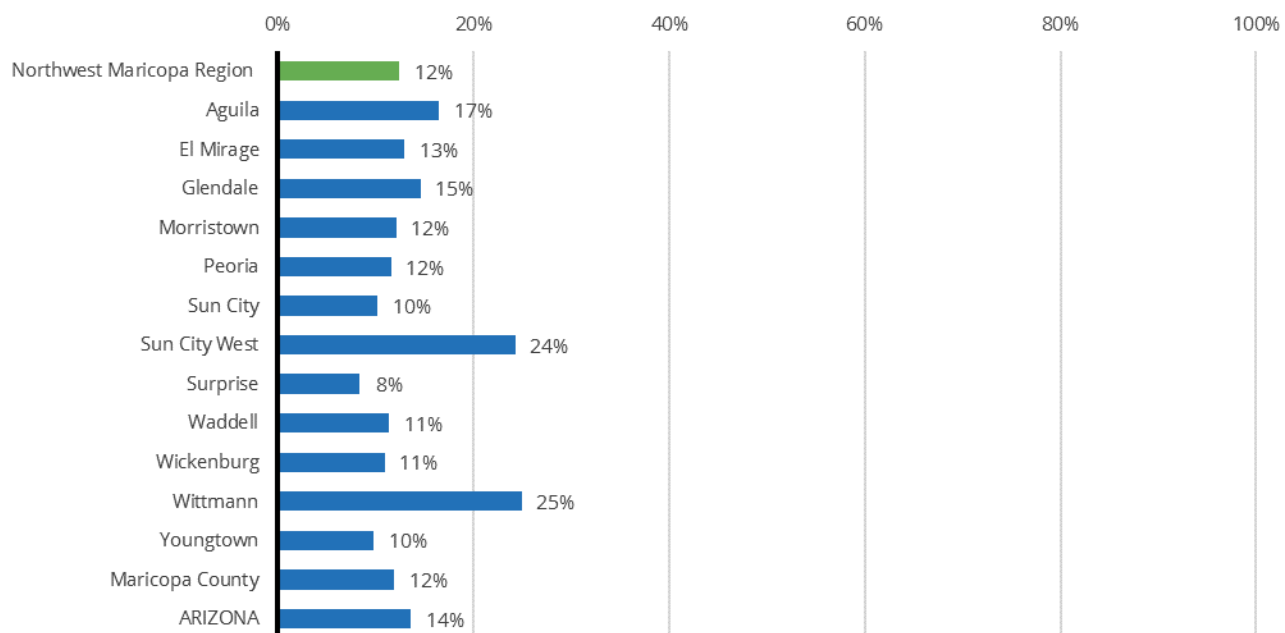
Table 9. Children (Ages 0 to 17) Living in a Grandparent's Household

	Number of children (ages 0-17) living in a grandparent's household	Percent of children (ages 0-17) living in a grandparent's household and the grandparent is responsible for the child	Percent of children (ages 0-17) living in a grandparent's household and the grandparent is responsible for the child (with no parent present)
Northwest Maricopa Region	13,031	48%	14%
Aguila	10	100%	0%
El Mirage	443	62%	10%
Glendale	6,181	46%	15%
Morristown	6	67%	0%
Peoria	3,071	55%	23%
Sun City	219	20%	0%
Sun City West	78	0%	0%
Surprise	2,491	44%	5%
Waddell	226	57%	0%
Wickenburg	47	100%	65%
Wittmann	80	44%	0%
Youngtown	179	61%	37%
Maricopa County	74,058	50%	13%
ARIZONA	140,038	53%	14%

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

Note: The percentages in the third column include cases in which the child's parent is present or absent. The percentages in the fourth column include only the cases in which the child's parent is absent.

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



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

Table 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
Northwest Maricopa Region	51,411	24%
Aguila	53	100%
El Mirage	3,619	26%
Glendale	22,253	34%
Morristown	101	31%
Peoria	11,840	19%
Sun City	810	0%
Sun City West	200	0%
Surprise	9,862	12%
Waddell	1,274	11%
Wickenburg	428	22%
Wittmann	398	0%
Youngtown	574	21%
Maricopa County	320,911	31%
ARIZONA	510,658	27%

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

Language Use

In the Northwest Maricopa Region, 81 percent of residents age 5 and older speak English at home with Spanish (14%) being the second most common home language (Table 11). Another 5 percent of the region's residents speak a language other than English or Spanish at home. In Morristown (97%) and Wittmann (91%), home languages other than English are relatively rare. The proportion of residents age 5 and older who speak Spanish at home is by far highest in Aguila (70%), but also notably high in El Mirage (26%) and Glendale (22%). In these three sub-regions, also, there are sizable fractions of the population who report that they do not speak English very well (Aguila 47%, El Mirage 12%, and Glendale 10%) (Table 12). The map in Figure 6 shows concentrations of Spanish-speaking households in central Glendale and northern El Mirage.

A household is considered "limited-English-speaking" if there is no adult (14 or older) who speaks English well. Three percent of households in the Northwest Maricopa Region are classified as limited-English-speaking, which is lower

than the proportion of households with that designation statewide (5%) (Table 13). Aguila (22%) has the greatest proportion of such households. In Glendale, 6 percent of households are limited-English-speaking, with 4 percent using Spanish and the remaining 2 percent using a different language. Youngtown has 3 percent of its households classified as limited-English-speaking, of which many are using a language other than Spanish.

Similar trends are seen in the proportion of English Language Learners (ELL) in schools in the region (Table 37). The percent of kindergarten through third grade students in the region who are English Language Learners in the Northwest Maricopa region (7%) is less than the county (11%) or statewide (10%) rates. In certain districts, however, the proportion of English Language Learners is considerably higher; 36 percent of students in the Aguila Elementary District and 22 percent of students in the Glendale Elementary District are English Language Learners. (See Figure 11 for a map of the region's school districts.)

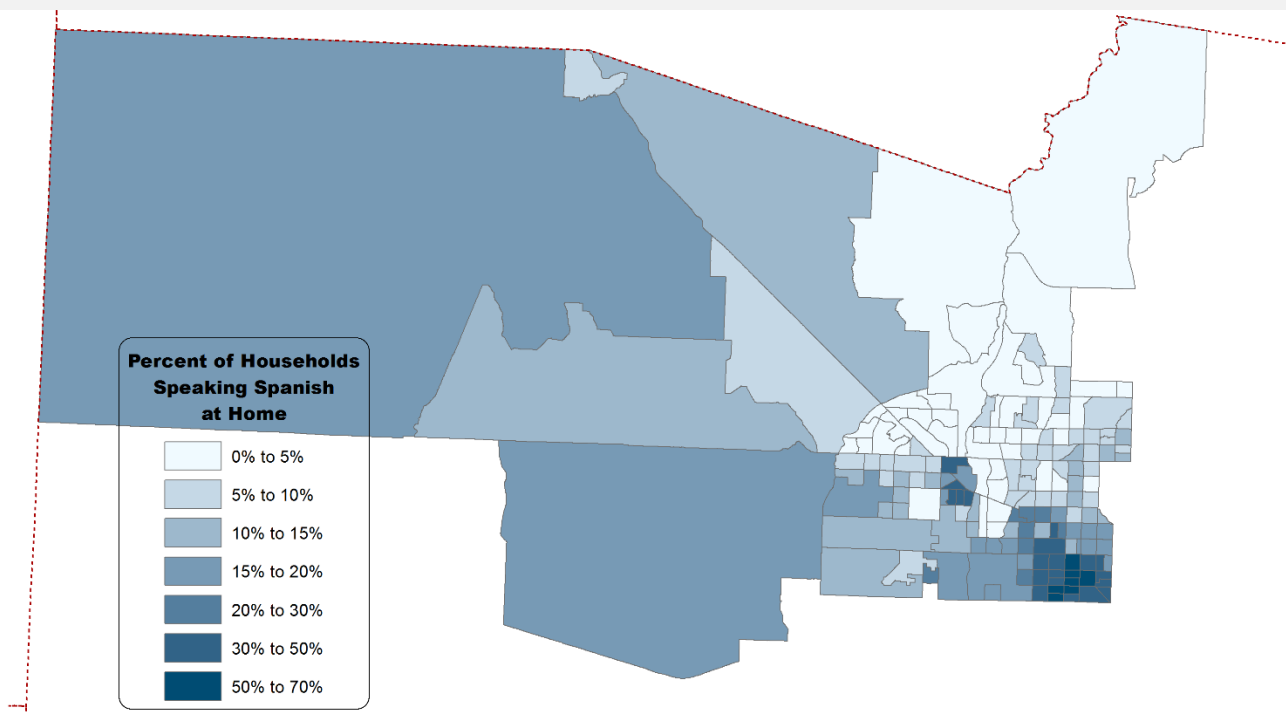
Table 11. Language Spoken at Home (Ages 5 and Older)

	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
Northwest Maricopa Region	657,392	81%	14%	0%	5%
Aguila	1,088	29%	70%	0%	2%
El Mirage	29,551	71%	26%	1%	2%
Glendale	252,721	72%	22%	0%	6%
Morristown	1,226	97%	1%	0%	2%
Peoria	155,260	85%	9%	0%	6%
Sun City	46,824	95%	2%	0%	3%
Sun City West	27,384	95%	2%	0%	3%
Surprise	115,446	88%	8%	0%	4%
Waddell	8,432	84%	11%	0%	5%
Wickenburg	7,906	88%	11%	0%	0%
Wittmann	5,585	91%	8%	0%	1%
Youngtown	5,969	82%	12%	0%	6%
Maricopa County	3,672,140	74%	20%	0%	6%
ARIZONA	6,120,900	73%	20%	2%	5%

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

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

Figure 6. Percent of Households Speaking Spanish at Home



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

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

	Population (ages 5 and older)	Speak English at home	Speak another language at home, and speak English "very well"	Speak another language at home, and do not speak English "very well"
Northwest Maricopa Region	657,392	81%	12%	7%
Aguila	1,088	29%	24%	47%
El Mirage	29,551	71%	17%	12%
Glendale	252,721	72%	18%	10%
Morristown	1,226	97%	1%	2%
Peoria	155,260	85%	10%	5%
Sun City	46,824	95%	3%	2%
Sun City West	27,384	95%	4%	1%
Surprise	115,446	88%	8%	4%
Waddell	8,432	84%	13%	3%
Wickenburg	7,906	88%	4%	7%
Wittmann	5,585	91%	8%	1%
Youngtown	5,969	82%	12%	7%
Maricopa County	3,672,140	74%	17%	10%
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 in a row may not add to 100% due to rounding.

Table 13. Limited-English-Speaking Households

	Number of households	Households which speak a language other than English	Limited-English-speaking households (Total)	Limited-English-speaking households (Spanish)
Northwest Maricopa Region	262,027	19%	3%	2%
Aguila	282	53%	22%	22%
El Mirage	9,888	28%	5%	5%
Glendale	93,221	28%	6%	4%
Morristown	579	4%	1%	0%
Peoria	59,330	17%	2%	1%
Sun City	26,400	6%	1%	1%
Sun City West	16,082	6%	1%	0%
Surprise	45,189	13%	1%	1%
Waddell	2,931	17%	0%	0%
Wickenburg	3,851	9%	5%	5%
Wittmann	1,984	12%	1%	1%
Youngtown	2,292	19%	3%	1%
Maricopa County	1,424,244	26%	5%	4%
ARIZONA	2,387,246	27%	5%	4%

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



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.^{14,15,16,17,18} They are also more likely to remain poor later in life.¹⁹ More than a quarter (26%) of Arizona's children lived in poverty in 2014, compared to just over a fifth (21%) six years earlier.²⁰

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.²¹ 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.²² Unemployment can also put families at greater risk for stress, family conflict, and homelessness.²³

Housing instability and homelessness can have deleterious effects on the physical, social-emotional, and cognitive development of young children.²⁴ 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.²⁵ High housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition and homelessness.²⁶ 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 \$93.²⁷

Other public assistance programs available in Arizona affect access to food. Food insecurity – a limited or uncertain availability of food – is negatively associated with many markers of health and well-being for children, including a heightened risk for developmental delays.²⁸ Food insecurity is also associated with overweight and obesity.²⁹ 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.³⁰ 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.³¹

In addition to SNAP, food banks and school-based programs such as the National School Lunch Program³² and Summer Food Service Program³³ 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 Program³⁴ provides free and reduced-price meals at school for students whose family incomes are under 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.^v 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^{35, 36, 37} and decreased risk of under and overweight.³⁸

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.^{vi} In Arizona in 2015, half of all children aged birth through four were enrolled in WIC.³⁹ Participation in WIC has been shown to be associated with healthier births, lower infant mortality, improved nutrition, decreased food insecurity, improved access to health care and improved cognitive development and academic achievement for children.⁴⁰

What the Data Tell Us

Income

The median income^{vii} for all Maricopa County families is \$64,072. (See Table 14.) The median income for families with two parents and children under age 18 is more than \$15,000 higher (\$79,792), and single-parent families make substantially less. The median income for households run by a single female in Maricopa County is \$27,792; the median income for households led by single males is almost 40 percent greater (\$38,614). The city of Peoria has the highest family median income (\$73,923) among the incorporated places in the region, and El Mirage has the lowest (\$49,784). The map in Figure 7 shows how family incomes vary across the region. Neighborhoods along Grand Avenue tend to have lower median incomes.

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

^{vi} For more information on the Arizona WIC Program, visit <http://azdhs.gov/prevention/azwic/>

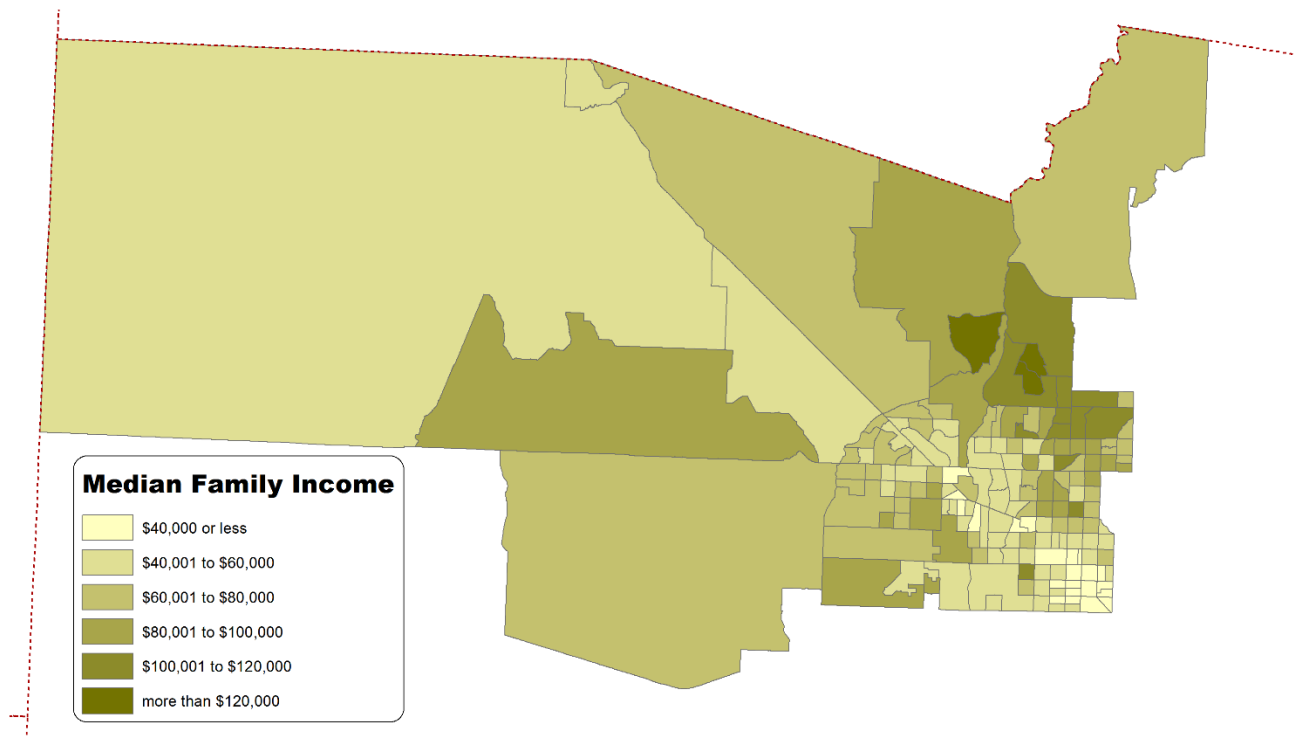
^{vii} The median is the number which separates the lower half from the upper half. Fifty percent of families in the county have income less than \$64,072 and the other half have more.

Table 14. Median Annual Family Income

	Median family income for all families	Median family income for husband-wife families with child(ren) under 18	Median family income for single-male-householder families with child(ren) under 18	Median family income for single-female-householder families with child(ren) under 18
Northwest Maricopa Region	N/A	N/A	N/A	N/A
El Mirage city	\$49,784	\$60,767	\$35,744	\$29,150
Glendale city	\$54,952	\$65,255	\$34,889	\$26,290
Peoria city	\$73,923	\$93,841	\$41,575	\$36,036
Surprise city	\$65,393	\$77,378	\$37,457	\$34,711
Wickenburg town	\$50,677	N/A	N/A	N/A
Youngtown town	\$51,500	N/A	N/A	N/A
Maricopa County	\$64,072	\$79,792	\$38,614	\$27,792
ARIZONA	\$59,088	\$73,563	\$37,103	\$25,787

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

Figure 7. Median Family Income, by Census Tract in the Northwest Maricopa Region



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

Poverty

An estimated 14 percent of the total (all-age) population of the Northwest Maricopa Region lives in poverty, which is slightly lower than in Maricopa County as a whole (17%) or the state (18%) (Table 15). The percentage of the population aged 0-5 in poverty in the Northwest Maricopa Region (25%) is considerably higher than the total (all-age) population in the region in poverty (14%) but somewhat lower than the percentage of children aged 0-5 living in poverty across the state (29%). Sub-regional data illustrates that there is a great deal of diversity across the region. While poverty is relatively rare in some areas—such as Waddell (6% of young children in poverty)—more than half of the children under six in Aguila (75%) and Wickenburg (56%) live in poverty.

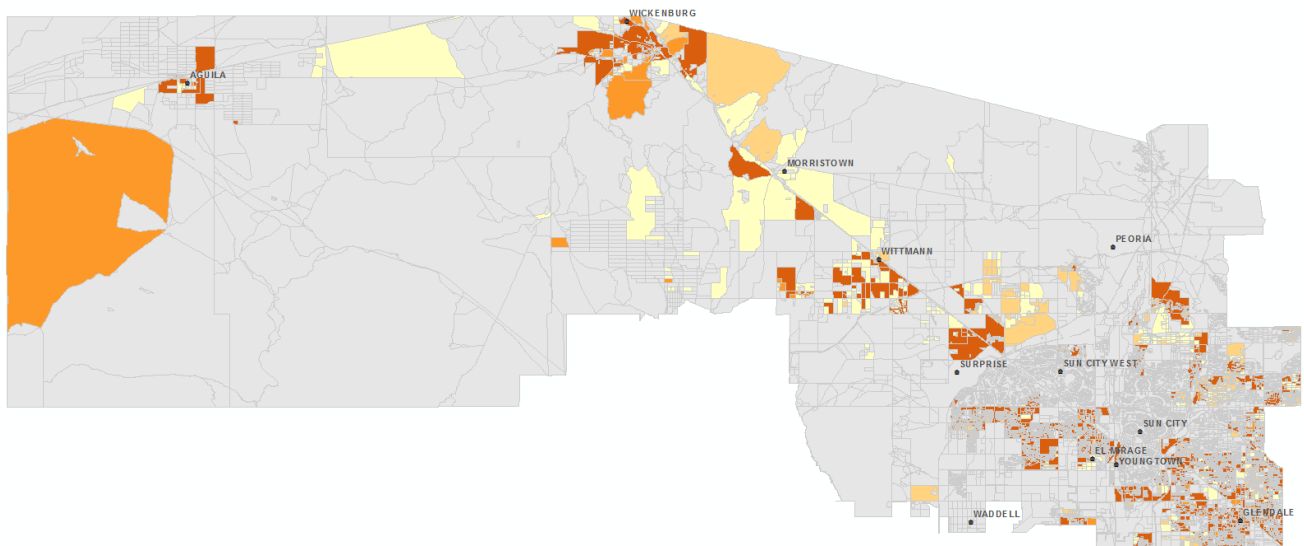
In addition to the families whose incomes fall below the federal poverty level, a greater proportion of households in the region and county are considered low-income (i.e., near but not below the federal poverty level, or FPL). Forty-three percent of families in the region with children aged four and under live below 185 percent of the FPL (that is, they earned less than \$3,677 a month for a family of four), which is slightly less than the 46 percent in the county and 49 percent across the state (Table 16). Across the sub-regions, a majority of families with children ages 0 to 4 earn less than 185 FPL in Wickenburg (90%), Aguila (88%), El Mirage (52%), and Glendale (54%).

The Temporary Assistance to Needy Families (TANF) cash assistance program can be an important short-term support to families in dire financial need. The number of young children helped by this program has steadily declined in recent years, both in the Northwest Maricopa Region (down 32%) and statewide (down 39%) (Table 17). The 1,744

young children receiving TANF in the Northwest Maricopa Region represent about 3 percent of the total population of children (ages 0-5) in the region, a similar percentage to the percent of young children receiving TANF statewide (3%).

Between 1996 and 2015, Arizona reduced TANF benefits more than any other state in the nation, and now ranks 42nd in the level of assistance to those participating in TANF.⁴¹ In Arizona, TANF eligibility is capped at \$335 per month, or \$4,020 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.⁴² 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.⁴³

Figure 8. Poverty in the Northwest Maricopa Region, by Census Tract



Legend	# of Census Blocks	Poverty 0-5	Population 0-5	% Poverty
High Poverty-High Population	1,896	11,055	30,986	36%
High Poverty-Low Population	639	1,129	2,378	47%
Low Poverty-High Population	719	353	7,221	5%
Low Poverty-Low Population	1,816	639	4,454	14%
No Poverty	9,212	0	10,039	0%
Total	14,282	13,175	55,078	24%

Source: First Things First (2016).

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 15. Persons Living in Poverty

	Number of persons (all ages) for whom poverty status is known	Persons (all ages) below poverty level	Number of young children (ages 0-5) for whom poverty status is known	Young children (ages 0-5) below poverty level
Northwest Maricopa Region	695,089	14%	52,417	25%
Aguila	1,142	58%	64	75%
El Mirage	32,433	20%	3,651	26%
Glendale	269,016	20%	22,747	32%
Morristown	1,313	11%	101	26%
Peoria	163,670	10%	12,020	19%
Sun City	47,080	7%	810	4%
Sun City West	27,287	5%	200	0%
Surprise	123,212	11%	10,070	19%
Waddell	9,636	9%	1,355	6%
Wickenburg	8,148	17%	428	56%
Wittmann	5,948	17%	398	32%
Youngtown	6,205	21%	574	27%
Maricopa County	3,895,963	17%	326,901	27%
ARIZONA	6,411,354	18%	522,513	29%

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

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

	Estimated number of families with children (ages 0-4)	Families with children (ages 0-4) below 100% FPL	Families with children (ages 0-4) below 130% FPL	Families with children (ages 0-4) below 150% FPL	Families with children (ages 0-4) below 185% FPL
Northwest Maricopa Region	29,964	23%	31%	35%	43%
Aguila	40	75%	75%	88%	88%
El Mirage	2,003	22%	32%	39%	52%
Glendale	12,943	30%	40%	45%	54%
Morristown	79	30%	30%	30%	30%
Peoria	7,007	18%	22%	25%	34%
Sun City	473	2%	3%	3%	20%
Sun City West	146	0%	8%	8%	8%
Surprise	5,718	16%	23%	26%	34%
Waddell	712	9%	16%	16%	16%
Wickenburg	210	55%	73%	79%	90%
Wittmann	338	26%	26%	26%	31%
Youngtown	295	14%	27%	27%	32%
Maricopa County	188,518	26%	34%	38%	46%
ARIZONA	301,165	27%	35%	41%	49%

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

Please note that the columns in Table 16 are cumulative. In other words, the 23% of families that are below 100% of the FPL are also counted in the 43% of families that are below 185% of the FPL in the Region.

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

	CY 2012	CY 2013	CY 2014	CY 2015	Change from 2012 to 2015
Northwest Maricopa Region	2,568	2,298	2,006	1,744	down 32%
Maricopa County	17,120	15,936	12,432	10,042	down 41%
ARIZONA	26,827	24,889	19,884	16,336	down 39%

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

Employment and Unemployment

Unemployment rates have been dropping steadily in both Maricopa County and the state since 2010 (Table 18). In 2015, the unemployment rate in Maricopa County was approximately 5 percent. While state and county unemployment has decreased since the peak of 2010, it is still higher than it was in 2007, before the economic crisis began. Across the cities and towns in the region, unemployment has been declining year by year since 2011. Compared to the rest of the region, the town of Youngtown has consistently had higher rates of unemployment over the past five years, while Wickenburg has had noticeably lower rates.^{viii}

For the young children in the region who live with two parents, it is somewhat more common that both parents are in the labor force (34%) than having only one parent in the labor force (28%) (Table 19).^{ix} Having neither parent in the labor force is relatively rare (2%). For the young children who live with one parent, it is more common that the parent is in the labor force (28%) than not (8%).

Another way to look at the data in Table 19 is to consider the children who do not have a parent not in the labor force (that is, those who have two parents in the labor force plus those whose single parent is in the labor force). For the Northwest Maricopa Region, 62 percent of the children under six fall into this category (that is, the 34% who have two parents in the labor force plus the 28% who have their single parent in the labor force). This yields an estimate of about 31,800 young children without a stay-at-home parent in the region. There is considerable variation within the region, however. In Waddell and Wittmann, more than 70 percent of children have no stay-at-home parent, but in Aguila (30%) and Wickenburg (34%), the majority of young children have at least one stay-at-home parent.

It is important to note that parents are considered in the labor force if they currently have a job or are looking for a job, so high rates of labor force participation may indicate that many parents in the community are looking for work, even if they are not currently employed. 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.⁴⁴ Statewide, about 12 percent of children are in homes without a working parent; in this region, the rate is higher in the Aguila (28%) and El Mirage (16%) sub-regions.

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

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

Table 18. Annual Unemployment Rates, 2009 to 2016

	2009	2010	2011	2012	2013	2014	2015	2016
Northwest Maricopa Region	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
City of El Mirage	N/A	9.2%	10.2%	8.6%	7.6%	6.8%	5.9%	5.0%
City of Glendale	N/A	12.2%	9.5%	8.1%	7.1%	6.2%	5.5%	4.9%
City of Peoria	N/A	8.3%	7.9%	6.6%	6.1%	5.4%	4.7%	4.2%
City of Surprise	N/A	9.8%	9.2%	7.8%	7.3%	6.4%	5.6%	4.8%
Town of Wickenburg	N/A	N/A	6.8%	5.8%	5.2%	4.6%	4.1%	N/A
Town of Youngtown	N/A	N/A	14.8%	12.7%	11.6%	10.3%	9.2%	N/A
Maricopa County	9.1%	9.5%	8.6%	7.3%	6.6%	5.8%	5.1%	4.5%
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).

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

	Estimated number of children (ages 0-5) living with one or two parents	Children (ages 0-5) living with two parents who are both in the labor force	Children (ages 0-5) living with two parents, one in the labor force, and one not	Children (ages 0-5) living with two parents, neither in the labor force	Children (ages 0-5) living with a single parent who is in the labor force	Children (ages 0-5) living with a single parent who is not in the labor force
Northwest Maricopa Region	51,411	34%	28%	2%	28%	8%
Aguila	53	0%	42%	0%	30%	28%
El Mirage	3,619	31%	22%	4%	31%	12%
Glendale	22,253	31%	25%	3%	32%	10%
Morristown	101	50%	30%	0%	16%	4%
Peoria	11,840	35%	30%	2%	27%	6%
Sun City	810	42%	41%	0%	15%	2%
Sun City West	200	73%	20%	0%	0%	8%
Surprise	9,862	37%	33%	1%	22%	7%
Waddell	1,274	56%	25%	0%	15%	4%
Wickenburg	428	9%	59%	0%	25%	7%
Wittmann	398	51%	22%	0%	18%	9%
Youngtown	574	27%	42%	1%	19%	11%
Maricopa County	320,911	32%	29%	2%	28%	10%
ARIZONA	510,658	31%	29%	1%	29%	10%

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

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

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

Food Insecurity

Feeding America's "Map the Meal Gap" project gathers information regarding food insecure households, types of households, unemployment rates, and other information to provide a picture of nation's food insecurity.⁴⁵ Food insecurity is defined by the USDA as a "household-level economic and social condition of limited or uncertain access to adequate food."⁴⁶ In Maricopa County, 16 percent of the population (all-age) is estimated to be food insecure, which is similar to the rate across the state (17%). Twenty-five percent of children (those under 18 years old) in the county are food insecure, slightly lower than the state's 27 percent. An estimated 68 percent of food insecure children in the county are likely to be income-eligible for federal nutrition assistance (Table 20).

Families' ability to promote the health of their children is influenced by the built environment, that is, the physical parts of their communities where people live and work (for example, homes, buildings, streets, open spaces and infrastructure). In Maricopa County in 2012 (the most recent data available), there were 6 times as many fast-food restaurants as there are grocery stores (Table 21).^x The county has few recreation facilities per capita. There were 265 fitness and recreation facilities in 2012,^{xi} or 0.07 facilities per 1,000 residents. Approximately one-quarter (24%) of adults over age 18 in Arizona reported getting no physical activity during their leisure time in the prior month.⁴⁷

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. While the number of young children participating in SNAP has declined since 2012, this program still supports over 23,000 children annually in the Northwest Maricopa Region (Table 23). Available to these SNAP participants in the region are 356 SNAP retailers (52.11 retailers per 100,000 residents) (Table 22).

WIC enrollment has also declined slightly (Table 25) from 2012 (53% of children under five) to 2015 (49%). Table 26 provides a single month snapshot of participation in the program in January of 2015. In the Northwest Maricopa Region, 78 percent of the women, 84 percent of the infants, and 77 percent of the children enrolled in WIC claimed their benefits in the month of January. There were 63 reported WIC retailers in the region (9.22 retailers per 100,000 residents) (Table 22).

Schools are an important part of the nutrition assistance system, especially for children who may be food insecure. About half of all public- and charter-school students in the Northwest Maricopa Region have been eligible for free or reduced-price lunch since 2012 (Table 27). This is lower than the percent across the state, which has hovered at 57 percent. Over the last five years, the proportion of students receiving free or reduced-price lunch has stayed fairly constant in most school districts in the region, although the percentage has increased in the Washington district (from 77% in 2012 to 90% in 2016) and decreased in the Pendergast district (from 59% in 2012 to 53% in 2016). The only school districts in the region with less than 50 percent eligibility for free or reduced-price lunch in 2016 are Deer Valley (25%) and Peoria (43%). About nine of every ten students in the Aguila (89%), Alhambra (90%), Glendale (89%), and Washington (90%) districts are eligible for free or reduced-price lunch. (Note that the data in Table 27 refer only to schools located inside the Northwest Maricopa Region boundaries; the Deer Valley, Washington, Alhambra, and Pendergast districts have some schools in this region and some in the Phoenix North or Southwest Maricopa regions. See Figure 11 for a map of the region's school districts.)

When school is not in session, community institutions (schools, community centers, churches, and others) can receive funding through the Summer Food Service Program (SFSP)^{xii} to provide summer meals to children of all ages—in areas where at least half of the children are eligible for free or reduced-price lunch.⁴⁸ A reported 2,292 sites provided summer meals to children in Maricopa County in 2015. The number of SFSP meals served in the county

^x 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](https://www.ers.usda.gov/webdocs/DataFiles/Data%20Access%20and%20Documentation%20Downloads%2018030/documentation.pdf)

^{xi} 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](https://www.ers.usda.gov/webdocs/DataFiles/Data%20Access%20and%20Documentation%20Downloads%2018030/documentation.pdf)

^{xii} For more information on the Summer Food Service Program in Arizona, visit <http://www.azsummerfood.gov/>

decreased by 16 percent from 2012 to 2015 (Table 28), which was a larger decline than in the state as a whole (down 10%).

Table 20. Food Insecurity and Eligibility for Federal Nutrition Assistance

	Total population	Food insecurity rate (all ages)	Likely eligible for Federal Nutrition Assistance (all ages)	Population of children (ages 0-17)	Food insecurity rate (ages 0-17)	Likely eligible for Federal Nutrition Assistance (ages 0-17)
Northwest Maricopa Region	N/A	N/A	N/A	N/A	N/A	N/A
Maricopa County	3,947,378	16%	67%	1,011,475	25%	68%
ARIZONA	6,731,488	17%	67%	1,622,075	27%	68%

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

Table 21. Food Environment

	Grocery stores, 2012	Grocery stores per thousand residents, 2012	Fast-food restaurants, 2012	Fast-food restaurants per thousand residents, 2012	Recreation & fitness facilities, 2012	Recreation and fitness facilities per thousand residents, 2012
Northwest Maricopa Region	N/A	N/A	N/A	N/A	N/A	N/A
Maricopa County	493	0.13	2,758	0.70	265	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 22. Retailers Participating in the SNAP or WIC Programs

	Number of SNAP retailers	SNAP retailers per 100,000 residents	Number of WIC retailers	WIC retailers per 100,000 residents
Northwest Maricopa Region	356	52.11	63	9.22
Maricopa County	2,274	59.57	388	10.16
ARIZONA	4,038	63.17	644	10.08

Sources: Arizona Department of Health Services (2016). Arizona WIC Vendor List & United States Department of Agriculture (2016). SNAP Retailer Locator.

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

	FY 2012	FY 2013	FY 2014	FY 2015	Change from 2012 to 2015
Northwest Maricopa Region	27,293	26,690	25,720	23,355	down 14%
Maricopa County	176,139	173,143	164,403	146,940	down 17%
ARIZONA	296,686	290,513	277,345	249,712	down 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
Northwest Maricopa Region	30,639	8,155	8,841	13,643
Maricopa County	196,750	52,634	55,391	88,725
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 the 2010 US Census	Number and percentage of children (0 to 4) enrolled, 2012		Number and percentage of children (0 to 4) enrolled, 2013		Number and percentage of children (0 to 4) enrolled, 2014		Number and percentage of children (0 to 4) enrolled, 2015	
Northwest Maricopa Region	45,656	24,156	53%	23,578	52%	22,986	50%	22,484	49%
Maricopa County	282,770	160,058	57%	152,869	54%	147,626	52%	144,116	51%
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
Northwest Maricopa Region	79%	78%	84%	77%
Maricopa County	80%	79%	85%	78%
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. Proportion of Students (Pre-kindergarten Through Twelfth Grade) Eligible for Free or Reduced-Price Lunch, 2012 to 2016

	2012	2013	2014	2015	2016
Northwest Maricopa Region Schools	49%	50%	51%	51%	51%
Aguila Elementary District	93%	93%	92%	89%	89%
Alhambra Elementary District	94%	93%	97%	95%	90%
Deer Valley Unified District	24%	26%	26%	25%	25%
Dysart Unified District	49%	49%	48%	47%	50%
Glendale Elementary District	88%	88%	88%	89%	89%
Glendale Union High School District	66%	70%	68%	71%	69%
Morristown Elementary District	70%	72%	72%	68%	68%
Nadaburg Unified School District	71%	73%	67%	65%	65%
Pendergast Elementary District	59%	65%	62%	63%	53%
Peoria Unified School District	41%	41%	41%	42%	43%
Tolleson Union High School District	76%	74%	80%	81%	76%
Washington Elementary School District	77%	76%	80%	89%	90%
Wickenburg Unified District	58%	60%	58%	49%	59%
Northwest Maricopa Region Charter Schools	45%	47%	47%	45%	43%
Maricopa County Schools	54%	54%	54%	54%	55%
All Arizona Schools	57%	57%	58%	58%	58%

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

Note: In this table, the data for school districts include only the schools which are located within the Northwest Maricopa Region.

Table 28. The Summer Food Service Program (SFSP)

	Number of sites in Summer 2015	Number of free meals in Summer 2015	Change in the number of meals from 2012 to 2015
Northwest Maricopa Region	N/A	N/A	N/A
Maricopa County	2,292	2,568,675	Down 16%
Arizona	3,506	3,998,264	Down 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 the children are eligible for free or reduced price meals

Housing and Homelessness

Of the estimated 262,027 occupied housing units in the Northwest Maricopa Region, 69 percent are occupied by homeowners and 31 percent are occupied by renters (Table 29). The homeownership rate in region is higher than it is countywide (61%) or statewide (63%). Lower homeownership rates are seen in the Glendale (59%) and Youngtown (51%) sub-regions. In the Wittman (89%), Morristown (82%), and Waddell (81%) sub-regions, more than four out of every five homes are owner-occupied. Residents of the Northwest Maricopa region have a similar housing cost burden to residents of the state as a whole: 34 percent of the region's housing units require their residents to contribute more than 30 percent of their household income toward housing (Table 30). Housing costs are somewhat more burdensome in the Waddell (42%) and Youngtown (42%) sub-regions.

In the Northwest Maricopa Region, 85 percent of the population has lived in the same house for the past year (Table 31). The rate of the population living in the same house is even higher in the Morristown (94%), Wickenburg (92%), and Waddell (91%) sub-regions. In each sub-region except Aguila, the majority of those who had moved in the past year moved from elsewhere in Maricopa County. In Aguila, however, a quarter of the population (25%) lived outside of Arizona a year ago.

Table 29. Owner- and Renter-Occupied Housing Units

	Number of occupied housing units	Owner-occupied units	Renter-occupied units
Northwest Maricopa Region	262,027	69%	31%
Aguila	282	72%	28%
El Mirage	9,888	63%	37%
Glendale	93,221	59%	41%
Morristown	579	82%	18%
Peoria	59,330	69%	31%
Sun City	26,400	83%	17%
Sun City West	16,082	87%	13%
Surprise	45,189	74%	26%
Waddell	2,931	81%	19%
Wickenburg	3,851	71%	29%
Wittmann	1,984	89%	11%
Youngtown	2,292	51%	49%
Maricopa County	1,424,244	61%	39%
ARIZONA	2,387,246	63%	37%

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

Table 30. The Cost of Housing, Relative to Household Income

	Number of occupied housing units	Occupied housing units which cost 30% of household income, or more
Northwest Maricopa Region	262,027	34%
Aguila	282	39%
El Mirage	9,888	38%
Glendale	93,221	38%
Morristown	579	20%
Peoria	59,330	35%
Sun City	26,400	28%
Sun City West	16,082	23%
Surprise	45,189	32%
Waddell	2,931	42%
Wickenburg	3,851	34%
Wittmann	1,984	38%
Youngtown	2,292	42%
Maricopa County	1,424,244	35%
ARIZONA	2,387,246	34%

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

Table 31. Estimated Population Mobility

	Estimated population (ages 1 and older)	Lived in the same house a year ago	Moved within Maricopa County in the past year	Moved from elsewhere in Arizona in the past year	Moved from outside of Arizona in the past year
Northwest Maricopa Region	693,833	85%	11%	0%	4%
Aguila	1,127	74%	1%	0%	25%
El Mirage	31,963	87%	9%	0%	4%
Glendale	268,733	82%	14%	1%	4%
Morristown	1,275	94%	3%	0%	2%
Peoria	163,411	86%	11%	1%	2%
Sun City	47,392	87%	8%	0%	5%
Sun City West	27,510	89%	6%	1%	5%
Surprise	122,555	86%	9%	0%	4%
Waddell	9,476	91%	6%	0%	3%
Wickenburg	8,191	92%	4%	0%	4%
Wittmann	5,923	89%	9%	1%	1%
Youngtown	6,278	81%	16%	0%	3%
Maricopa County	3,895,703	81%	14%	1%	4%
ARIZONA	6,480,318	81%	13%	2%	4%

Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B07001



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.^{49,50,51,52} Starting in kindergarten, poor school attendance can cause children to fall behind, leading to lowered proficiency in reading and math, and increased grade-retention.⁵³

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.⁵⁴ 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.⁵⁵

In 2010, the Arizona legislature, recognizing the importance of early reading proficiency, enacted *Move on When Reading* legislation to support building literacy skills in the early grades. Part of the legislation is Arizona Revised Statute §15-701, which states that, as of school year 2013-14, a student shall not be promoted from the third grade if the student obtains a reading score that falls far below the third-grade level as established by the State Board of Education.^{xiii} 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).^{xiv} 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.⁵⁶ 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,⁵⁷ and earning a score of "proficient" or "highly proficient" indicates that a student is prepared for the next grade without requiring additional support.⁵⁸ Students who score as either "minimally" or "partially proficient" are likely to need support to be ready to move on to the next grade.⁵⁹ 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.⁶⁰

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

^{xiii} For more information on *Move on When Reading*, visit <http://www.azed.gov/mowr/>

^{xiv} For more information on the AIMS test, visit <http://arizonaindicators.org/education/aims>

achievement, as well improved health, social and economic outcomes.⁶¹ 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.^{62,63}

What the Data Tell Us

Standardized Test Scores

The AzMERIT, which replaced AIMS in the 2014-2015 school year, is designed to assess students' critical thinking skills and their mastery of the Arizona English Language Arts and Math Standards established in 2016. 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, 41 percent of Northwest Maricopa Region students attained these scores on the third grade math assessment, which was the same passing rate as across Arizona as a whole (41%) (Table 32). Performance on the English Language Arts (ELA) test was similar, with 43 percent of Northwest Maricopa students demonstrating proficiency, compared to 40 percent across the state (Table 33). A portion of the 41 percent of Northwest Maricopa region third graders who scored minimally proficient are at risk for retention in third grade, based on the Arizona's *Move on When Reading* law, which requires retention of those whose reading falls far below the third grade level.^{xv}

The highest achieving district in the region in both math and English language arts was the Deer Valley Unified District (57% passing math; 57% passing ELA). The districts with the lowest proficiency rates were the Aguila Elementary District (0% passing math or ELA), Glendale Elementary District (20% passing math, 18% passing ELA) and the Alhambra Elementary District (27% passing math, 22% passing ELA). District boundaries are shown in Figure 11.^{xvi}

A sample of students in Arizona grades 4, 8 and 12 also take the National Assessment of Educational Progress (NAEP), a nationally administered achievement test that allows for comparisons between states. Thirty percent of Arizona fourth graders scored at the proficient or advanced level in reading in 2015, compared with 35 percent of fourth graders nationally. Scores have been improving steadily, both in the state and nationally, since testing began in 1998.⁶⁴

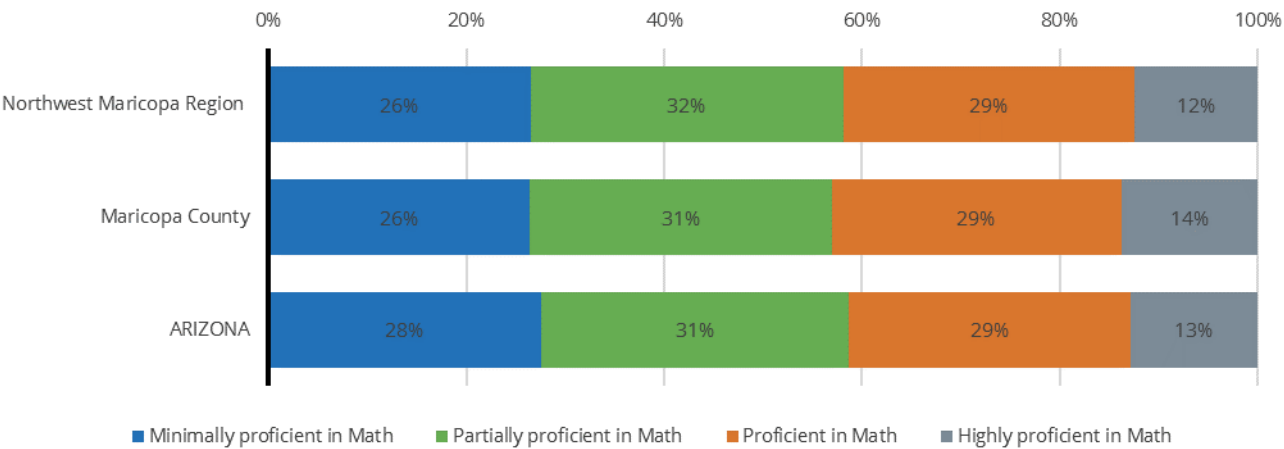
Strong disparities exist in the state NAEP scores based on race, ethnicity and income. Forty-four percent of Arizona fourth grade white students score at the proficient reading level or above, compared with 27 percent of black students, 18 percent of Hispanic students, and 11 percent of American Indian students. Fifty-two percent of fourth graders who were *not* eligible for free or reduced-price school lunch scored at or above the proficient reading level, but only 17 percent of children who were eligible for the program scored that highly. In the Northwest Maricopa Region, we see that some of the districts with the highest proportions of children eligible for free or reduced-price lunch—such as Aguila Elementary District, Alhambra Elementary District, and Glendale Elementary District (see Table 27)—also have the highest proportions of students not passing the AzMERIT assessments in the third grade (Table 32 and Table 33).

^{xv} 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.

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

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

Figure 9. AzMERIT Math Test Results for Third-Graders in the 2014-2015 School Year



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

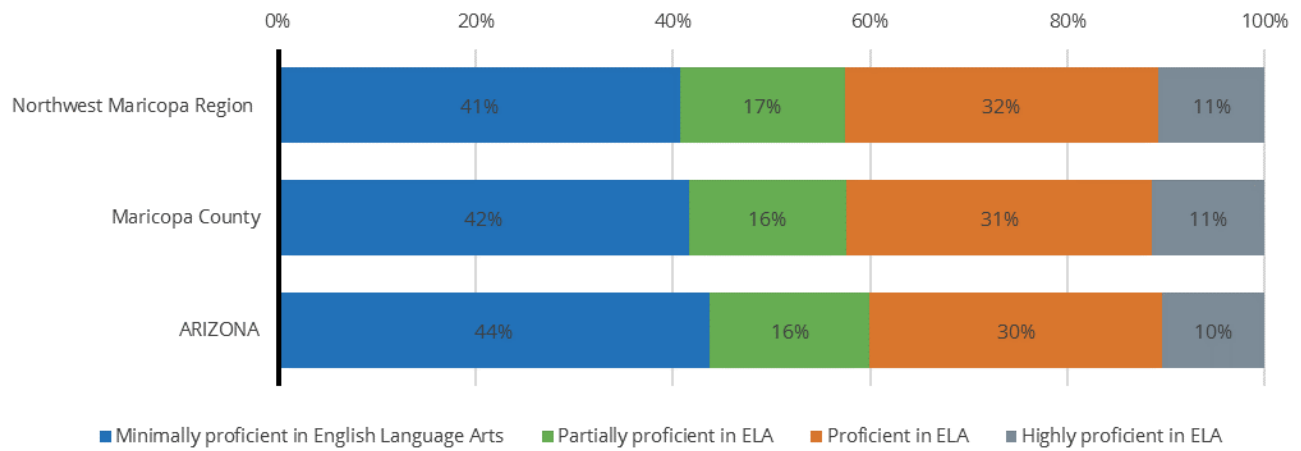
Table 32. AzMERIT Math Test Results for Third-Graders in 2014-15, by School District

	Minimally proficient in Math	Partially proficient in Math	Proficient in Math	Highly proficient in Math	Passing Math (proficient or highly proficient)
Northwest Maricopa Region Schools	26%	32%	29%	12%	42%
Aguila Elementary District	55%	45%	0%	0%	0%
Alhambra Elementary District	31%	42%	19%	8%	27%
Deer Valley Unified District	11%	31%	39%	18%	57%
Dysart Unified District	31%	31%	27%	10%	37%
Glendale Elementary District	47%	33%	17%	3%	20%
Morristown Elementary District	50%	14%	29%	7%	36%
Nadaburg Unified School District	31%	28%	33%	8%	41%
Pendergast Elementary District	25%	35%	31%	9%	40%
Peoria Unified School District	22%	30%	32%	16%	49%
Washington Elementary School District	27%	31%	29%	13%	42%
Wickenburg Unified District	23%	29%	36%	13%	48%
Northwest Maricopa Region Charter Schools	19%	33%	33%	15%	48%
Maricopa County Schools	26%	31%	29%	14%	43%
All Arizona Schools	28%	31%	29%	13%	41%

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

Note: The school-district data in this table include only the schools that are located within the Northwest Maricopa Region.

Figure 10. 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.

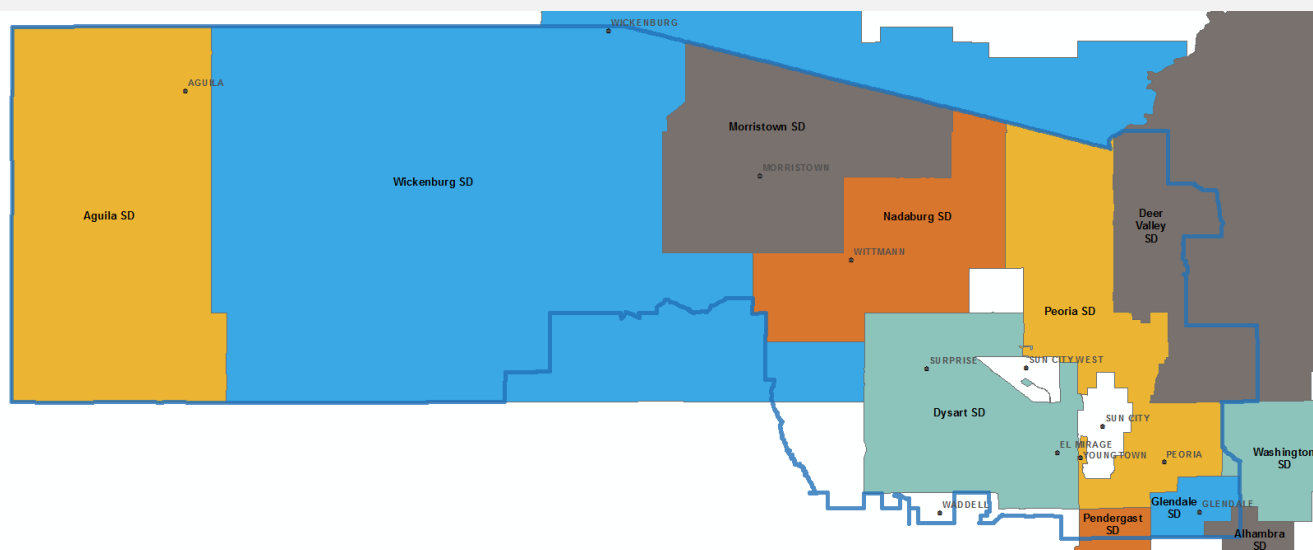
Table 33. AzMERIT English Language Arts Test Results for Third-Graders in 2014-15, by School District

	Minimally proficient in English Language Arts	Partially proficient in English Language Arts	Proficient in English Language Arts	Highly proficient in English Language Arts	Passing English Language Arts (proficient or highly proficient)
Northwest Maricopa Region Schools	41%	17%	32%	11%	43%
Aguila Elementary District	70%	30%	0%	0%	0%
Alhambra Elementary District	60%	18%	17%	5%	22%
Deer Valley Unified District	27%	16%	39%	18%	57%
Dysart Unified District	44%	16%	30%	10%	40%
Glendale Elementary District	68%	14%	16%	2%	18%
Morristown Elementary District	50%	7%	29%	14%	43%
Nadaburg Unified School District	52%	15%	26%	7%	33%
Pendergast Elementary District	42%	17%	36%	5%	41%
Peoria Unified School District	33%	18%	37%	13%	49%
Washington Elementary School District	36%	20%	42%	1%	43%
Wickenburg Unified District	41%	16%	32%	11%	43%
Northwest Maricopa Region Charter Schools	30%	19%	37%	13%	51%
Maricopa County Schools	42%	16%	31%	11%	42%
All Arizona Schools	44%	16%	30%	10%	40%

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

Note: The school-district data in this table include only the schools that are located within the Northwest Maricopa Region.

Figure 11. The School Districts of the Northwest Maricopa Region



Source: First Things First (2016).

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 35 shows these percentages for elementary school districts in the region. Rates of chronic absences in the Northwest Maricopa Region were similar in 2014 (33%) and 2015 (37%) to the state as a whole (34% and 36%, respectively). Chronic absences in 2015 were highest in the Nadaburg Unified School District (48%), while the rates were lowest in the Peoria Unified School District (32%). Identifying and addressing the reasons behind chronic absenteeism is important to ameliorate later effects on educational achievement and graduation rates.⁶⁵

The high school drop-out rate in Northwest Maricopa region remained stable at two percent between 2012 and 2015. The rate in Northwest Maricopa has stayed consistently below the county and state rate of 3 to 4 percent (Table 36). Northwest Maricopa Region Charter Schools (7%) and Wickenburg Unified District (5%) had drop-out rates that were higher than that of the region and state overall.

Four-year graduation rates in the Northwest Maricopa region (2014: 85%) are consistently higher than those in Arizona as a whole (2014: 76%). All but one district in the region (Northwest Maricopa Region Charter Schools) outperformed the state and county in four-year graduation rates in 2014. Northwest Maricopa Region Charter Schools had only a 49 percent graduation rate (Table 36).

Adults aged 25 and older in the Northwest Maricopa Region are similarly likely to have a bachelor's degree or higher (25%) compared to adults across Arizona (27%) (Table 34). The percent of adults with less than a high school education in the region (11%) is lower than the county (13%) or state (14%). However, one community, Aguilera, had much higher rates of adults who did not complete high school (59%), as compared to the region, county and state. Adults in the Sun City area have the highest educational attainment in the sub-regions, with the highest rates of bachelor's and advanced degrees (35%).

Table 34. 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
Northwest Maricopa Region	474,730	11%	27%	37%	25%
Aguila	685	59%	22%	11%	8%
El Mirage	18,520	19%	29%	37%	14%
Glendale	169,433	16%	27%	35%	22%
Morristown	1,101	13%	33%	39%	14%
Peoria	109,629	8%	25%	39%	27%
Sun City	44,316	9%	32%	37%	23%
Sun City West	26,903	5%	25%	34%	35%
Surprise	83,172	8%	26%	38%	28%
Waddell	6,102	8%	24%	40%	27%
Wickenburg	6,577	11%	31%	35%	23%
Wittmann	4,053	8%	46%	35%	11%
Youngtown	4,239	18%	37%	32%	14%
Maricopa County	2,550,592	13%	23%	33%	30%
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 in each row may not add to 100% due to rounding.

Table 35. Chronic Absences for Students in First, Second, and Third Grades, 2014 and 2015

	Number of schools	Number of students in 2014	Students with chronic absences (more than 10) in 2014	Percent of students with chronic absences in 2014	Number of students in 2015	Students with chronic absences (more than 10) in 2015	Percent of students with chronic absences in 2015
Northwest Maricopa Region Schools	113	30,452	10,173	33%	30,677	11,235	37%
Aguila Elementary District	1	67	23	34%	69	24	35%
Alhambra Elementary District	2	563	200	36%	573	255	45%
Deer Valley Unified District	15	3,813	1,238	32%	3,923	1,387	35%
Dysart Unified District	19	6,548	2,196	34%	6,664	2,685	40%
Glendale Elementary District	15	5,511	2,005	36%	5,593	2,279	41%
Morristown Elementary District	1	52	10	19%	39	14	36%
Nadaburg Unified School District	2	303	143	47%	329	157	48%
Pendergast Elementary District	3	672	247	37%	690	289	42%
Peoria Unified School District	32	7,992	2,564	32%	7,857	2,500	32%
Washington Elementary School District	1	248	90	36%	288	117	41%
Wickenburg Unified District	1	215	90	42%	211	79	37%
Northwest Maricopa Region Charter Schools	21	4,468	1,367	31%	4,441	1,449	33%
Maricopa County Schools	687	181,096	56,299	31%	185,765	63,293	34%
All Arizona Schools	1,185	278,142	93,719	34%	283,147	103,078	36%

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

Note: The school-district data in this table include only the schools that are located within the Northwest Maricopa Region.

Table 36. High School Drop-Out and Graduation Rates, 2012 to 2015

	Total number of high schools and alternative schools	Drop-out rate, 2012	Drop-out rate, 2013	Drop-out rate, 2014	Drop-out rate, 2015	Four-year graduation rate, 2011	Four-year graduation rate, 2012	Four-year graduation rate, 2013	Four-year graduation rate, 2014
Northwest Maricopa Region Schools	41	2%	2%	2%	2%	88%	86%	83%	85%
Deer Valley Unified District	3	1%	0%	0%	1%	92%	94%	93%	93%
Dysart Unified District	6	1%	1%	1%	1%	88%	84%	81%	84%
Glendale Union High School District	3	1%	1%	1%	1%	89%	86%	85%	88%
Peoria Unified School District	9	1%	1%	1%	1%	94%	93%	93%	93%
Tolleson Union High School District	1	3%	3%	2%	3%	84%	80%	73%	79%
Wickenburg Unified District	3	3%	3%	4%	5%	79%	88%	84%	78%
Northwest Maricopa Region Charter Schools	16	7%	7%	7%	7%	61%	58%	47%	49%
Maricopa County Schools	383	3%	3%	3%	3%	80%	79%	77%	77%
All Arizona Schools	836	4%	3%	3%	4%	78%	77%	76%	76%

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

Note: The school-district data in this table include only the schools that are located within the Northwest Maricopa Region.

Table 37. Kindergarten Through Third-Grade Enrollment

	Number of students enrolled (K to 3)	Number of English Language Learners (ELL)	Percent of students who are ELL	Number of students in special education	Percent of students in special education
Northwest Maricopa Region Schools	35,456	2,604	7%	3,844	11%
Aguila Elementary District	74	27	36%	<25	19%
Alhambra Elementary District	617	99	16%	56	9%
Deer Valley Unified District	5,105	140	3%	466	9%
Dysart Unified District	6,715	289	4%	966	14%
Glendale Elementary District	6,056	1,308	22%	579	10%
Morristown Elementary District	44	0	0%	<25	7%
Nadaburg Unified School District	392	17	4%	37	9%
Pendergast Elementary District	989	53	5%	86	9%
Peoria Unified School District	9,232	507	5%	1,162	13%
Washington Elementary School District	370	42	11%	68	18%
Wickenburg Unified District	84	0	0%	<25	11%
Northwest Maricopa Region Charter Schools	5,857	98	2%	387	7%
Maricopa County Schools	222,761	23,576	11%	20,635	9%
All Arizona Schools	342,307	34,256	10%	33,269	10%

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

Note: The school-district data in this table include only the schools that are located within the Northwest Maricopa Region.



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.⁶⁶ Gaps in language development between children from disadvantaged backgrounds and their more advantaged peers are already evident by 18 months of age;⁶⁷ those disparities that persist until kindergarten are predictive of later academic problems.⁶⁸

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.^{69,70} This is particularly true for children from disadvantaged backgrounds.⁷¹ 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.⁷²

Investment in children during the crucial first five years not only provides the necessary foundation for later achievement, but also produces a positive return on investment to society through increased educational achievement and employment, reductions in crime, and better overall health of those children as they mature into adults.^{73,74,75} Experts estimate that investments in quality early learning initiatives can offer returns as high as \$16 per dollar spent.⁷⁶ 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.⁷⁷ 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.⁷⁸ 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).⁷⁹

Child care subsidies can be a support for families who have financial barriers to accessing early learning services.⁸⁰ 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.)⁸¹ 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.⁸² How parents perceive and understand quality may differ; this points to the importance of quality rating systems to help guide parent choices. Quality First is Arizona’s Quality Improvement and Rating System (QRIS) for early child care and preschool providers. Quality First employs a five-point rating scale to indicate quality levels. A one-star rating indicates that the provider is committed to examining practices and improving the quality of care beyond basic health and safety requirements. Quality First participants can advance to a quality rating (3, 4, or 5 stars) 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 who meet quality standards (3-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.⁸³

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.⁸⁴

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.⁸⁵

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.^{86,87}

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.”⁸⁸ 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,⁸⁹ and are at an increased risk for maltreatment and neglect.^{90, 91} Almost half (46%) of families with a child with special needs in Arizona have incomes below 200 percent of the federal poverty level.⁹²

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.^{93,94,95} 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),⁹⁶ the Arizona Early Intervention Program (AzEIP),⁹⁷ and the Division of Developmental Disabilities (DDD).⁹⁸

What the Data Tell Us

Child Care and Preschool

According to the data from the American Community Survey, an estimated 33 percent of three- and four-year-old children in the Northwest Maricopa Region were enrolled in nursery school, preschool, or kindergarten, which is a lower percentage than statewide (36%) (Figure 13). Much higher rates of participation occur in Aguila (81%) and Morristown (91%); Wickenburg and Sun City also have the majority of children enrolled. Conversely, only about one in eight (12%) children in Sun City West is enrolled. Waddell and Wittmann also have fewer than a quarter of children enrolled.

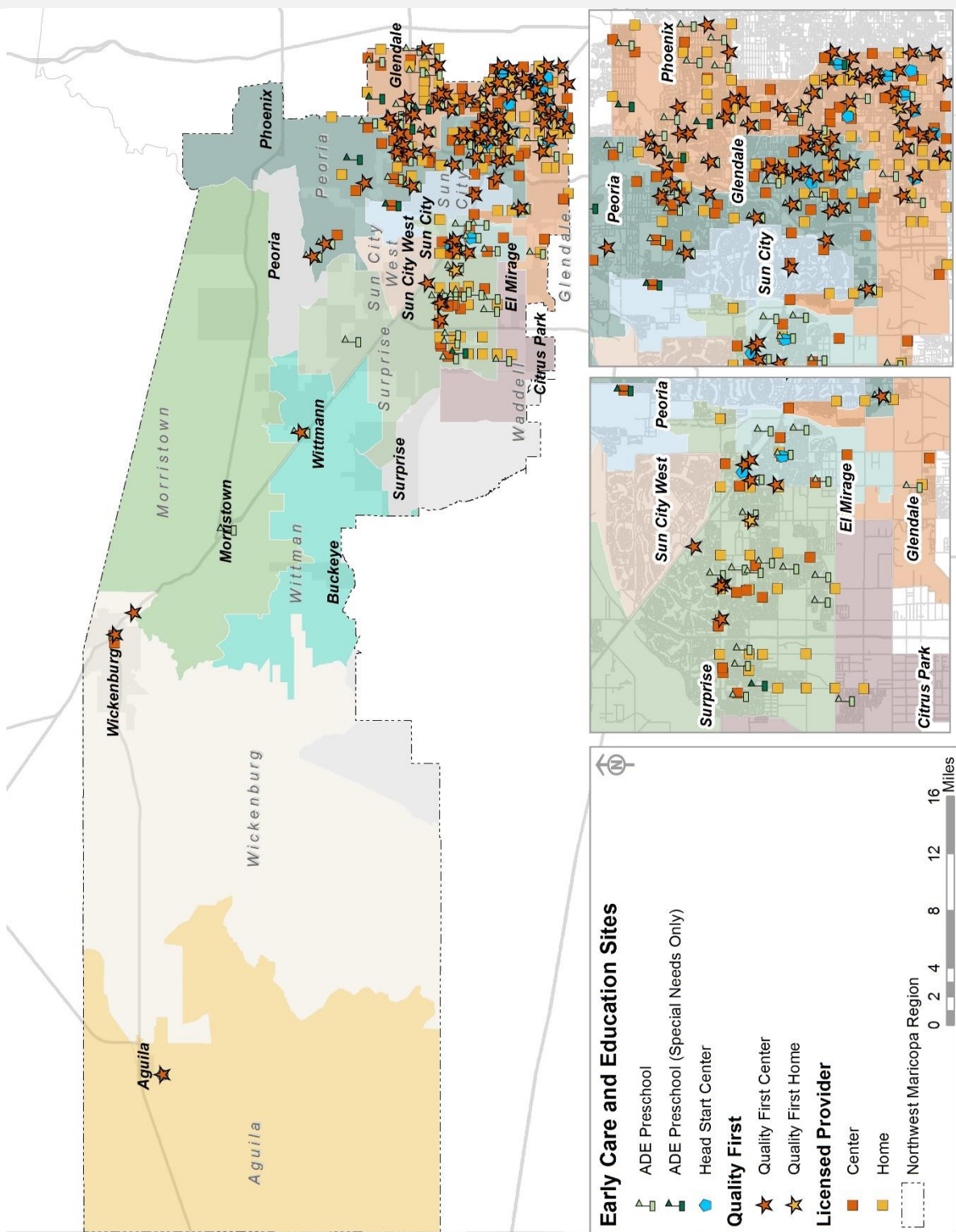
Enrollment in early care and education is influenced by the availability of child care in the region. According to the most recent data available in 2015 and 2016, there were 233 registered child care and early education providers in the Northwest Maricopa Region, approved to serve approximately 15,220 children (Table 38). Nearly half of these are located in Glendale. In the region, most child care providers are child care centers (n=114, both Quality First and non-Quality First centers), though there are also 47 family child care homes. Sun City and Morristown each have a single child care facility located in a public school, which suggests that care for infants is likely unavailable in these areas. The Arizona Department of Economic Security's 2014 Market Rate Survey⁹⁹, which surveyed a total of 3,717 child care providers (1,765 licensed centers, 1,552 approved family homes, 280 certified group homes, and 129 unregulated homes listed with Child Care Resource & Referral [CCR&R]), found that providers typically provided care to about 58 percent of their approved capacity.

The number of children with all parents in the labor force provides another estimate of how many children may currently need child care. In the Northwest Maricopa Region, there are approximately 31,800 children with all parents in the labor force but only 14,813 child care and early education slots available. Within the community, the capacity of early care and education centers to meet this estimate of child care demand varies. In the Aguila and Wickenburg communities, capacity actually exceeds the estimated demand. In all other communities, there is not sufficient capacity to meet the estimated demand. In some places (Youngtown, for example), there are many times more children with all parents in the labor force than there are slots. However, parents may be electing to use child care providers closer to where they work, rather than where they live. Considering that there may be parents who are not currently in the workforce due to the difficulty of finding child care, increasing the number of registered or licensed child care providers would benefit the communities in the area with a current capacity shortage.

Of the 234 known child care providers in the Northwest Maricopa Region, about one third (n=78) were participating in the Quality First program, as of June 2016. Most of these programs (31) have a 3-star rating, which is given to programs that "meet quality standards."¹⁰⁰ Seventeen programs have a 2-star rating (this is also the most common rating among sites statewide), which is described as a "progressing star" by First Things First, and means that the program is "approaching quality standards" (Table 39). Twelve programs in the Northwest Maricopa Region have achieved the 4-star rating, indicating they are exceeding quality standards, and two sites have achieved 5 stars, the highest Quality First rating.

There are 71 schools in the Northwest Maricopa Region that provide pre-kindergarten classes; about one third of these are in the Peoria Unified District, where 893 children are enrolled in pre-kindergarten (Table 40). There are also high numbers of children enrolled in preschool in the Dysart Unified District (n=725) and the Deer Valley District (n=597). Over half of students enrolled in the pre-kindergarten programs in the Dysart Unified District (61%) have special needs, while only 32 percent of pre-kindergarteners in the Glendale schools have special needs.

Figure 12. Child Care Locations in the Northwest Maricopa Region



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

Table 38. Childcare Capacity, by Type of Site

	Total number and total capacity of all childcare sites		Number and capacity of Quality First sites		Number and capacity of Head Start sites (excluding any QF sites)		Number and capacity of public-school-based sites (excluding any QF or HS sites)		Number and capacity of other childcare providers	
Northwest Maricopa Region	233	15,220	78	8,066	14	411	49	1,736	92	5,010
Aguila	1	20	1	20	0	0	0	0	0	0
El Mirage	11	711	1	262	1	64	5	264	4	121
Glendale	113	7,439	39	3,917	10	275	21	914	43	2,333
Morristown	1	<10	0	0	0	0	1	<10	0	0
Peoria	65	4,676	26	2,708	2	72	7	138	30	1,758
Sun City	1	<10	0	0	0	0	1	<10	0	0
Sun City West	0	0	0	0	0	0	0	0	0	0
Surprise	32	2,040	8	969	1	N/A	13	378	10	693
Waddell	2	35	0	0	0	0	1	31	1	<10
Wickenburg	4	168	2	74	0	0	0	0	2	94
Wittmann	1	116	1	116	0	0	0	0	0	0
Youngtown	2	<10	0	0	0	0	0	0	2	<10
Maricopa County	1,608	109,609	489	50,636	151	5,240	190	7,156	778	46,577
ARIZONA	3,053	173,566	916	75,173	201	14,665	313	10,280	1,623	73,448

Sources: Arizona Department of Economic Security (2016). [Child Care Resource & Referral dataset]. Unpublished data. & Catholic Charities Westside Head Start

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

Table 39. Numbers and Capacities of Quality First Sites, as of June 2016, by Star Rating

	Number and capacity of 1-star QF sites		Number and capacity of 2-star QF sites		Number and capacity of 3-star QF sites		Number and capacity of 4-star QF sites		Number and capacity of 5-star QF sites		Number and capacity of QF sites not publically rated		Total number and total capacity of all QF sites	
Northwest Maricopa Region	0	0	17	2,075	31	2,963	12	966	2	109	16	1,953	78	8,066
Maricopa County	2	96	145	17,060	146	14,942	77	6,925	20	1,557	99	10,056	489	50,636
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

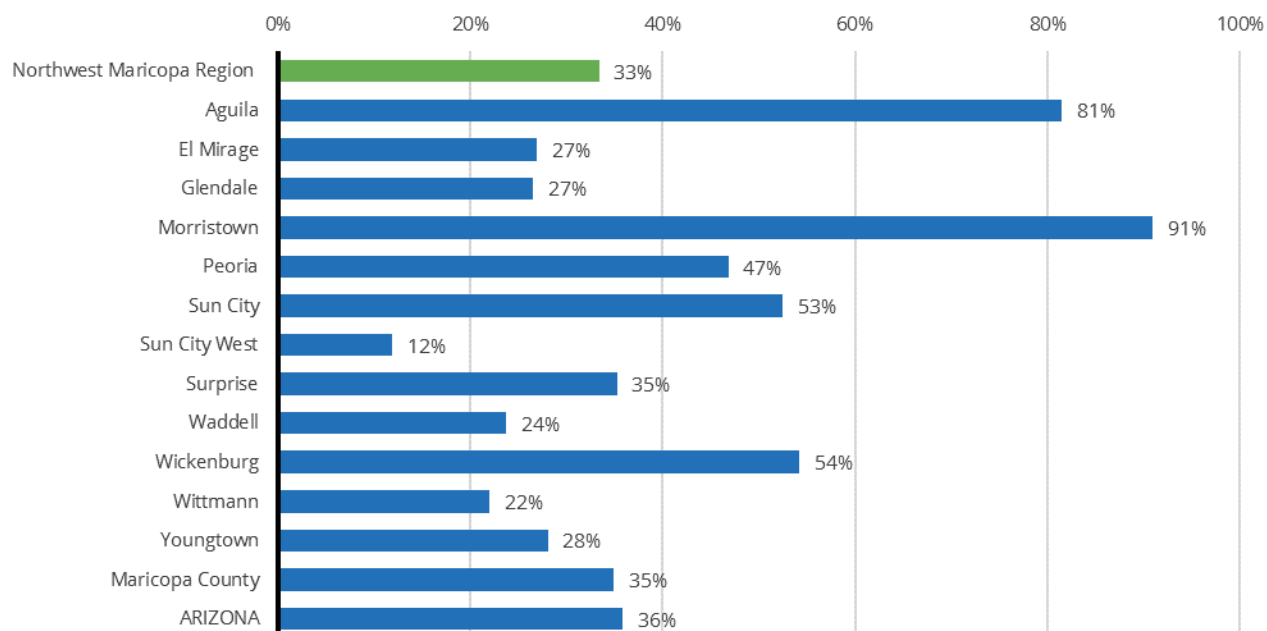
Table 40. Pre-Kindergarten Enrollment, October 2015

	Number of schools with pre-kindergarten	Number of students enrolled	Number of students in special education	Percent of students in special education
Northwest Maricopa Region Schools	71	2,893	1,362	47%
Aguila Elementary District	1	20	N/A	N/A
Alhambra Elementary District	1	169	76	45%
Deer Valley Unified District	15	597	268	45%
Dysart Unified District	19	725	440	61%
Glendale Elementary District	6	349	111	32%
Morristown Elementary District	1	<10	0	0%
Nadaburg Unified School District	2	13	<25	DS
Pendergast Elementary District	1	84	38	45%
Peoria Unified School District	24	893	385	43%
Washington Elementary School District	1	35	35	100%
Maricopa County Schools	268	12,975	5,885	45%
All Arizona Schools	445	19,123	8,773	46%

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

Note: The school-district data in this table include only the schools that are located within the Northwest Maricopa Region.

Figure 13. 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

Cost of Care

Compared to the state as a whole, parents in Maricopa County tend to pay higher prices for child care centers (e.g., \$44.19 per day for infant care vs. \$42, Table 41) and certified group homes (e.g., \$30 per day for infant care vs. \$27, Table 43), but slightly lower prices for child care in approved family homes (e.g. \$20 per day vs. \$22, Table 42) than parents statewide. Across all kinds of care, parents can expect to pay more for infant care, because lower teacher-to-child ratio needed for infant care necessitates a higher cost of care.

Families in Maricopa County are paying the same proportion of their overall income for a child care slot as other families statewide (Table 44). However, to avoid being overburdened, the Department of Health and Human Services recommends that parents spend no more than 10 percent of their family income on child care. Families in Maricopa County and across the state are paying more than that infant and toddler care, and 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. Single-parent homes, particularly those with a single female householder, are likely to have lower median incomes (see Table 14), resulting in a higher proportion of their income being spent on child care.

Subsidies from the Department of Economic Security (DES) can help families shoulder the cost burden of child care. DES prioritizes assistance for subsidies 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). 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 Northwest Maricopa Region remained fairly

constant from 2013 to 2015; the most recent data from 2015 showed 469 children whose families were hoping to receive support (Table 45). Additionally, nearly half (45%) of those children who received subsidies in 2015 were involved with DCS; 87 percent of DCS-involved children received a subsidy, suggesting that this is an important support for children in the child welfare system (Table 46).

Table 41. 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
Northwest Maricopa Region	N/A	N/A	N/A
Maricopa County	\$44.19	\$40.00	\$35.00
ARIZONA	\$42.00	\$38.00	\$33.00

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

Table 42. 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
Northwest Maricopa Region	N/A	N/A	N/A
Maricopa County	\$20.00	\$20.00	\$16.00
ARIZONA	\$22.00	\$20.00	\$20.00

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

Table 43. 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
Northwest Maricopa Region	N/A	N/A	N/A
Maricopa County	\$30.00	\$27.00	\$25.00
ARIZONA	\$27.00	\$25.00	\$25.00

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

Table 44. Charge for Full-Time Child Care in Licensed Child Care Centers, as a Percentage of Median Annual Income

	Median family income for all families	For one infant	For one child, 1 or 2 years old	For one child, 3 to 5 years old
Northwest Maricopa Region	N/A	N/A	N/A	N/A
Maricopa County	\$64,072	17%	15%	13%
ARIZONA	\$59,088	17%	15%	13%

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

Table 45. Department of Economic Security (DES) Child Care Subsidies for Children (Ages 0 to 5), 2013 to 2015

	Children eligible for subsidy during 2013	Children eligible for subsidy during 2014	Children eligible for subsidy during 2015	Children receiving subsidy during 2013	Children receiving subsidy during 2014	Children receiving subsidy during 2015	Children on waiting list during 2013	Children on waiting list during 2014	Children on waiting list during 2015
Northwest Maricopa Region	2,872	2,921	4,424	2,841	2,698	3,898	463	506	469
Maricopa County	17,165	18,031	27,042	16,439	16,448	23,851	2,836	3,123	2,989
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 46. DES Child Care Subsidies for Children Involved in the Department of Child Safety (DCS) During 2015

	Number of DCS-involved children eligible for subsidy	Number of DCS-involved children receiving subsidy	Percent of DCS-involved children receiving subsidy
Northwest Maricopa Region	2,014	1,745	87%
Maricopa County	11,506	9,858	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.

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

The Department of Economic Security Arizona Early Intervention Program (AzEIP) provides services to children from birth to 36 months of age who are developmentally delayed or at high risk of developmental delay.¹⁰¹ In the Northwest Maricopa Region and across Arizona, more children were referred to and served by AzEIP in FY2015 than in either of the two years prior (Table 49). In 2015, 1,258 children ages 0 to 2 were served through the AzEIP program, which is nearly double the number served in the region in the years prior. Based on the 2010 population estimates for children ages 0 to 2, this means that the AzEIP services, designed to prevent and address developmental delays, are used by approximately 4.7 percent of children in the region. Research suggests that about 13 percent of children ages 0 to 2 would typically qualify for early intervention services.¹⁰²

Between 2012 and 2015, the number of children ages 0-2 and 3-5 being referred to the Division of Developmental Disabilities (DDD) in Northwest Maricopa Region has increased; over 600 children were referred in 2015 (Table 50). Similar numbers (670) of children ages 0-5 were served by DDD during that time, nearly equally split between 0-2 and 3-5 year-old groups. However, the children ages 3-5 received more service visits (11 to 12 per month per child) than children 0-2 (4 per month), on average. To qualify for DDD services an individual must have a cognitive disability, cerebral palsy, autism, epilepsy or be at risk for a developmental disability. Children under the age of six are eligible if they show significant delays in one or more of these areas of development: physical, cognitive, communication, social emotional or self-help.¹⁰³

The number of preschoolers in special education in Northwest Maricopa Region schools has remained fairly constant over the past four years (Table 47). Among the approximately 1,300 children, 41 percent have speech or language impairment, 36 percent have a developmental disability, and most others have a severe delay (22%) (Table 48). There are very few children with hearing impairments (1%) or vision impairments (1%). This may be because hearing impairments are frequently diagnosed as speech or language impairments in the preschool age groups, or because many children with vision or hearing impairments may receive services through the Arizona State Schools for the Deaf and the Blind, which provides services to children in the region through the North Central Regions Cooperative.¹⁰⁴

Several districts across the region have high concentrations of preschool students with specific needs. In the Peoria Unified School District, for example, most children (68%) need services for a speech or language impairment (Table 48), whereas in while in the Deer Valley Unified District and the Washington Elementary District, the majority of children (52%) need services for developmental disabilities. Over 3,800 students in kindergarten through third grade are enrolled in special education in the region, representing 11 percent of all students enrolled (Table 37). This is a slightly higher proportion than in Maricopa County schools overall (9%).

The National Survey of Children with Special Health Care Needs¹⁰⁵ estimated that 7.6 percent of children from birth to five (and about 17% of school-aged children) in Arizona have special health care needs.^{xvii} The survey also estimates that nearly one in three Arizona children with special health care needs also have an unmet need for health

^{xvii} The survey defines children with special health care needs broadly as "those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally."

care services (compared to about one in four nationally). Further data on children with special health care needs in Arizona and in Maricopa County should be available in early 2017 with the publication of the results of the 2016 Arizona Children's Health Survey.^{xviii}

Table 47. Number of Preschoolers in Special Education, 2012 to 2015

	Number of ADE schools with a 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
Northwest Maricopa Region Schools	77	1,258	1,311	1,290	1,289
Aguila Elementary District	1	0	<25	0	0
Alhambra Elementary District	0	0	0	0	0
Deer Valley Unified District	15	197	213	218	218
Dysart Unified District	19	445	475	442	441
Glendale Elementary District	11	110	115	140	140
Morristown Elementary District	1	<25	<25	0	0
Nadaburg Unified School District	2	<25	<25	<25	<25
Pendergast Elementary District	3	37	42	38	38
Peoria Unified School District	24	422	430	422	422
Washington Elementary School District	1	36	27	<25	<25
Wickenburg Unified District	0	0	0	0	0
Northwest Maricopa Region Charter Schools	0	0	0	0	0
Maricopa County Schools	307	6,124	6,236	6,081	5,674
All Arizona Schools	550	9,173	9,203	8,845	8,702

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

Note: The school-district data in this table include only the schools that are located within the Northwest Maricopa Region.

^{xviii} For more information on the Arizona Children's Health Survey, visit <http://directorsblog.health.azdhs.gov/take-the-arizona-childrens-survey/>

Table 48. Types of Disabilities Among Preschoolers in Special Education, 2015

	Developmental disability	Hearing impairment	Severe delay	Speech or language impairment	Vision impairment
Northwest Maricopa Region Schools	36%	1%	22%	41%	1%
Aguila Elementary District	N/A	N/A	N/A	N/A	N/A
Alhambra Elementary District	N/A	N/A	N/A	N/A	N/A
Deer Valley Unified District	52%	2%	16%	29%	0%
Dysart Unified District	39%	1%	34%	26%	2%
Glendale Elementary District	38%	0%	25%	37%	0%
Morristown Elementary District	N/A	N/A	N/A	N/A	N/A
Nadaburg Unified School District	11%	0%	56%	33%	0%
Pendergast Elementary District	42%	0%	39%	18%	0%
Peoria Unified School District	23%	0%	8%	68%	0%
Washington Elementary School District	52%	0%	38%	10%	0%
Wickenburg Unified District	N/A	N/A	N/A	N/A	N/A
Maricopa County Schools	40%	1%	22%	37%	1%
All Arizona Schools	41%	1%	21%	36%	1%

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

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

Note: The school-district data in this table include only the schools that are located within the Northwest Maricopa Region.

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

Table 49. Arizona Early Intervention Program (AzEIP) Referrals and Services for Children (Ages 0 to 2), 2013 to 2015

	Children (ages 0-2) referred to AzEIP during FY2013	Children (ages 0-2) referred to AzEIP during FY2014	Children (ages 0-2) referred to AzEIP during FY2015	Children (ages 0-2) served by AzEIP during FY2013	Children (ages 0-2) served by AzEIP during FY2014	Children (ages 0-2) served by AzEIP during FY2015
Northwest Maricopa Region	922	1,285	1,582	613	635	1,258
Maricopa County	6,495	7,499	9,212	3,077	3,474	6,704
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 50. Children (Ages 0 to 5) Referred to the Division of Developmental Disabilities (DDD), 2012 to 2015

	Number of children (ages 0-2) referred in FY2012	Number of children (ages 0-2) referred in FY2013	Number of children (ages 0-2) referred in FY2014	Number of children (ages 0-2) referred in FY2015	Number of children (ages 3-5) referred in FY2012	Number of children (ages 3-5) referred in FY2013	Number of children (ages 3-5) referred in FY2014	Number of children (ages 3-5) referred in FY2015
Northwest Maricopa Region	208	296	363	353	179	165	241	278
Maricopa County	1,044	1,538	1,763	1,747	957	963	1,266	1,386
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 51. Children (Ages 0 to 5) Evaluated by the Division of Developmental Disabilities (DDD), 2012 to 2015

	Number of children (ages 0-2) screened in FY2012	Number of children (ages 0-2) screened in FY2013	Number of children (ages 0-2) screened in FY2014	Number of children (ages 0-2) screened in FY2015	Number of children (ages 3-5) screened in FY2012	Number of children (ages 3-5) screened in FY2013	Number of children (ages 3-5) screened in FY2014	Number of children (ages 3-5) screened in FY2015
Northwest Maricopa Region	97	34	DS	26	78	81	81	134
Maricopa County	536	217	157	180	474	506	509	698
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 52. Children (Ages 0 to 5) Served by the Division of Developmental Disabilities (DDD), 2012 to 2015

	Number of children (ages 0-2) served in FY2012	Number of children (ages 0-2) served in FY2013	Number of children (ages 0-2) served in FY2014	Number of children (ages 0-2) served in FY2015	Number of children (ages 3-5) served in FY2012	Number of children (ages 3-5) served in FY2013	Number of children (ages 3-5) served in FY2014	Number of children (ages 3-5) served in FY2015
Northwest Maricopa Region	336	380	333	332	334	318	313	338
Maricopa County	1,926	1,918	1,662	1,647	1,866	1,891	1,847	1,826
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 53. Division of Developmental Disabilities (DDD) Service Visits for Children (Ages 0 to 5), 2012 to 2015

	Number of service visits (ages 0-2) in FY2012	Number of service visits (ages 0-2) in FY2013	Number of service visits (ages 0-2) in FY2014	Number of service visits (ages 0-2) in FY2015	Number of service visits (ages 3-5) in FY2012	Number of service visits (ages 3-5) in FY2013	Number of service visits (ages 3-5) in FY2014	Number of service visits (ages 3-5) in FY2015
Northwest Maricopa Region	23,941	20,386	19,076	16,358	48,256	47,273	43,422	46,963
Maricopa County	130,651	117,268	98,971	87,309	285,585	294,586	285,484	275,800
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.



CHILD HEALTH

Why Child Health Matters

Health encompasses not only physical health, but also mental, intellectual, social and emotional well-being. Optimal development brings all of these facets together. A child's health begins with its mother's health before she becomes pregnant and is influenced by early prenatal care.¹⁰⁶ 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.^{107,108} 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.^{109,110,111}

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.¹¹² 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.^{113,114} Children who lack health insurance are also more likely to be hospitalized and to miss school.¹¹⁵

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.¹¹⁶ Arizona became the only state without an active CHIP program. However, in May 2016, the Arizona legislature voted to lift the freeze on KidsCare,¹¹⁷ and in July 2016 applications began to be accepted for the first time in six years, with coverage beginning September 1, 2016.¹¹⁸ 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.¹¹⁹

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.¹²⁰ 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.^{121,122,123}

A mother's weight status can also influence her child's health. Women who are obese before they become pregnant have pregnancies with a higher risk of birth complications and neonatal and infant mortality.^{124,125} Babies born to obese women are at risk for chronic conditions in later life such as diabetes and heart disease.¹²⁶ 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.¹²⁷

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.¹²⁸

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.¹²⁹ 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.¹³⁰ Healthy People 2020 aims to increase the proportion of infants who were ever breastfed to 81.9 percent.¹³¹

Children exposed to alcohol and drugs neonatally face behavioral and developmental health challenges. 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. 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. 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.

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.^{132,133} 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.¹³⁴

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.¹³⁵ 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.¹³⁶ 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%).¹³⁷

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,¹³⁸ and injuries are the leading cause of death in children in the United States.¹³⁹ 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.¹⁴⁰ 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.¹⁴¹ 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 Plan¹⁴², as well as included it as part of their Arizona Injury Prevention Plan.¹⁴³

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.^{144,145} Obesity can have negative consequences on physical, social, and psychological well-being that begin in childhood and continue into and throughout adulthood.¹⁴⁶ 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.¹⁴⁷ 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.¹⁴⁸ The availability and accessibility of recreational facilities and resources that promote physical fitness can affect the ability of both child and adult community members to reap the benefits of physical activity.

What the Data Tell Us

Access to Care

A key factor for access to health care is health insurance, and seven percent of young children in the region were estimated to be uninsured, along with 14 percent of the total population in the Northwest Maricopa Region (Table 54). This is lower than uninsured rates across the entire county and statewide for young children (9 and 10%, respectively) and all ages (16% in both). The proportion of health insurance varied by community. There were no young children in the Morristown and Sun City West communities who lacked health insurance. This is compared to the 38 percent of children in the Wickenburg community and the 15 percent in the Wittmann community with no health insurance.

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.¹⁴⁹

The smallest proportion of adults without health insurance was in the Sun City West (3%), Sun City (6%), and Surprise (9%) communities, while more than half (52%) of adults in Aguila lacked insurance. Unlike all other communities, adults in Wickenburg were more likely to be insured than children..

Table 54. Estimated Proportion of Population Without Health Insurance

	Estimated population (ages 0-5)	Children (ages 0-5) without health insurance	Estimated population (all ages)	Persons (all ages) without health insurance
Northwest Maricopa Region	53,131	7%	696,246	14%
Aguila	64	8%	1,142	52%
El Mirage	3,671	5%	32,562	16%
Glendale	23,052	8%	269,860	18%
Morristown	101	0%	1,313	11%
Peoria	12,207	5%	163,863	12%
Sun City	810	6%	47,109	6%
Sun City West	200	0%	27,277	3%
Surprise	10,264	8%	123,190	9%
Waddell	1,355	11%	9,590	13%
Wickenburg	428	38%	8,146	17%
Wittmann	398	15%	5,960	17%
Youngtown	582	2%	6,235	13%
Maricopa County	332,425	9%	3,918,121	16%
ARIZONA	531,825	10%	6,453,706	16%

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

Pregnancies and Birth

During calendar year 2014, Northwest Maricopa Region residents gave birth to 8,453 babies, which was 15 percent of all babies born in Maricopa County and 10 percent of all births in the state (Table 55). In keeping with the projected population growth in Northwest Maricopa, the number of births in the county is expected to increase through 2040, with the steepest increase between 2020 and 2025 (+5,299 births), and then tapering down (+2,025 births between 2035 and 2040) (Table 56). Birthing facilities will need to adapt to this increase in demand in the coming years.

Table 55. Live Births During Calendar Year 2014, by Mother's Place of Residence

Total number of births to Arizona-resident mothers in 2014	
Northwest Maricopa Region	8,453
Maricopa County	55,285
ARIZONA	86,648

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

Table 56. Projected Number of Births Per Year, 2015 to 2040

	2015	2020	2025	2030	2035	2040
Northwest Maricopa Region	N/A	N/A	N/A	N/A	N/A	N/A
Maricopa County	55,502	60,383	65,682	69,633	72,123	74,148
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).

Mothers Giving Birth/Maternal Characteristics

Of the over 8,400 mothers who gave birth in the Northwest Maricopa Region in 2014, 56 percent were non-Hispanic White, 33 percent were Hispanic or Latina, 6 percent were Black or African American, 4 percent were Asian or Pacific Islander, and 1 percent were American Indian or Alaska Native (Figure 14). Compared to mothers across Maricopa and the state as a whole, mothers in the Northwest Maricopa Region were more likely to be White, non-Hispanic, and less likely to be Hispanic or Latina or Native American. New mothers in the Northwest Maricopa Region had a slightly higher level of educational attainment (58% had some education beyond high school) than all mothers in the state (54% post-high school) (Table 57).

The population of new mothers in the Northwest Maricopa Region was also similar to mothers across the county and statewide on other attributes. About 4 in 10 mothers (42%) in the region were not married (43% Maricopa County, 45% statewide) and 7 percent were in their teens (7% county, 8% statewide) (Table 58). In Northwest Maricopa, just over half of births (51%) were to mothers relying on AHCCCS or Indian Health Service (IHS) coverage, which was similar to the county percentage (52%) and statewide proportion of 55 percent.

A similar proportion of mothers in the Northwest Maricopa Region reported smoking (4.9%) as compared to the county (3.7%) or state (4.6%), though all areas fall above the Healthy People 2020 goal of a maximum of 1.4 percent (Table 58). Across Arizona, the percent of expectant mothers who reported smoking during pregnancy has remained

relatively stable from 2009 to 2013 at around 4.5 percent. However, there is evidence of disparities. In Arizona in 2013, expectant mothers insured by AHCCCS were more likely to report smoking (6.4%) compared to those with private insurance (1.8%). Race and ethnicity also affect reports of smoking during pregnancy with white, non-Hispanic (7%) and African-American (6.5%) expectant moms more likely to report smoking than expectant moms who were American Indian or Alaska native (2.9%), Hispanic or Latina (1.8%), or Asian or Pacific Islander (1.1%).¹⁵⁰

Another aspect of maternal health that is linked to both birth outcomes and a child's subsequent health is maternal obesity. Among Arizonan women overall, about 51 percent had overweight or obesity^{xix} before pregnancy in 2014.¹⁵¹ 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 have obesity in the United States.¹⁵² In the Northwest Maricopa Region, this rate was slightly lower; 26 percent of women had overweight, and 29 percent had obesity, for a total of 55 percent who were overweight or obese before becoming pregnant (Figure 15). The rate of obesity in the region, county, and the state has increased slightly but steadily since 2012 (see Figure 16); this mirrors worrisome national trends as well.¹⁵³

Table 57. Live Births During Calendar Year 2014, by Mother's Educational Attainment

	Less than high school	High school or GED	Some college or professional education	Bachelor's degree or more
Northwest Maricopa Region	16%	25%	36%	22%
Maricopa County	20%	24%	30%	26%
ARIZONA	20%	25%	31%	23%

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

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

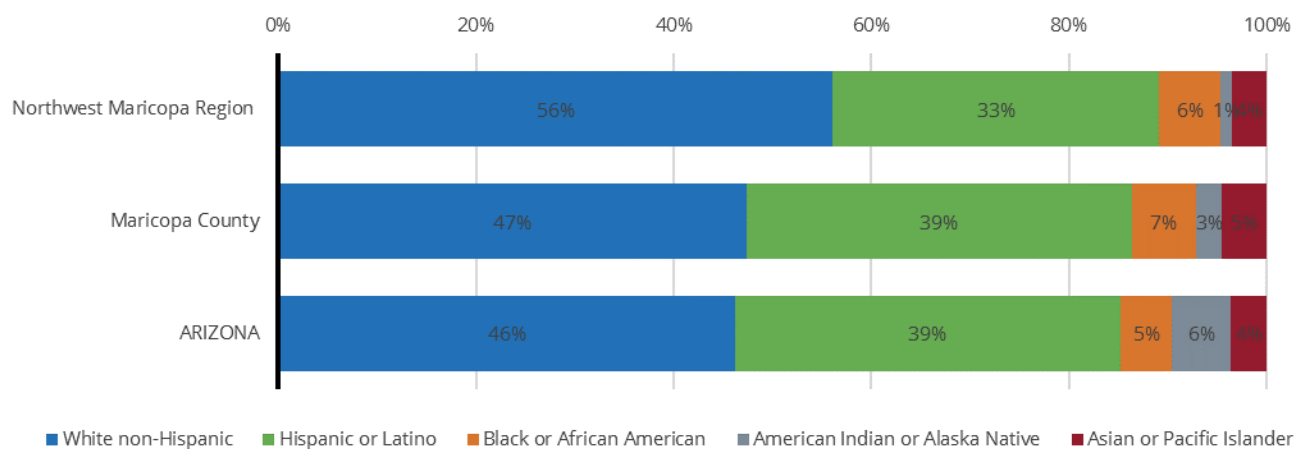
^{xix} Note that the Centers for Disease Control now use language consistent with the perspective that obesity is a disease state. We have adopted that language. See <https://www.cdc.gov/obesity/data/adult.html>.

Table 58. Other Characteristics of Mothers Giving Birth in 2014

	Mother was not married	Mother was 19 or younger	Mother was 17 or younger	Birth was covered by AHCCCS or Indian Health	Tobacco use during pregnancy
Northwest Maricopa Region	42%	7%	2%	51%	5%
Maricopa County	43%	7%	2%	52%	4%
ARIZONA	45%	8%	2%	55%	5%

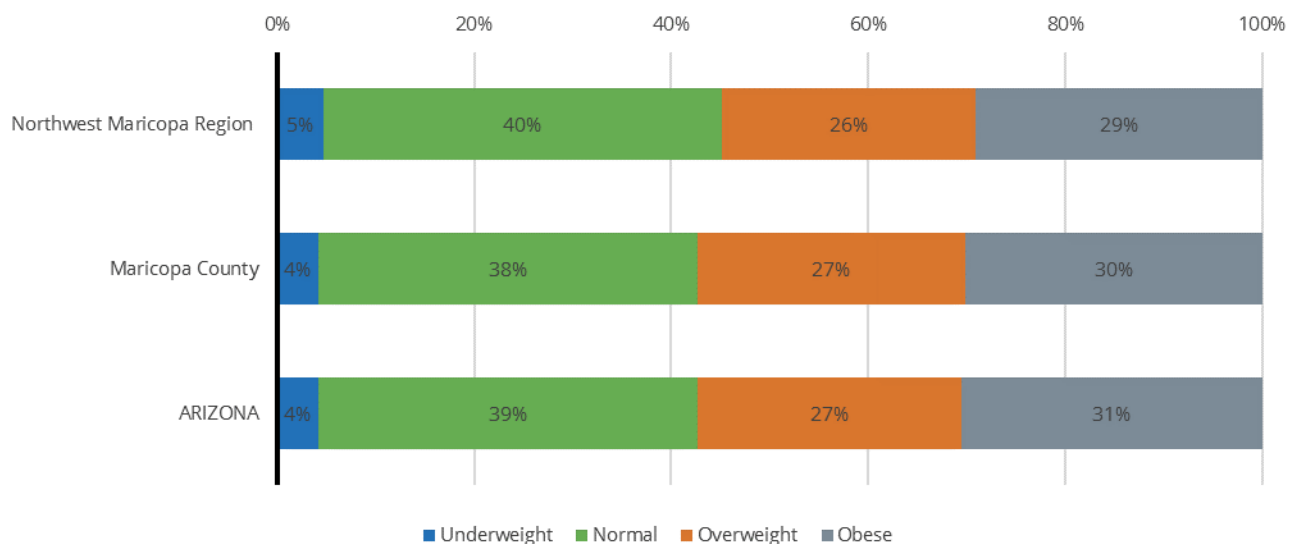
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 14. Race and Ethnicity of Mothers Giving Birth in 2014



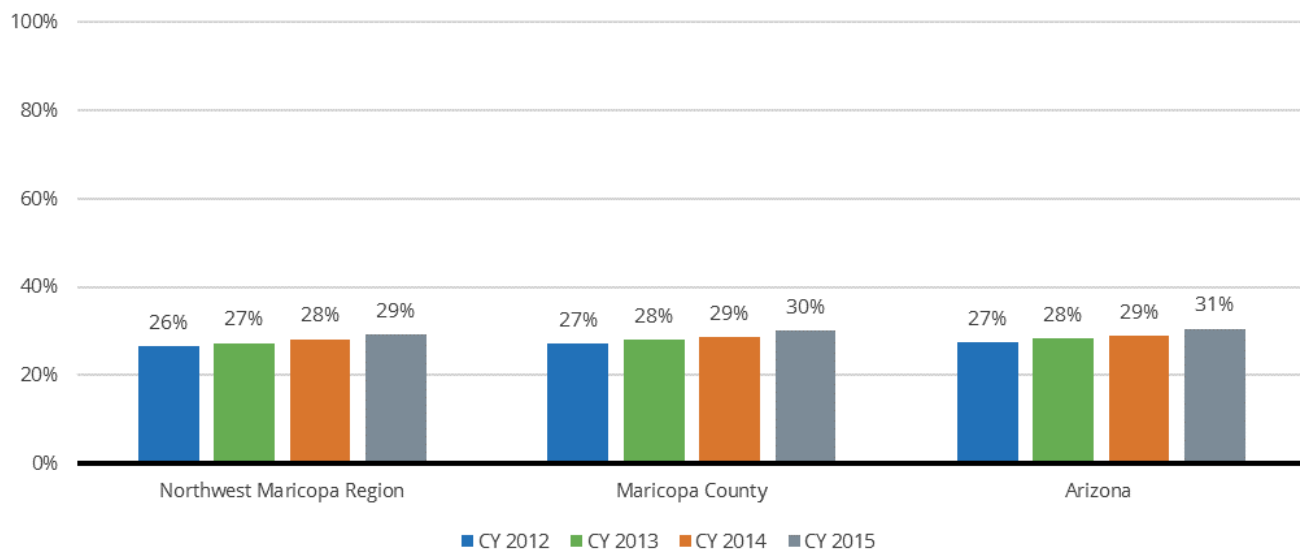
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 15. Pre-Pregnancy Weight Status for WIC Women, 2015



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

Figure 16. Pre-Pregnancy Obesity Rates for WIC Women, 2012 to 2015



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

Prenatal Care

The Healthy People 2020 goal is that at least 77.9 percent of pregnant women receive prenatal care that begins in the first trimester of pregnancy. Prior to 2014, the percent of women with early prenatal care was never lower than 85 percent, meeting the Healthy People 2020 goal each year from 2009 to 2013. 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. In 2014, 69.9 percent of pregnant women in the region (and 66% in the state) obtained prenatal care during the first trimester, meaning that the Healthy People 2020 goal was not met (although it is not clear whether the apparent decrease is real, or merely an artifact of the new reporting system). Nonetheless, a decline in women seeking early prenatal care could have serious repercussions for child well-being. Particularly concerning is that there is a similar downward trend in the proportion of Arizona women of child-bearing age (18-45) who report that a doctor, nurse or other health care worker ever talked with them about ways to prepare for a healthy pregnancy and baby (that is, discussed preconception health). Statewide, this rate has fallen from 47 percent in 2011, to 35 percent in 2014; in Maricopa County the rate in 2014 was 33 percent.¹⁵⁴

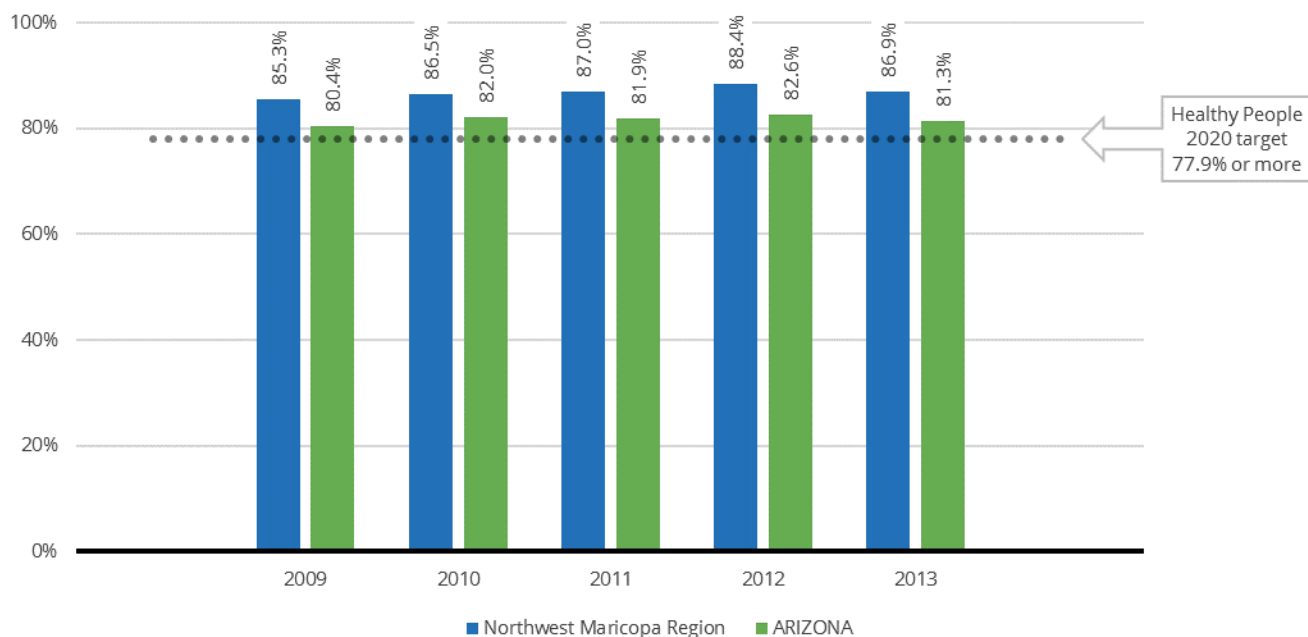
On a more positive note, nearly all mothers received at least some form of prenatal care, and only 4 percent of babies in the Northwest Maricopa Region were born to mothers who had had fewer than five prenatal care visits (Table 59). The Northwest Maricopa Region had a smaller proportion of mothers with few prenatal visits, compared to the state, where 6 percent of births were to mothers who had fewer than five prenatal care visits.

Table 59. Live Births During Calendar Year 2014, by Number of Prenatal Visits

	No visits	1 to 4 visits	5 to 8 visits	9 to 12 visits	13 or more visits	Percent of births with fewer than five prenatal care visits	Percent of births with prenatal care begun in first trimester
Northwest Maricopa Region	1%	3%	13%	53%	29%	4%	69.9%
Maricopa County	2%	3%	13%	49%	32%	5%	N/A
ARIZONA	2%	4%	15%	47%	31%	6%	66.0%

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

Figure 17. Percent of Births With Prenatal Care Begun in First Trimester



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

Note: In 2014, the Arizona Department of Health Services introduced major changes in the way that pregnant care by trimester is assessed; these structural changes mean that rates from 2014 onward are not directly comparable to earlier rates.

Birth Outcomes

With regard to perinatal health, babies from the Northwest Maricopa Region fared similarly to babies born statewide. In the region in 2014, 7.0 percent of babies were low birth weight, compared to seven percent across the state (Figure 18). The percent of premature births was slightly higher in the region (9.5%) than in the state (9.0%). (Figure 19). 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 Northwest Maricopa Region has achieved the Healthy People 2020 goal for both low birthweight births and preterm births. The percentage of newborns admitted to the NICU in the region (7%) was comparable to that across the county or state (7% for both) (Table 60).

Infants enrolled in WIC fell below the Healthy People 2020 goal of 81.9 percent of babies ever being breastfed in the Northwest Maricopa Region (2015: 68.9%), as did babies in Arizona where 71.2 percent of WIC-enrolled infants ever breastfed (Figure 20). Rates of breastfeeding in the Northwest Maricopa Region have consistently been lower than the countywide and statewide rates. The rate has, however, increased from 57.1 percent in 2012 to 68.9 percent in 2015. In the region, the rate rose by nearly 12 percentage points during that time. Breastfeeding data on the total Northwest Maricopa Region infant population (i.e., including those not participating in WIC) 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.^{xx} Thus, it is possible that the region overall does currently approach or meet the Healthy People 2020 goal, especially if rates have continued to climb since 2015.

In 2015, about three out of every 100 newborns (3.4%) did not pass an initial hearing screen. However, only 0.5 percent of those screened required a diagnostic evaluation and a very small proportion, 0.2 percent, of all babies were found to have confirmed hearing loss (Table 61). This was identical to the proportion across the state with confirmed hearing loss.

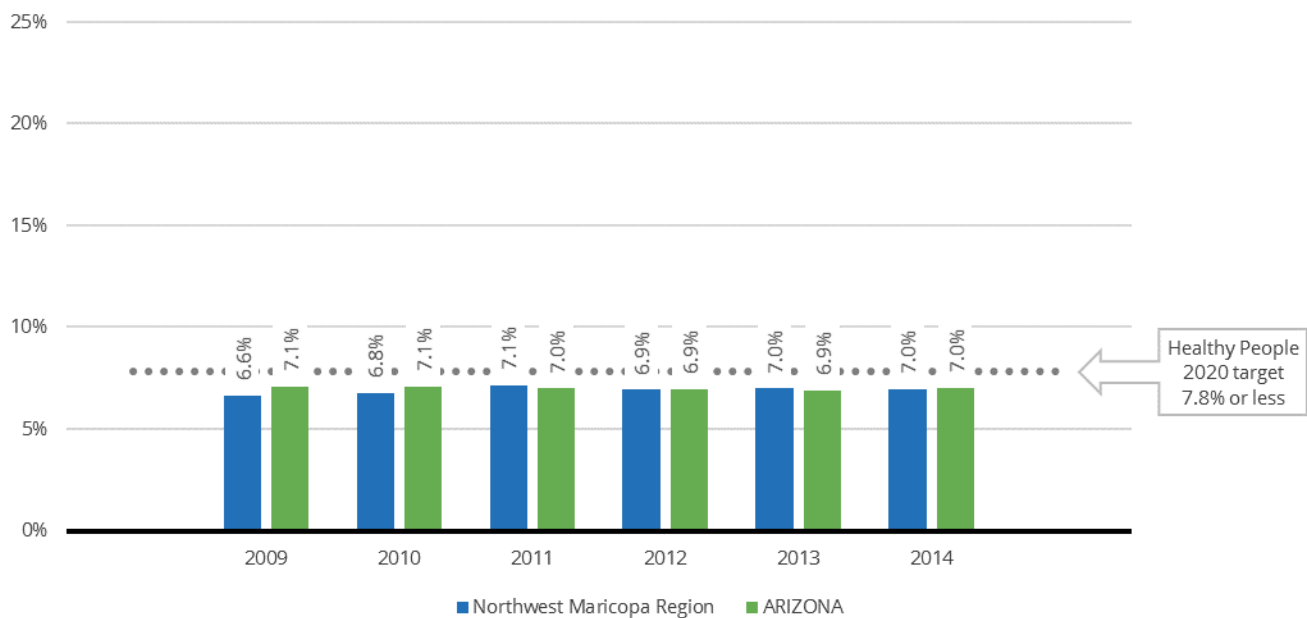
Table 60. NICU Admissions

Newborns admitted to intensive care unit	
Northwest Maricopa Region	7%
Maricopa County	7%
ARIZONA	7%

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

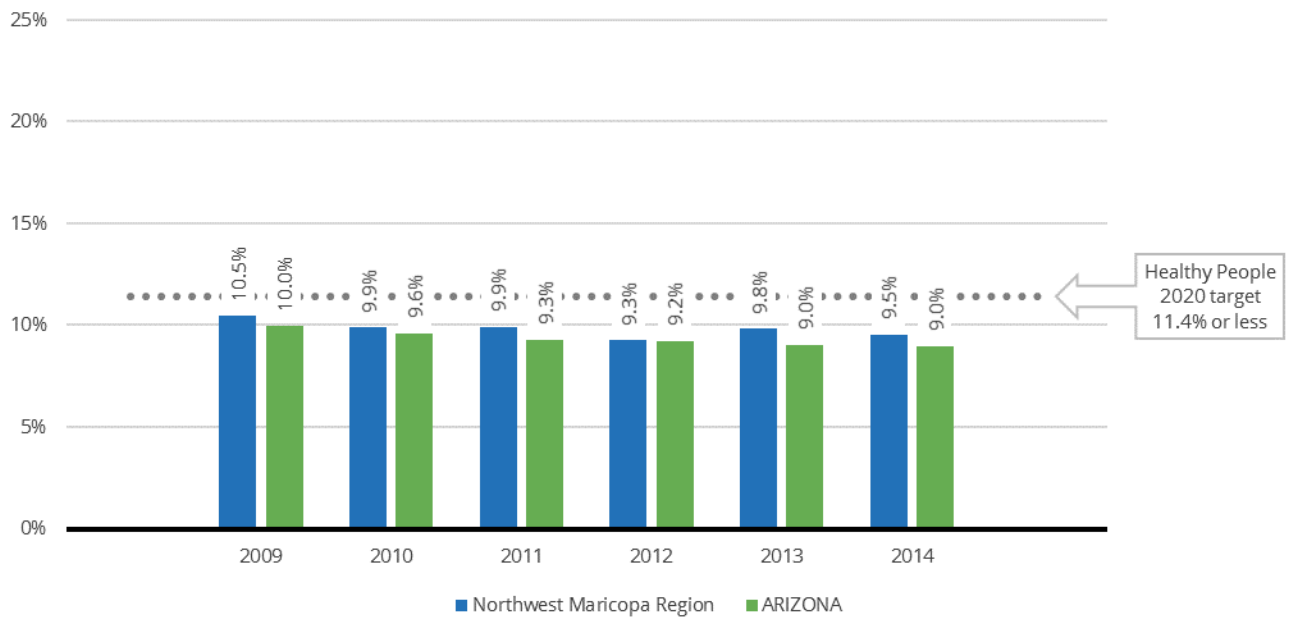
^{xx} This estimate is based on a sample of 291 births in Arizona in 2013. Rates of Any and Exclusive Breastfeeding by State among Children Born in 2013. Data available at: https://www.cdc.gov/breastfeeding/data/nis_data/rates-any-exclusive-bf-state-2013.htm

Figure 18. Percent of Babies Born With Low Birthweight (5.5 Pounds or Less), 2009 to 2014



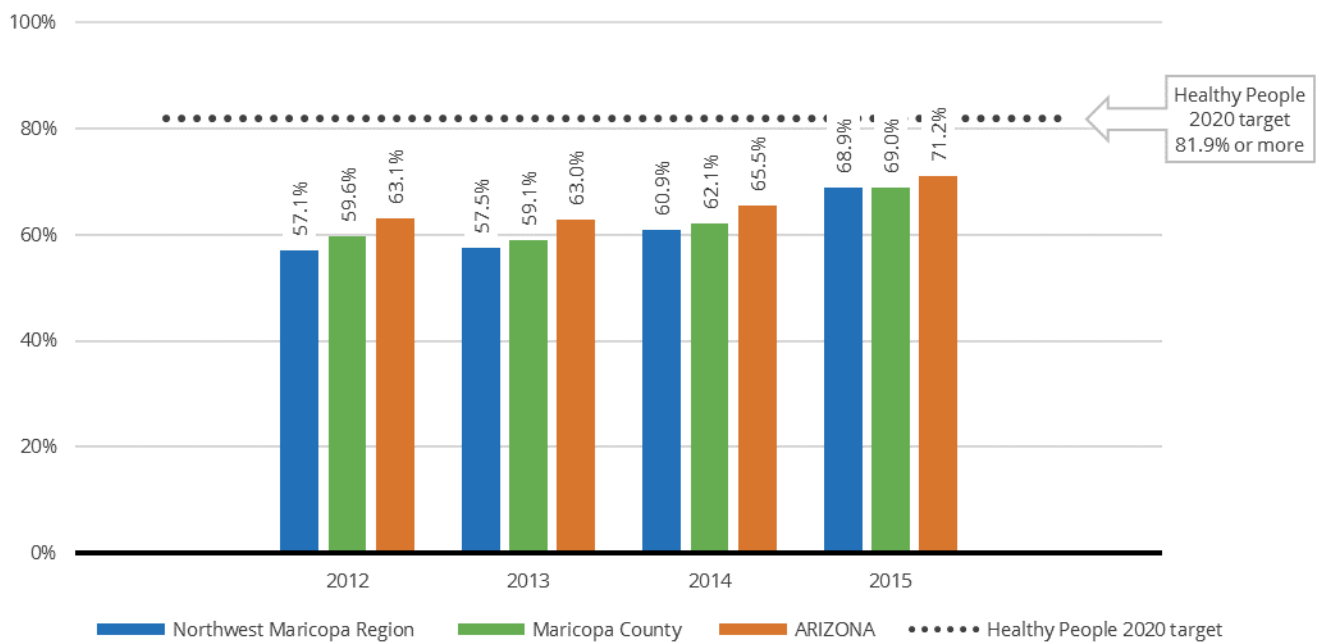
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 19. Percent of Babies Born Premature (37 Weeks or Less), 2009 to 2014



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

Figure 20. WIC Infants Who Were Ever Breastfed, 2012 to 2015



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

Table 61. Newborn Hearing Screening Results

	Newborns with hearing screening	Newborns not passing initial screen	Newborns requiring diagnostic evaluation	Newborns with confirmed hearing loss
Northwest Maricopa Region	8,490	3%	0%	0%
Maricopa County	N/A	N/A	N/A	N/A
ARIZONA	84,887	4%	1%	0%

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

Immunizations

While immunization rates vary by vaccine, over 90 percent of children in child care in the Northwest Maricopa Region had completed each of the three major (DTAP, polio, and MMR) vaccine series; the regional rates were in many cases slightly higher than those of the county and on par with those of the state (Table 62). The Healthy People 2020 target for vaccination coverage for children ages 19–35 months for these vaccines is 90 percent,^{xxi} 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.^{xxii} 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. Vaccine coverage is slightly lower for Hepatitis A; 87 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.^{xxiii} Rates for the three major (DTAP, polio, and MMR) vaccine series for children in kindergarten consistently fell above the rates for children in child care, even though more kindergarteners had claimed non-medical exemptions (Table 63). This likely reflects the more universal enrollment in kindergarten than in child care; children not enrolled in child care did not have to file for exemptions when not vaccinated, whereas schools require documentation of immunization status for all kindergarteners. Rates of personal exemptions for vaccinations among children in child care (3.2%) and kindergarten (4.1%) in the region were lower than exemption rates at the county (3.9% and 4.9% respectively) and state level (3.5% and 4.7% respectively).

^{xxi} 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>

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

Table 62. Vaccination Rates and Exemption Rates for Children in Childcare

	Students enrolled	Four or more DTAP	Three or more Polio	Two or more MMR	Three or more HIB	Two Hep A	Three or more Hep B	One or more Varicella	Religious exemption	Medical exemption
Northwest Maricopa Region	9,390	92%	93%	93%	92%	87%	92%	94%	3.2%	0.4%
Maricopa County	61,756	91%	92%	93%	92%	85%	91%	94%	3.9%	0.6%
ARIZONA	92,128	92%	93%	94%	92%	81%	92%	95%	3.5%	0.5%

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

Table 63. Vaccination Rates and Exemption Rates for Kindergarten Children

	Students enrolled	Four or more DTAP	Three or more Polio	Two or more MMR	Three or more Hep B	One or more Varicella	Personal exemption	Medical exemption
Northwest Maricopa Region	8,356	94%	94%	93%	95%	97%	4.1%	0.3%
Maricopa County	54,019	94%	94%	94%	95%	97%	4.9%	0.3%
ARIZONA	83,088	94%	95%	94%	96%	97%	4.5%	0.3%

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

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.^{xxiii} 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.^{xxiv} In the Northwest Maricopa Region, 292 children were screened and 56 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 27 percent of kindergarteners in the region, which was the same as the state (27%). In overall decay experience, 50 percent of kindergarteners in the region reported decay experience 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.

^{xxiii} Please see appendix for methodology.

^{xxiv} First Things First (2016). *Taking a bite out of school absences*. Children's Oral Health Report 2016.

Oral health care may be an under-emphasized issue with regards to children with special needs, because of the other perhaps more salient health needs. In addition to the chronic conditions that children with special health care needs face, they also are twice as likely to have unmet oral health care needs than their typical peers, and face additional barriers to care including inaccessibility of dental offices and limited dentists willing to treat children with special healthcare needs.¹⁵⁶

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.¹⁵⁷ In the 2015 annual report, 768 deaths were reported in children under 18 years old in Arizona, a decrease from 834 the year prior. Of child fatalities in 2015, 39 percent were determined to be preventable and 74 percent (n=566) were young children from birth to age five. More than one-third of the deaths of children birth to five (38%) occurred in the neonatal period (birth-27 days) and were due to natural causes (prematurity, neurological disorders, and other medical conditions). The infancy age group (28-365 days) saw 23 percent of these deaths, which were largely due to suffocation. About 13 percent of deaths were amongst children one to four years old, an age group with high rates of fatalities due to drowning, motor vehicle accidents, and blunt force trauma. In 2015, 10 percent of perinatal deaths, 48 percent of infant deaths, and 57 percent of young child deaths in Arizona were deemed preventable. Additionally, fatalities were overrepresented among African American children (9% of child deaths) and American Indian children (9% of child deaths) in the state.

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).

In 2015, Maricopa County reported 445 deaths among its population of 1,021,299 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).

Weight Status

Based on data from the Centers for Disease Control and Prevention (CDC), adult obesity increased in Maricopa County from 2011 (22.6%) to 2013 (25.4%) (Table 64). Across all three years, Maricopa County met the Healthy People 2020 goal of having no more than 30.5 percent of the population have obesity.^{xxxv} Statewide, adult obesity rates also rose from 25.1 to 26.8 percent over that same period.

Compared to adults, children are less likely to have obesity. Healthy People 2020 has set a goal of no more than 9.4 percent of children having obesity. Among children participating in WIC in the Northwest Maricopa Region in 2015, 10.2 percent had obesity and an additional 10 percent have overweight (Figure 21). Promisingly, the proportion of children with obesity decreased between 2012 and 2015, dropping from 12.1 percent in 2012 to 10.2 percent in 2015

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

(Table 65). This pattern mirrors national patterns, where 2014 saw a decrease from 2010 among WIC participants ages 2 to 4.¹⁵⁸ Based on these data, the Northwest Maricopa Region is not meeting the Healthy People 2020 target, although it is important to note that these data only reflect one segment of the population of the region, and low-income populations, i.e., those receiving WIC benefits, are at an elevated risk for obesity.

Table 64. Adult Obesity Rate, According to the CDC

	CDC adult obesity rate, 2011	CDC adult obesity rate, 2012	CDC adult obesity rate, 2013
Northwest Maricopa Region	N/A	N/A	N/A
Maricopa County	22.6%	22.2%	25.4%
ARIZONA	25.1%	26.0%	26.8%

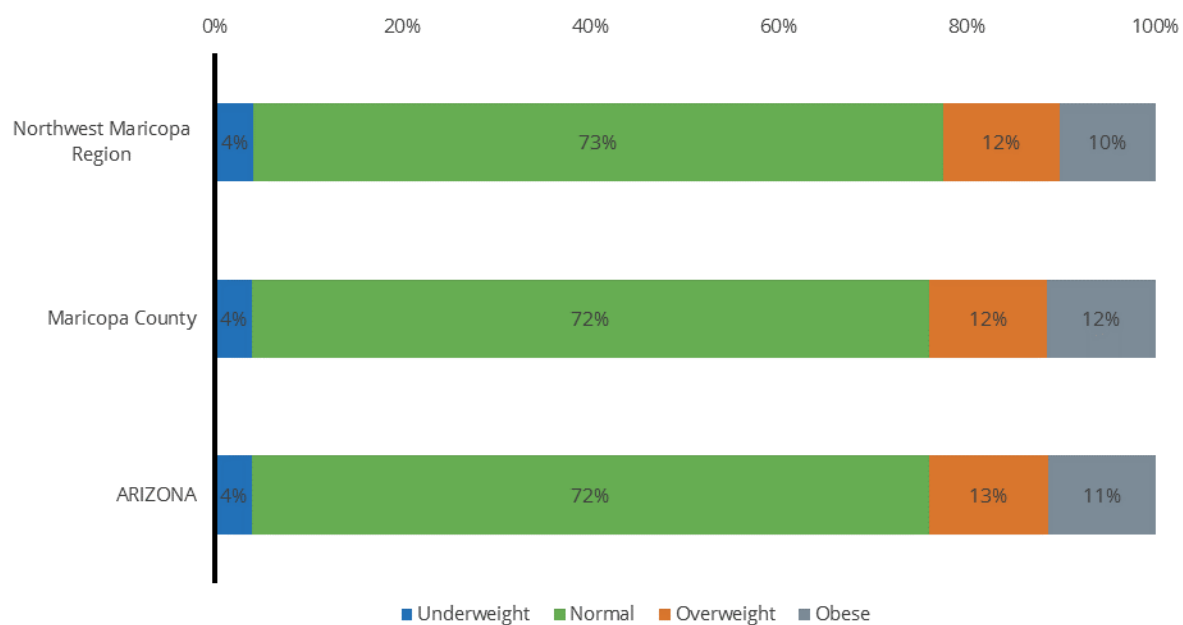
Source: CDC (2016). *Diabetes Data and Statistics*. Retrieved from www.cdc.gov/diabetes/atlas/countydata/atlas.html

Table 65. WIC Children's Obesity Rates, 2012 to 2015

	Childhood obesity rate, 2012	Childhood obesity rate, 2013	Childhood obesity rate, 2014	Childhood obesity rate, 2015	Healthy People 2020 Target for Childhood Obesity
Northwest Maricopa Region	12.1%	11.8%	10.3%	10.2%	9.4%
Maricopa County	13.2%	12.8%	11.3%	11.5%	9.4%
ARIZONA	12.7%	12.3%	11.1%	11.4%	9.4%

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

Figure 21. WIC Children's Weight Status, 2015



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



FAMILY SUPPORT AND LITERACY

Why Family Support and Literacy Matter

Parents, caregivers and families who provide positive and responsive relationships support optimal brain development during a child's first years^{159,160} and promote better social, physical, academic and economic outcomes later in that child's life.^{161,162} Parental and family involvement is positively linked to academic skills and literacy in preschool, kindergarten and elementary school.¹⁶³ 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.¹⁶⁴ Reading aloud, singings songs, practicing nursery rhymes, and engaging in conversation primes children to reach their full potential. To assess the degree to which these activities are happening across the state, the First Things First Family and Community Survey, a phone-based survey, was designed to measure many critical areas of parents' knowledge, skills, and behaviors related to their young children. Among other topics, the 2012 survey collected data about parent and caregiver knowledge of children's early development and their involvement in a variety of behaviors known to contribute positively to healthy development. Data on the amount and quality of the interaction parents and caregivers typically have with their children can be useful to inform programs and policies to encourage positive engagement. Examples of these community-level resources in Arizona include Read On Arizona, a partnership of agencies, philanthropic organizations, and community stakeholders committed to creating a continuum of services to improve language and literacy outcomes^{xxvi}; 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.¹⁶⁵

Not all children are able to begin their lives in the most positive, stable environments. Adverse Childhood Experiences (ACEs)¹⁶⁶ have been linked to risky health behaviors (such as smoking, drug use and alcoholism), chronic health conditions (such as diabetes, depression, obesity), poorer life outcomes (such as lower educational achievement and increased lost work time), and early death.¹⁶⁷ Children in Arizona are more likely to have experienced two or more ACEs (31.1%) than children across the country (21.1%).¹⁶⁸ 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.¹⁶⁹ 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.¹⁷⁰

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.¹⁷¹ 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 2014.¹⁷² 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.¹⁷³

^{xxvi} For more information on Read On Arizona, visit <http://readonarizona.org/>

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.¹⁷⁴ 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.¹⁷⁵ 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.¹⁷⁶

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."¹⁷⁷ When young children experience stress and trauma they have limited responses available to react to those experiences.

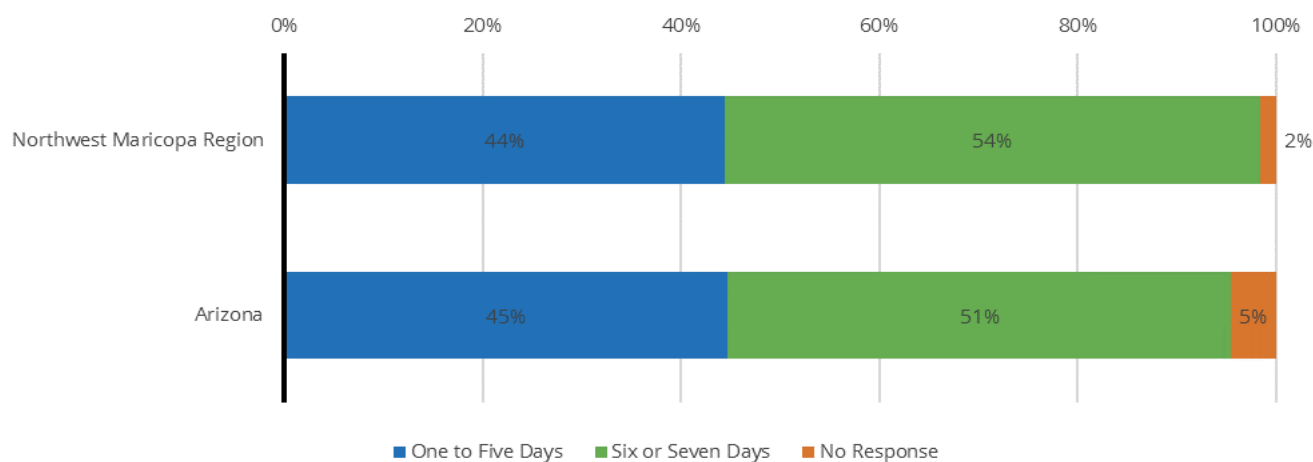
What the Data Tell Us

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.¹⁷⁸ Interventions known to have a positive impact on these skills include shared-reading interventions, parent and home programs, and preschool and kindergarten programs.¹⁷⁹

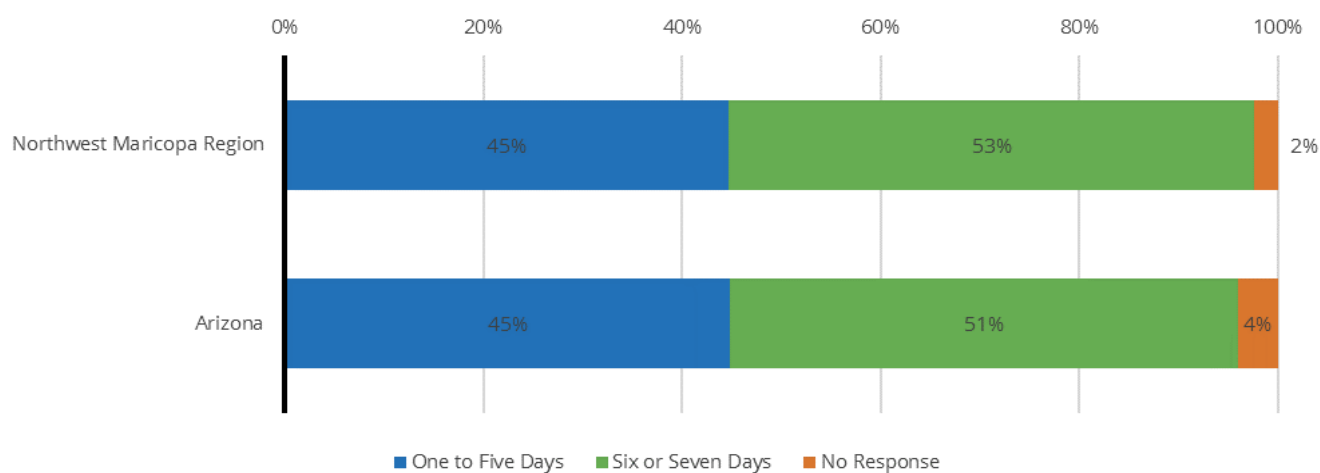
The First Things First Family and Community Survey is a phone-based survey designed to measure many critical areas of parents' knowledge, skills, and behaviors related to their young children. In the Northwest Maricopa Region, 197 people responded to the 2012 First Things First Family and Community Survey. Among other topics, the 2012 survey collected data about parent and caregiver knowledge of children's early development and their involvement in a variety of behaviors known to contribute positively to healthy development. Parents in the Northwest Maricopa Region were more likely to report reading to their children (54%) and telling stories to their children (53%) six or seven days a week, compared to parents across the state (51% and 51%, respectively) (see Figure 22 and Figure 23). Parents in the region were as likely to report drawing with their child (47%) six or seven days a week as parents across the state (47%). Parents in the Northwest Maricopa Region also showed a similar understanding that brain development can be affected prenatally or right from birth (81%) compared to respondents across the state as a whole (80%) (see Figure 24).

Figure 22. Responses to "During the past week, how many days did you or other family members read stories to your child?"



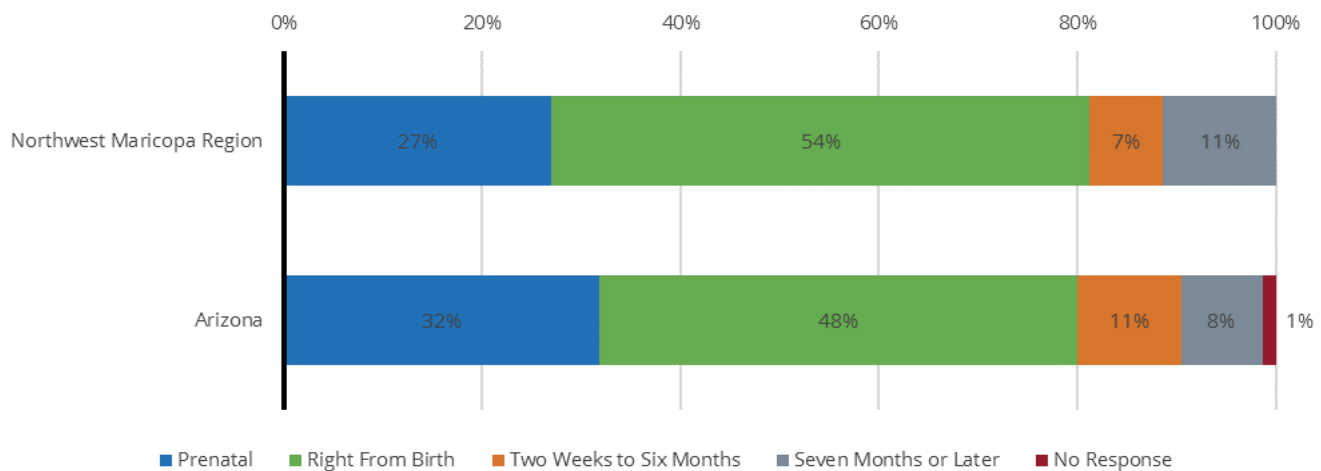
Source: First Things First (2014). [2012 Family and Community Survey dataset]. Unpublished data.

Figure 23. 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 24. 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-to-September 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, 2016.¹⁸⁰ According to this latest report, of 14,350 reports of abuse and neglect received during that period for Maricopa County, 1,709 (12%) resulted in a removal from the home (Table 66); note this number reflects all children, not just those aged birth to 5. The proportion of reports resulting in removal were the same (12%) as across the state as a whole. For reports of maltreatment that were substantiated during that period, most (88%) were cases of neglect, followed by physical (10%) and sexual (2%) abuse (Table 67).

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 Maricopa County for the April 1- September 30, 2016 reporting period (n=3,276) is higher than the number of removals resulting from substantiated reports of abuse (n=1,709) 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 68). More than one in 10 children entering out-of-home care had been removed at least once in the prior two years.

Table 66. Department of Child Safety Reports and Removals, April to September 2016

	Number of reports received, April to September 2016	Number of reports assigned, April to September 2016	Number of reports with removal, April to September 2016	Removal rate
Northwest Maricopa Region	N/A	N/A	N/A	N/A
Maricopa County	14,350	14,312	1,709	12%
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

Table 67. Department of Child Safety Substantiated Maltreatment Reports, April to September 2016

	Number of substantiated maltreatment reports	Neglect	Physical Abuse	Sexual Abuse	Emotional Abuse
Northwest Maricopa Region	N/A	N/A	N/A	N/A	N/A
Maricopa County	1,793	88%	10%	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. Table 19

Table 68. Children Entering Out-of-Home Care, April to September 2016

	Number of children removed	Number of children with a prior removal within the previous 24 months	Percent of children with a prior removal within the previous 24 months
Northwest Maricopa Region	N/A	N/A	N/A
Maricopa County	3,276	419	13%
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. Table 31

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, ten domestic violence shelters

in Maricopa County served a total of 3,934 people, 2,100 (53%) of whom were children (Table 69). These were Autumn House, Chrysalis, De Colores, DV STOP, Elm House, Faith House, My Sister's Place, New Life Center, Sojourner Center, and UMOM. Sojourner Center and New Life Center served the greatest numbers of clients (925 and 731, respectively). The average length of stay across all ten shelters was about 45 days, close to the statewide average of 39 days. Additionally, 14,251 calls were made to hotline and information and referral (I&R) numbers for the county, representing 57 percent of such calls statewide (Table 69).

Table 69. Domestic Violence Shelters

	Total number served	Number of adults served	Number of children served	Number of bed-nights	Average length of stay	Number of hours of support services	Number of hotline and information-and-referral (I&R) calls
Northwest Maricopa Region	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maricopa County	3,934	1,834	2,100	176,104	45 days	60,611	14,251
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.^{xxvii} Maricopa County is served by Mercy Integrated Care (MIC). Prior to October 2015, Maricopa County was served by Mercy Maricopa Integrated Care (MMIC). The data received for this report is for the period before the change to MIC.

In 2015, 1,664 pregnant or parenting women received publically funded behavioral health services in the Northwest Maricopa Region (Table 70). This represents a decrease of 34 percent from the 2,540 women who received services in 2012. This decrease over the three years was greater than that across the county (-31%) and state (-24%). The number of children ages birth to 5 receiving behavioral health services in the Northwest Maricopa Region also decreased by seven percent, from 2012 (n=943) to 2015 (n=881)(Table 71). This represents approximately six percent of young children in poverty in the Northwest Maricopa Region (compared to about 9.5 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 problems¹⁸¹, suggesting that there may be an unmet need for services for over 900 additional young children.^{xxviii}

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 non-fostered children (7%) enrolled in AHCCCS.¹⁸² This suggests that there may be a higher proportion of children not in the child welfare system who would benefit from

^{xxvii} Arizona Regional Behavioral Health Areas. See <https://www.azahcccs.gov/img/BehavioralHealth/ARBHAMap.jpg>

^{xxviii} Representing the difference between the 881 low-income children (4%) currently served, and the estimated 1,790 (13%) likely in need.

behavioral health services statewide. Beginning in 2015, each Regional Behavioral Health Authority (RBHA) was contractually required to ensure that children in Department of Child Safety (DCS) custody and their families are referred for ongoing behavioral health services, suggesting that rates of both mothers and children being provided services are likely to increase going forward.

A continuum of services to address infant and toddler mental health promotion, prevention and intervention has been proposed by a number of national organizations. Recommendations from the Zero To Three Policy Center 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.¹⁸³

Table 70. Number of Pregnant or Parenting Women Receiving Behavioral Health Services, 2012 to 2015

	2012	2013	2014	2015	Change from 2012 to 2015
Northwest Maricopa Region	2,540	2,458	1,634	1,664	down 34%
Maricopa County	13,607	12,486	8,672	9,386	down 31%
ARIZONA	19,134	17,731	13,657	14,546	down 24%

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

Table 71. Number of Children (Ages 0 to 5) Receiving Behavioral Health Services, 2012 to 2015

	2012	2013	2014	2015	Change from 2012 to 2015
Northwest Maricopa Region	943	1,011	682	881	down 7%
Maricopa County	7,000	8,019	6,250	8,515	up 22%
ARIZONA	13,110	14,396	12,396	14,374	up 10%

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



COMMUNICATION, PUBLIC INFORMATION, AND AWARENESS^{xxix}

^{xxix} 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 72. First Things First Engagement of Early Childhood Supporters, SFY2014 Through SFY2016

	Friends	Supporters	Champions
Northwest Maricopa Region	1,536	136	51
ARIZONA	21,369	3,102	908

Source: First Things First Communications Division

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.

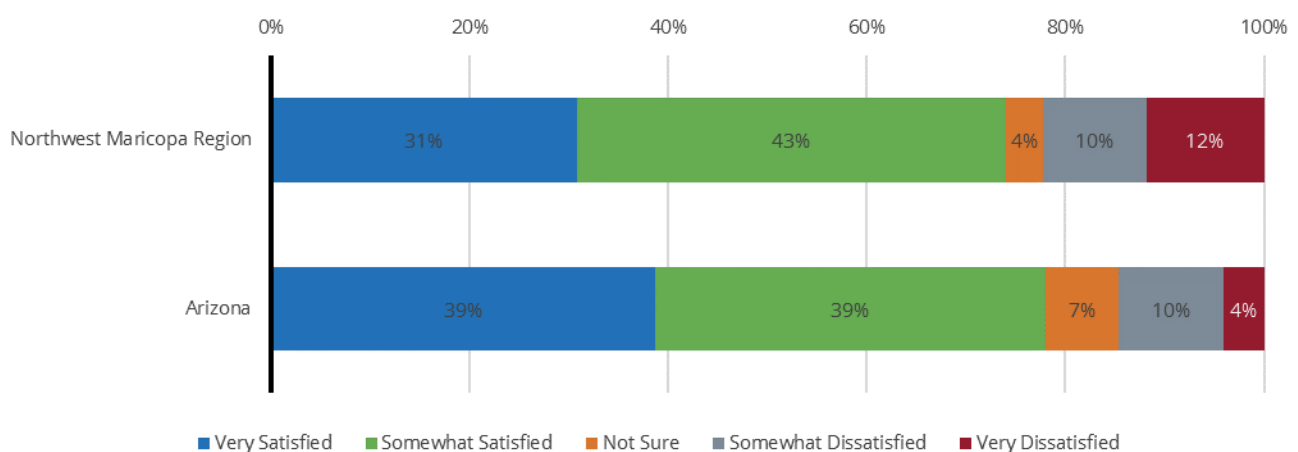
Furthermore, the Arizona Early Childhood Alliance—comprised of early childhood system leaders like FTF, the United Ways, Southwest Human Development, Children’s Action Alliance, Read On Arizona, Stand for Children, Expect More Arizona and the Helios Foundation—represent the united voice of the early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

The Family and Community Survey

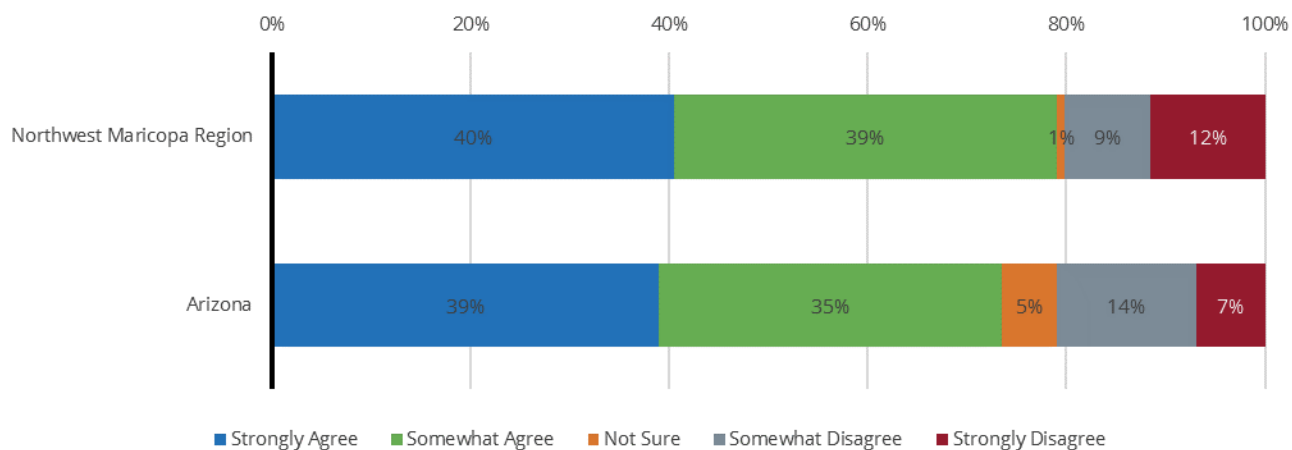
In addition to measuring parent knowledge, skills, and behaviors related to their young children, the 2012 First Things First Family and Community Survey collected data on parents’ perceptions regarding resources available to young children and their families across Arizona. Results from the survey demonstrated that respondents in the Northwest Maricopa Region had lower levels of satisfaction with available information and resources, but higher levels of agreement with ease of locating services, compared to the state. Thirty-one percent of Northwest Maricopa 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 25). Seventy-nine percent of Northwest Maricopa Region respondents “strongly” or “somewhat agreed” that “it is easy to locate services that I want or need,” compared to 74 percent of respondents across the state (see Figure 26). Similar numbers of respondents in the region expressed satisfaction (35%) and dissatisfaction (34%) whereas residents statewide were more likely to indicate satisfaction (43%) than dissatisfaction (29%) with how care providers and government agencies work together and communicate (see Figure 27). Almost one third of Northwest Maricopa Region respondents were “not sure” about coordination and communication among providers and agencies.

Figure 25. Responses to "How satisfied are you with the community information and resources available to you about children's development and health?"



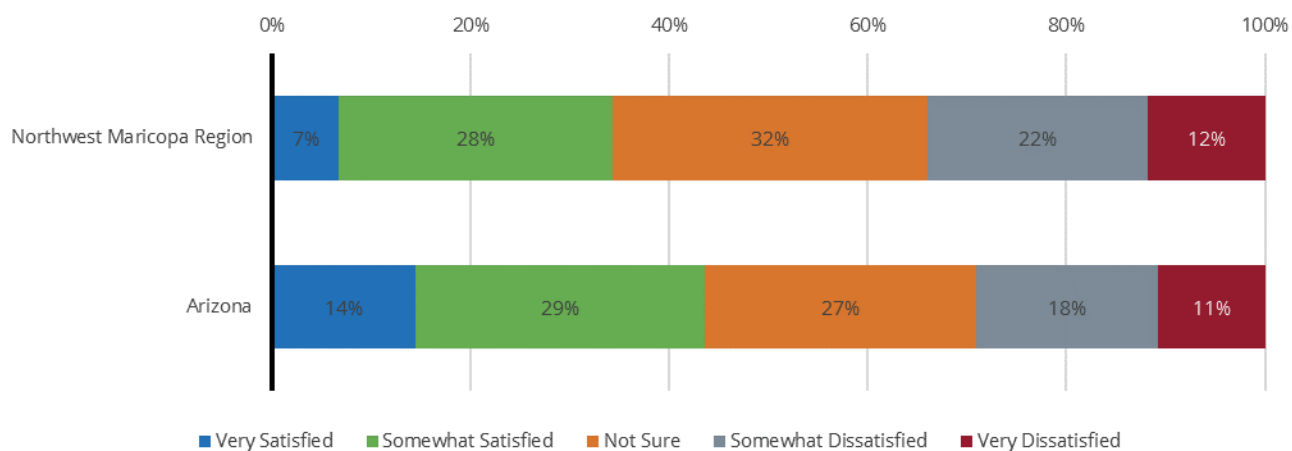
Source: First Things First (2014). [2012 Family and Community Survey dataset]. Unpublished data.

Figure 26. 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 27. 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."^{xxx} 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

The 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

^{xxx} 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.

disseminated to non-tribal system partners in 18 FTF county-based regions via an online survey in October of 2016.^{xxxi}

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 county (i.e., Family Support and Literacy, Early Learning, Child's Health and Professional Development); the level of collaboration that is occurring among system partners; the sectors engaged in system building work; and perceptions of the FTF regional partnership councils' role in system building efforts.

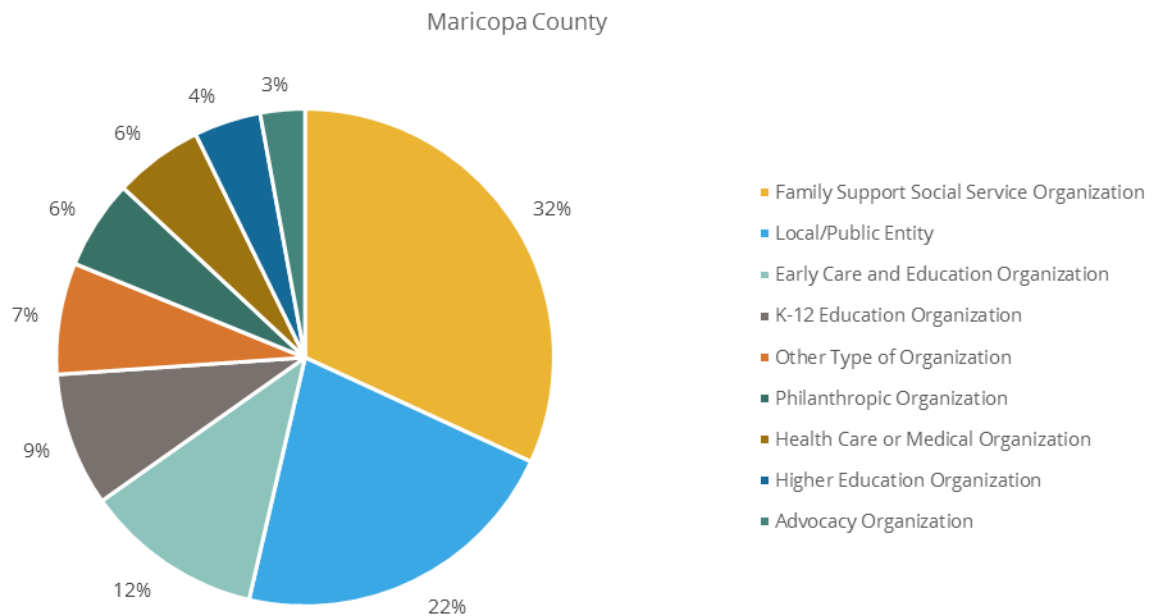
What the Data Tell Us

The results are based on the responses from 69 respondents that participated in the survey from Maricopa County out of 102 that were contacted to participate, for a 68 percent overall survey response rate. However, please note that not all respondents answered each question, and that the number of respondents varies by question. Each figure or table indicates the number of people responding to that particular question. The respondents represent the following FTF Regional Partnership Councils: Phoenix North, Phoenix South, East Maricopa, Northwest Maricopa, Southeast Maricopa, and Southwest Maricopa.

Respondents represented many sectors of the early childhood system in the region. The most common organization type among respondents was Family Support/Social Service agencies (32%), Local/Public entities (22%), and Early Care and Education organizations (12%), while state agencies and businesses were not represented at all in this survey (Figure 28).

^{xxxi} Partners located on tribal lands will be surveyed at a later date after tribal approvals are requested and received.

Figure 28. Sectors With Which Organizations Work (N=69)



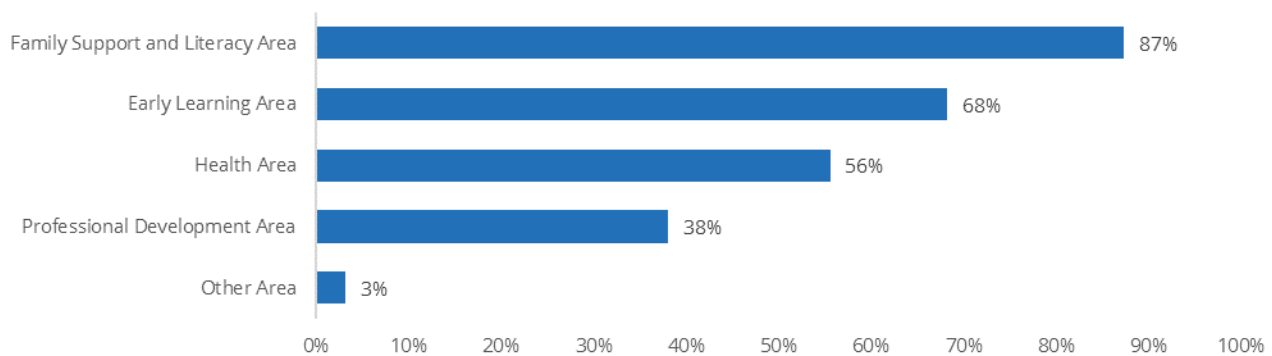
Source: First Things First (2016). [2016 Coordination and Collaboration Survey dataset]. Unpublished data.

Note: The percentages in the pie chart do not add to 100% because of rounding.

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

The majority of respondents (93%) consider themselves to be a part of the early childhood system in Maricopa County. Although organizations representing each of the key areas of the Early Childhood System responded to the survey, the area best represented was Family Support and Literacy (87%) (Figure 29). This is in accordance with the large percentage of respondents from the Family Support/Social Service sector (Figure 28). Many partners reported engaging with multiple key areas of the Early Childhood System. While only 6% of organizations identified their primary sector as health care, 56% of organizations engaged with child health.

Figure 29. Area(s) of the Early Childhood System That Organizations Engage With (N=63)

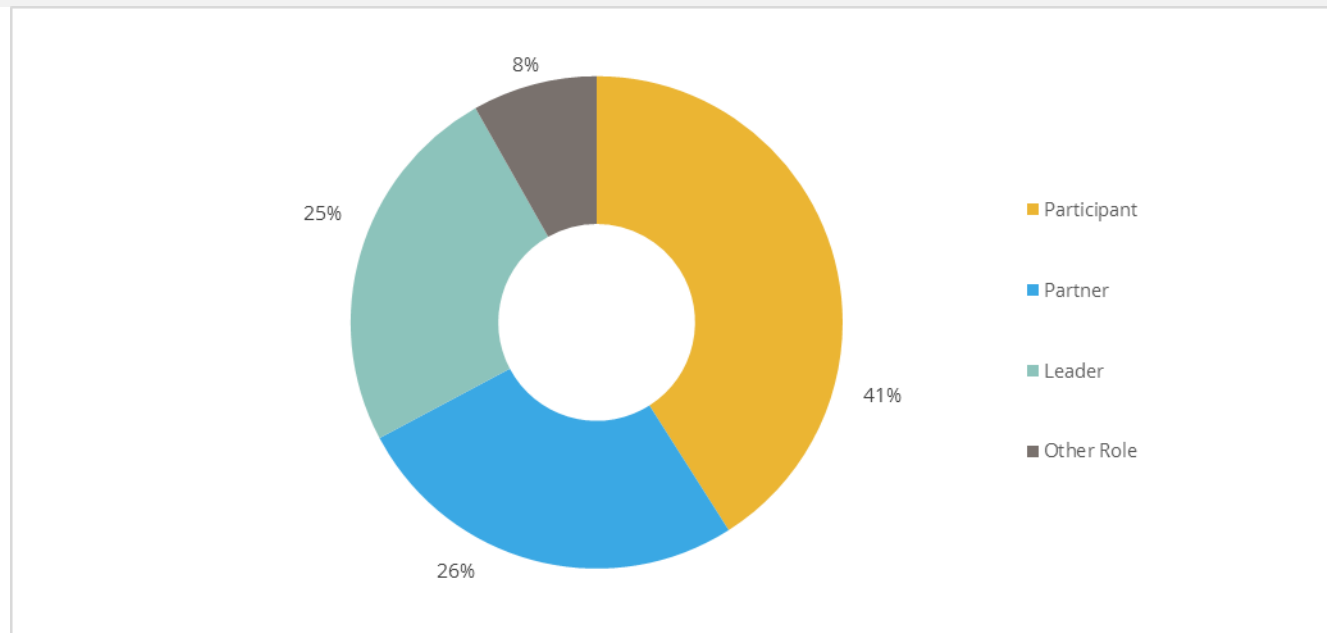


Source: First Things First (2016). [2016 Coordination and Collaboration Survey dataset]. Unpublished data.

Role of an Organization in the Early Childhood System

When asked about their organizations' role in the development and advancement of the Early Childhood System in Maricopa County, the majority of respondents viewed their organization's role as a Participant (41%), i.e., one of many community organizations involved in supporting the Early Childhood System. Nearly equal numbers described their roles as Partner (26%), i.e., part of a group responsible for co-convening and/or facilitation and is one of many community members involved in a community-based initiative and Leader (25%), i.e., taking the lead for convening and facilitating a group of community members. Eight percent of respondents defined their role in the development and advancement of the Early Childhood System as something different from the defined roles of Participant, Partner, Leader (see Figure 30). Respondents falling into "Other Role" category noted they had a very specific role that they played which they could not identify within one of the three roles (e.g., advocacy) or they target specific populations (e.g., low income families or African Americans).

Figure 30. Role of Organization in the Development and Advancement of the Early Childhood System in Maricopa County (N=61)



Source: First Things First (2016). [2016 Coordination and Collaboration Survey dataset]. Unpublished data.

In their roles as Participants, Partners, or Leaders, respondents noted numerous successful partnerships. Organizations that identified their role as that of a Participant described partnering with other groups for staff trainings and presentations, sharing resources put out by other organizations and connecting their clients to the resources of other organizations, using space at other organizations, participating in networks (e.g., Family Resource Network, Early Childhood Network), and participating in special events (e.g., Community Baby Showers).

Organizations that identified their role as that of a Partner also indicated that they participated in trainings hosted by other organizations, had formal memorandums of understanding (MOU), and one created a direct referral system from well child visits to local Family Support Specialists to determine eligibility & subsequently enrollment in Head Start.

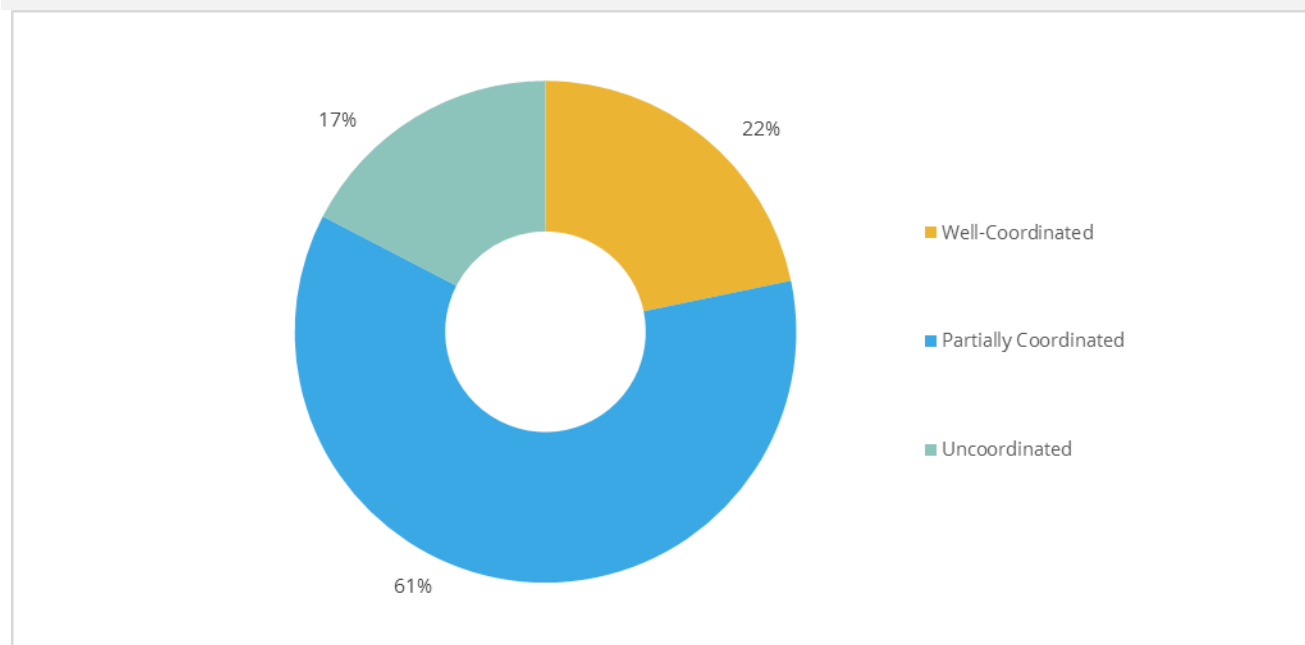
Organizations that identified their role as that of a Leader primarily described experiences in alliances and task forces. One organization is working with Department of Child Safety to provide support, resources, and education that better equips parents/caregivers to care for their children and facilitates reunification and prevents removals from the home.

System Partners' Perspective on Systems Building

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

A majority (61%) of survey respondents described the early childhood system in Maricopa County as a partially coordinated system, with less than a quarter of respondents (22%) describing the system as a well-coordinated system, and 17 percent viewing the early childhood system as a group of separate, uncoordinated system partners working in isolation (Figure 31).

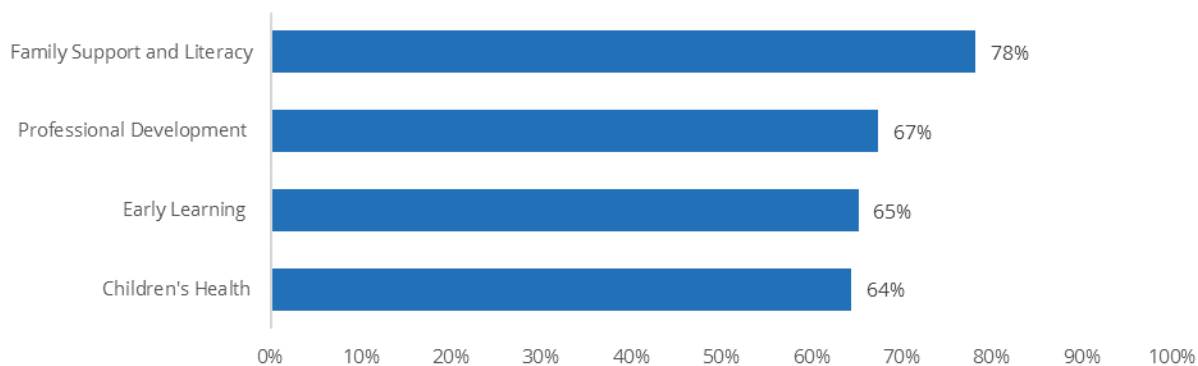
Figure 31. Describe the Early Childhood System in Maricopa County (N=46)



Source: First Things First (2016). [2016 Coordination and Collaboration Survey dataset]. Unpublished data.

With regard to each of the key areas, the majority of respondents reported that the early childhood system in Maricopa County effectively addresses the needs of young children (Figure 32). The percentage was highest in the Family Support and Literacy area (78%), followed by the Professional Development (67%), Early Learning (65%), and Children's Health (64%) areas. It is important to note, however, that in each area many organizations disagreed that the existing Early Childhood System was effectively meeting the needs of young children, suggesting that there is still work to be done and improvements than can be made.

Figure 32. Percent Agreeing That the Early Childhood System in Maricopa County Effectively Addresses the Needs of Young Children and Their Families Across Key Areas (N=46)

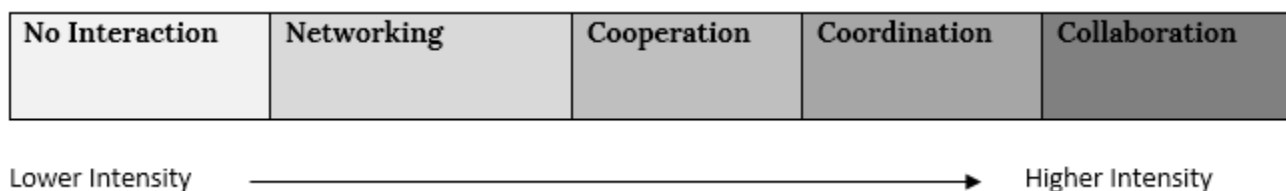


Source: First Things First (2016). [2016 Coordination and Collaboration Survey dataset]. Unpublished data.

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 33).

Figure 33. The Five Levels of the Continuum of Collaboration



These stages, as described by Frey and colleagues,^{xxxii} 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.

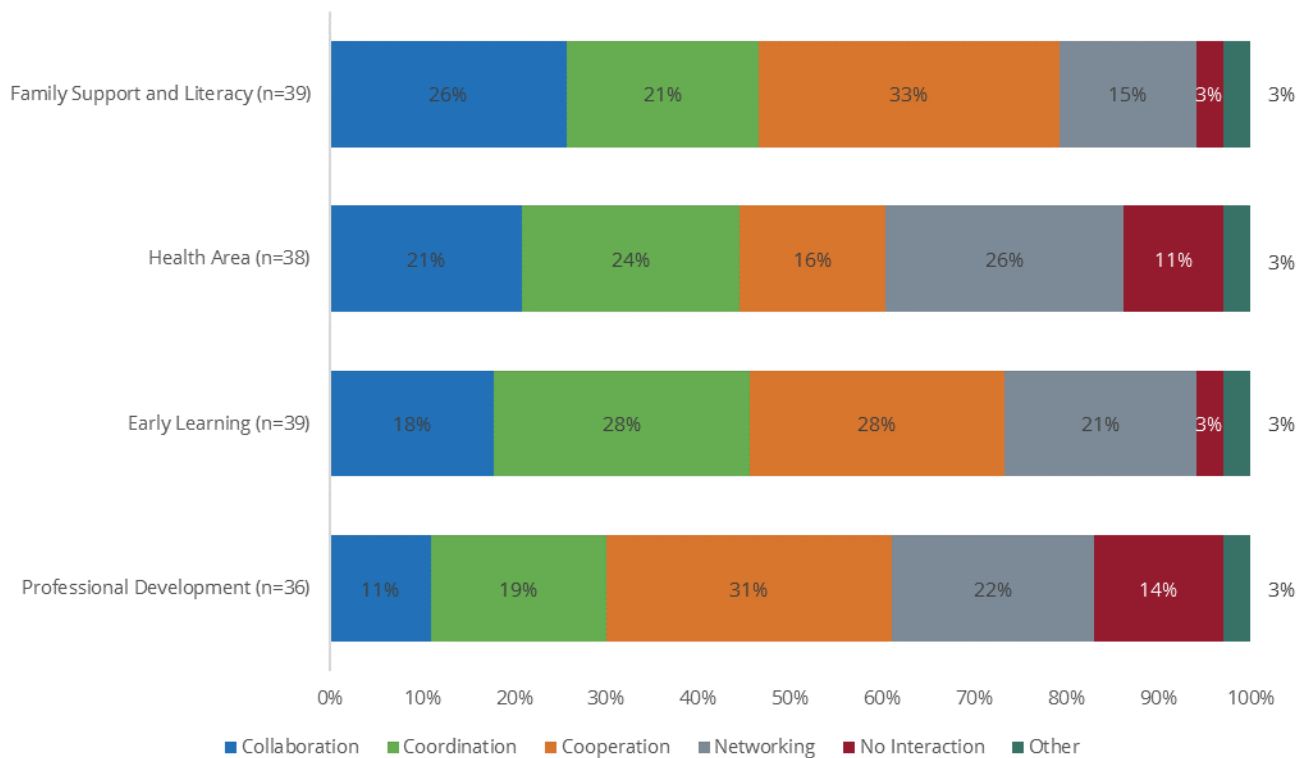
^{xxxii} Frey, B. B., Lohmeier, J. H., Lee, S. W., & Tollefson, N. (2006). Measuring collaboration among grant partners. *American Journal of Evaluation*, 27(3), 383-392.

- *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 Maricopa County for each area of the early childhood system. In the Family Support and Literacy area (33%) and the Professional Development area (31%), the greatest proportion of respondents indicated that they perceived cooperation among system partners; a relationship characterized by short-term, informal relationships that exist without a clearly defined mission. In the area of Early Learning, equal proportions of participants selected Cooperation and Coordination (both at 28%). Coordination, a relationship of relatively high intensity, involves more formal planning and division of roles and opens communication channels between organizations. This is somewhat different from the Children's Health area, where respondents indicated Networking (26%) as the most prevalent mode of relationships between system partners. Networking is a relationship of low intensity, characterized by bringing individuals or organizations together for relationship building and information sharing (Figure 34).

A relatively large percentage of respondents in the Professional Development (14%) and Children's Health areas (11%) indicated that there is no interaction among system partners.

Figure 34. Continuum of Collaboration in the Early Childhood System Areas



Source: First Things First (2016). [2016 Coordination and Collaboration Survey dataset]. Unpublished data.

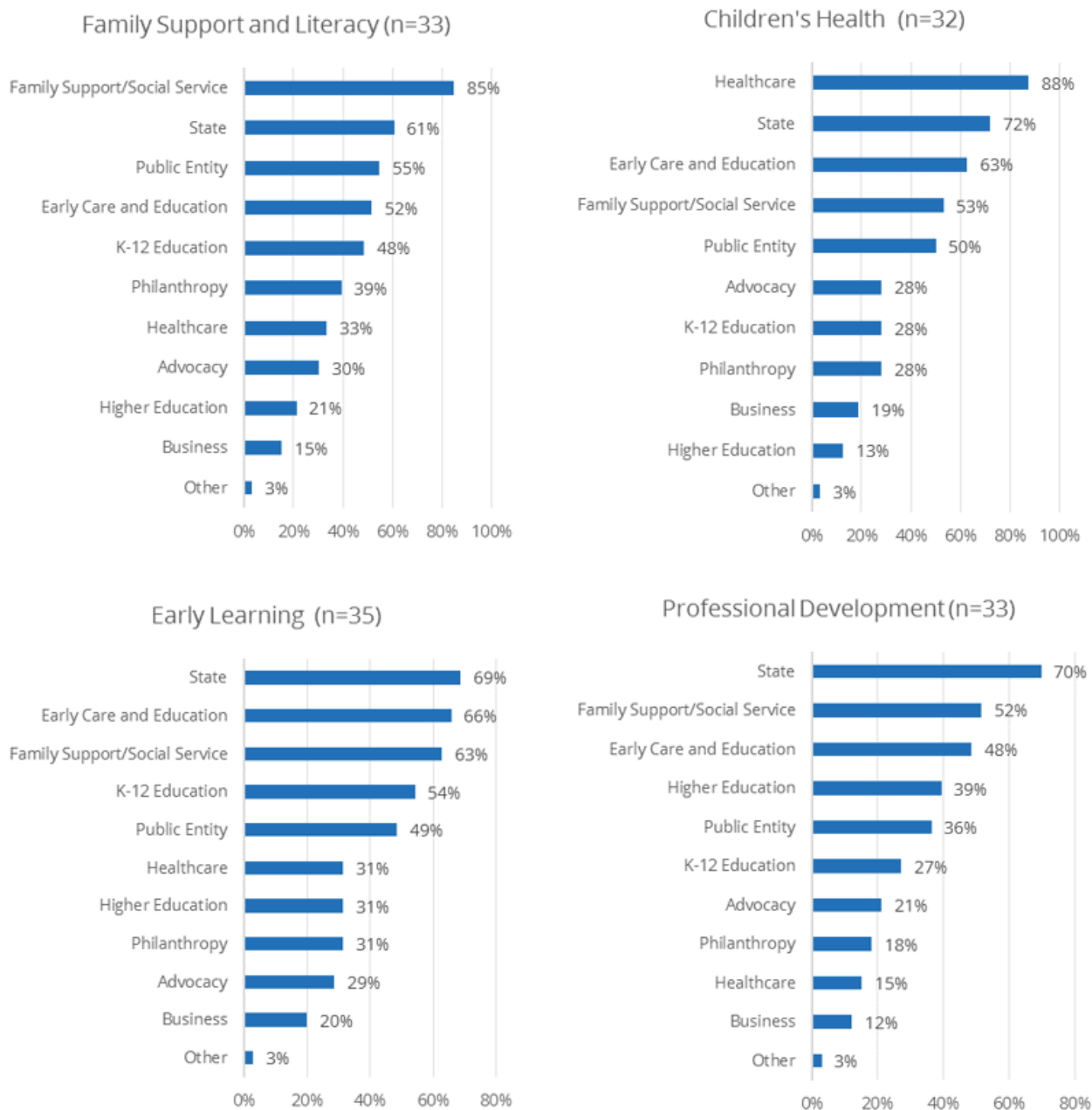
Sectors involved in the Early Childhood System Building

Respondents were also asked to indicate which sectors are involved in systems building within each of the four areas of the Early Childhood System (see Figure 35). In the area of Family Support and Literacy, a majority (85%) of respondents noted the participation of Family Support/ Social Service Agencies in system building work in Maricopa County. Other sectors that the majority of respondents felt were contributing were State Agencies (61%), Local and Public Entities (55%), and Early Care and Education (52%, see Table 2). In the area of Children's Health, respondents indicated that the Health Care/ Medical Sector (88%), followed by State Agencies (72%), and the Early Care and Education (63%) were the most engaged in systems buildings.

In the area of Early Learning, there was less agreement around a primary sector. State Agencies (69%) and Early Care and Education (66%) play large roles, followed by the Family Support and Social Services (63%).

Finally, in the area of Professional Development, most participants (70%) indicated that State Agencies were involved, followed by the Family Support/ Social Services (52%) and Early Care and Education (48%).

Figure 35. Sectors Involved In/Engaged In System Building Work in Maricopa County



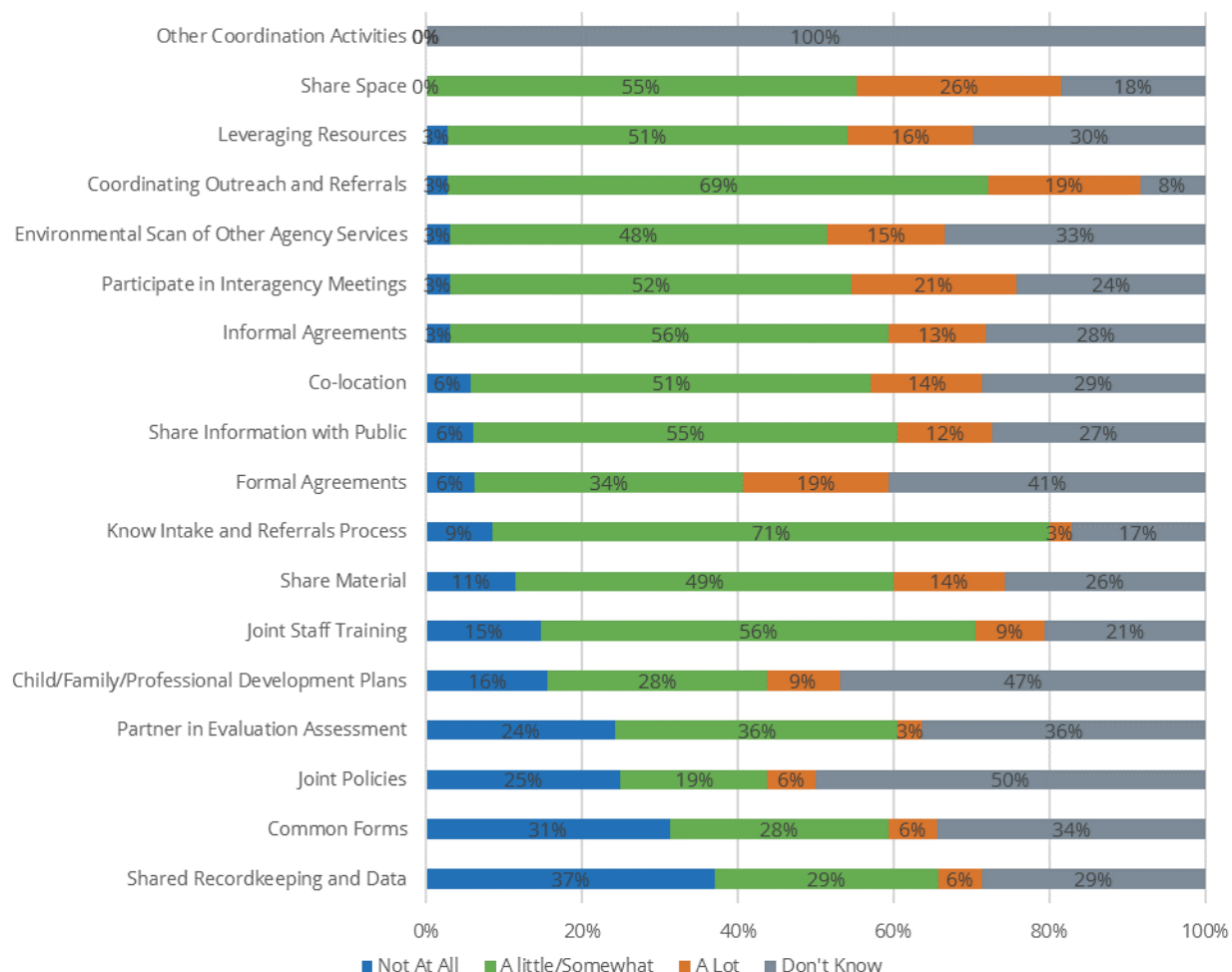
Source: First Things First (2016). [2016 Coordination and Collaboration Survey dataset]. Unpublished data.

The following data reflect questions asking respondents about how frequently key activities were occurring that are known indicators of collaborative work. It should be noted that many (29 or 41%) survey participants opted to not respond to this portion of the survey and that 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=37), activities that system partners within Family Support and Literacy are using include: sharing facility space in some way, having some knowledge of other program's intake requirements and referral processes, and having some coordination of outreach and referrals (Figure 36). Participation in standing inter-agency committees is another key activity that system partners identified as happening in the county.

When thinking about activities along the continuum of collaboration, the types of activities that respondents indicated are occurring represent networking, cooperation, and coordination type activities within the continuum. Areas where a high number of respondents indicated that the activity was not happening at all (31% to 37%) was in the use of shared forms (e.g. common referral and intake forms) and shared record keeping and management of data information systems. These are key activities that align to a high level of collaboration between system partners and represent opportunities for of continued growth for system partners.

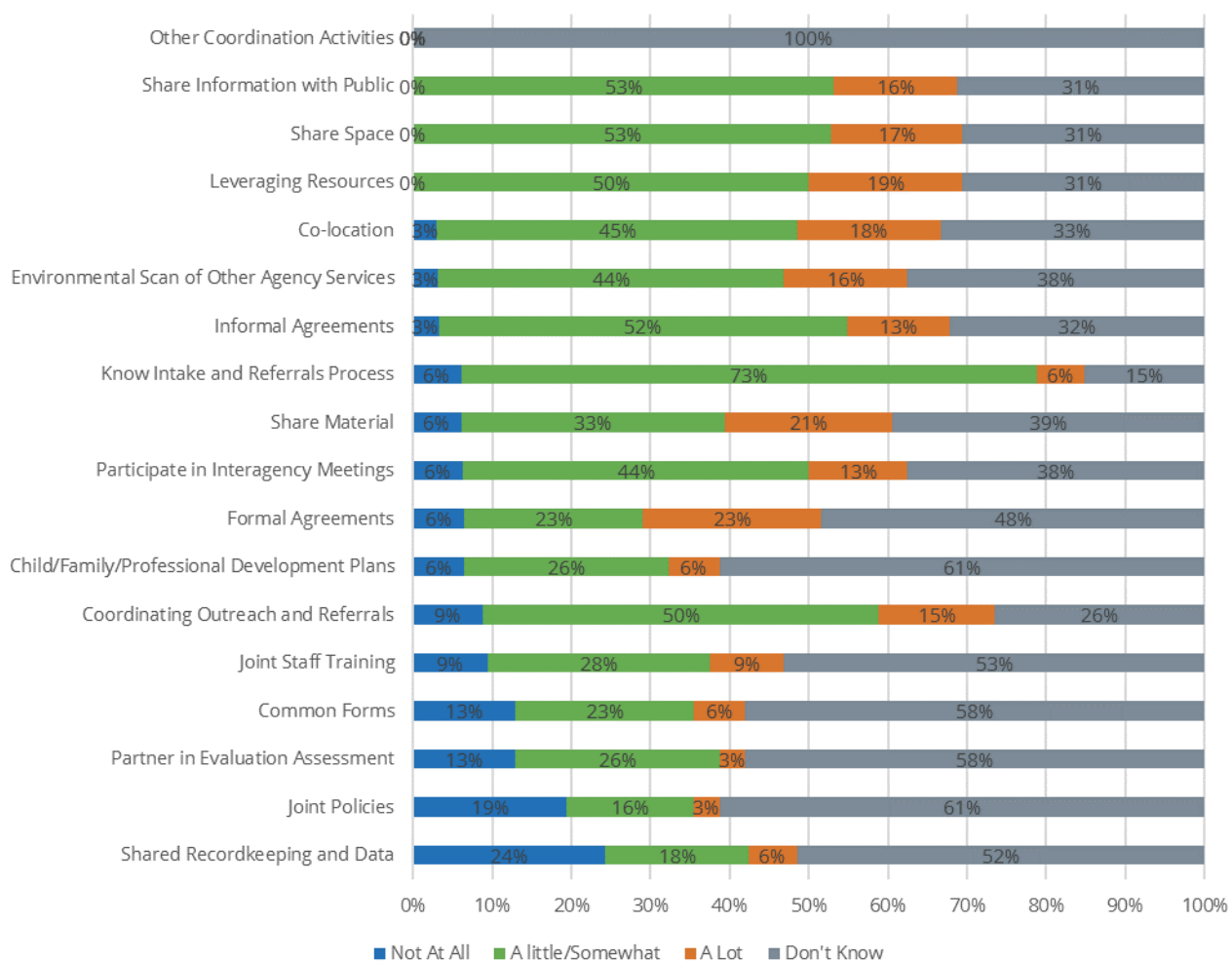
Figure 36. Frequency of Activities: Family Support & Literacy (n=37)



Source: First Things First (2016). [2016 Coordination and Collaboration Survey dataset]. Unpublished data.

Within the Children's Health area, the collaborative activity that greatest number (23%) of respondents saw a lot of use of was formal agreements; however, overall only 23 percent felt formal agreements were used a little/somewhat, and 6 percent felt they were not used at all (Figure 37). The activity that the most respondents felt had at least a little use was organizations having knowledge of other programs' intake requirements/referral process (79%). Areas where numerous respondents indicated a complete absence of activity include shared recordkeeping and data, joint policies, partnerships in program evaluation and/or assessment, and the use of common forms (e.g., intake and/or referral forms). These were also areas where large proportion of respondents indicated that they did not know whether the activity was occurring or not. These activities align to a high level of collaboration between system partners and represent opportunities for of continued growth for system partners.

Figure 37. Frequency of Activities: Children's Health (n=36)

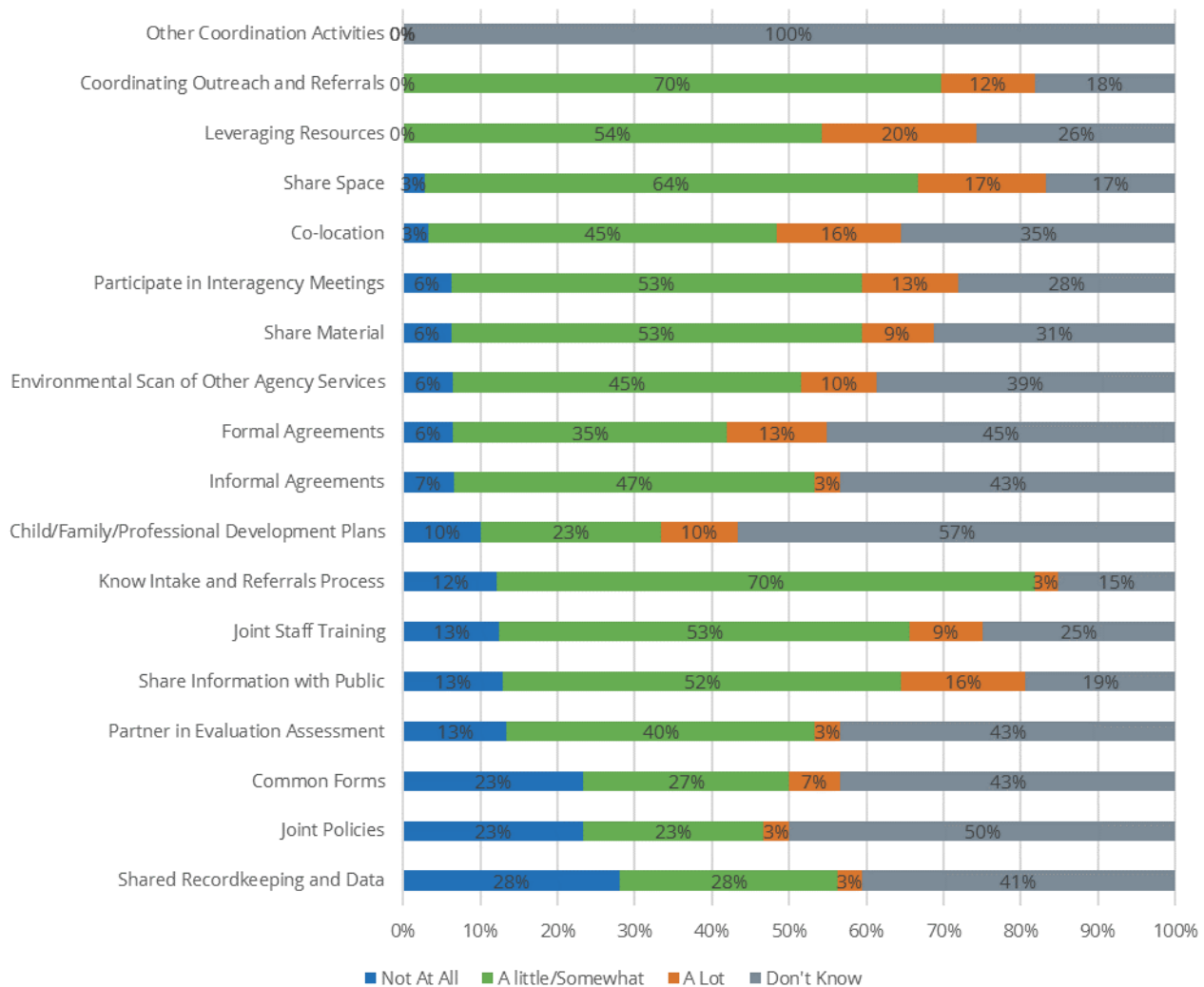


Source: First Things First (2016). [2016 Coordination and Collaboration Survey dataset]. Unpublished data.

As with other the other key areas, respondents were more likely to indicate that most activities within the Early Learning area (see Figure 38) were happening a little/somewhat, rather than a lot or not at all. Within the Early

Learning area, the activities that the most respondents felt had at least a little use were (1) coordinating outreach and referrals (82%), (2) sharing space (81%), and 3) having knowledge of other programs' intake requirements/referral process (73% - although 12% also felt this activity was not happening at all). Areas where numerous respondents indicated a complete absence of activity include shared recordkeeping and data, joint policies, and the use of common forms (e.g., intake and/or referral forms). These areas were similar to those noted in the Child Health area, suggesting that work to enhance these capacities would benefit system partners in multiple sectors.

Figure 38. Frequency of Activities: Early Learning (n=35)

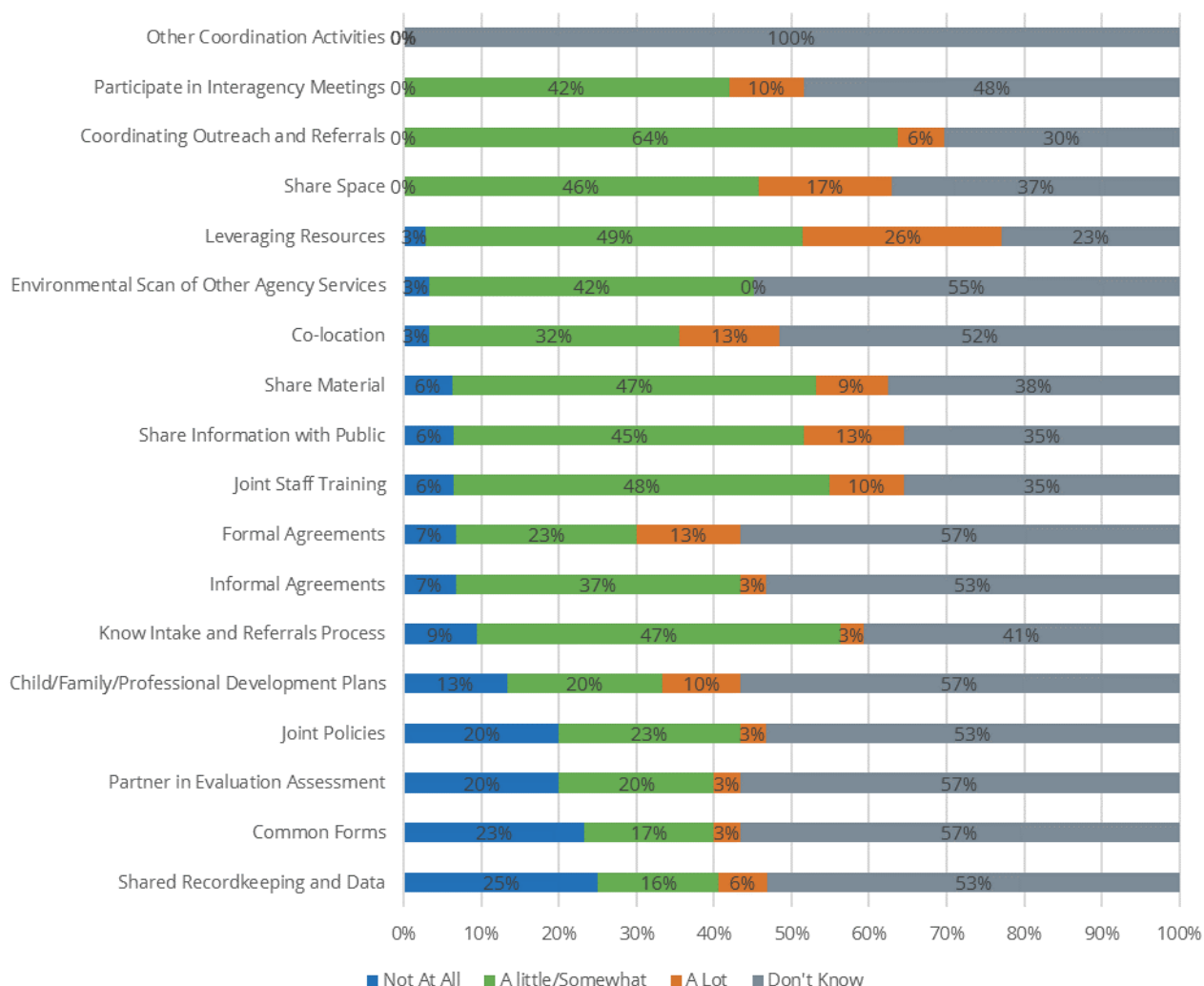


Source: First Things First (2016). [2016 Coordination and Collaboration Survey dataset]. Unpublished data.

Collaborative activities that system partners within the Professional Development area are most likely to be engaged in include leveraging resources/funding across partners and coordinating outreach and referrals across agencies. As

in the other key areas, most of collaborative activities are used with relatively low frequency, if at all (Figure 39). Activities not in active use among many organizations include: shared recordkeeping and data, use of common forms, partnerships in program evaluation and/or assessment and the existence of joint policies. Again, these areas were similar to those noted in the other areas, suggesting that work to enhance these capacities would benefit system partners across all four key sectors.

Figure 39. Frequency of Activities: Professional Development (n=35)



Source: First Things First (2016). [2016 Coordination and Collaboration Survey dataset]. Unpublished data.

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 focused on the sheer volume of agencies and activities happening within Maricopa County. Respondents noted issues with duplication of efforts, fragmentation rather than cohesiveness

across the different regions, the lack of a coordinating entity across the county, and the sense that there was an absence of an overarching, long-term commitment to making collaboration and coordination a priority, limited opportunities for leadership and professional development for owners, directors, and family child care providers, staff turnover in agencies, and the climate of competition among grantees. As one respondent put it, "Maricopa grant funding is ... too competitive and we are not working together as a cohesive group."

Survey participants were then asked to reflect on the role of FTF Regional Partnership Councils (RPC) in supporting early childhood system building and collaboration efforts in the county. Noted contributions of the RPC included funding, in particular seeking philanthropic funding as revenue from the tobacco tax declines. It was also stated that the RPC played a role in forming the West Valley Developmental Screening Collaborative.

Participants were also asked to provide suggestions for how the Regional Partnership Councils (these responses were not available at the regional level) can improve support of early childhood system building and partner collaboration efforts in Maricopa County. The most common suggestion focused on ways of increasing communication and coordination across both the FTF RPCs and agencies across the county. Concerns around duplication of effort, the complexities created when families move into a different region ("Even when strategies are the same, the programs funded may be different with different requirements (i.e. Home Visitation). This interrupts the "system" because it isn't truly a system once families cross into a new council region."), and competition for funding stymieing support for collaboration ("organizations are competing against each other to obtain funding from FTF rather than finding a way to work together to serve families") were raised. Respondents also felt there should be more possibilities to replicate successful strategies and share funding strategies across regions, and it was felt that the FTF RPCs could take a leadership role in orchestrating this coordination and collaboration.

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

- Focus on strategic plans. Specifically, convene strategic planning sessions with local stakeholders to get broader perspectives and invigorated approaches
 - Establish deliberate guidelines for all recipients of FTF funding, i.e. skills and knowledge for ECD professionals; what collaboration will encompass; expectations and avenues to accomplish them
- More listening sessions; more input from families/communities - particularly those of high need
- Greater commitment to serving the African American community
- More interaction with grantees (e.g., site visits, volunteering at events)
- Facilitate networking (e.g., introduce grantees to each other and to church groups/schools/businesses, as appropriate)
 - Promote and encourage participation in the Early Childhood system among business and agencies outside the existing grantee agencies, especially among those organizations that are not traditionally involved in the system
 - Encourage and facilitate partnerships between these organizations and FTF grantees
- More resources, more staff, and more support from state leaders
- Recognize the value in the school districts extending into early learning by creating policies that strengthen the ability of districts to support our youngest students

Current System Coordination Efforts

While the survey results demonstrate that there is still work to be done to improve the early childhood system in Maricopa County, the FTF Regional Councils in Maricopa County have come together to increase and coordinate

resources and supports available to families and providers. The regions throughout Maricopa County fund a variety of countywide initiatives to enhance the early childhood system, including:

- *FindHelpPhoenix*
Maricopa County Department of Public Health created FindHelpPhx.org and its Spanish partner site EncuentraAyudaPhx.org, as an easy-to-use, bilingual, mobile friendly website that empowers residents of Maricopa County to find the help they need for themselves. FindHelpPhx (EncuentraAyudaPhx) lists approximately 2,000 low-cost and free healthcare and social service resources including mental health, housing, parenting, and food/clothing services. With only two “clicks” (“touches” for mobile users), visitors are able to locate a specific resource, displaying an easy-to-read description of the organization, its services, cost, eligibility requirements and directions to the point of service. New resources are added routinely and verified annually for accuracy.
- *Family Resource Network*
Established in 2011, the Family Resource Network is a collaboration of more than 35 Family Resource Centers working together to supply parents and caregivers with referrals to connect them with community resources and provide them with the tools they need to support the learning and healthy development of their young children. The objectives of the Network are as follows: increase awareness and availability of services for families and children; improve service delivery to adequately address the needs of families; build capacity throughout the regions to deliver highly effective and efficient family resource centers services; share expertise and training resources; and foster a learning community across community organizations, health clinics, public entities and other groups. The long-term goal of the Network is that all families in Arizona have access to the resources and information they need to support their child’s health, development, and education.
- *First Teeth First*
First Teeth First is a countywide initiative designed to provide best practice approaches that enhance the oral health status of young children through the prevention of tooth decay, reduction of the prevalence of early childhood tooth decay, and the elimination of the associated risks for pain and infections that can lead to lifelong complications for health and wellbeing. Maricopa County’s Office of Oral Health, in partnership with Dignity Health, administers First Teeth First. Services provided through this program include: oral health screenings, fluoride varnish applications, education and referrals for children 0 through 5 years of age and pregnant women. The program provides services at Women, Infant and Children (WIC) clinics, Immunization clinics, child care centers, preschools and community events. The program also offers professional development and outreach to medical and dental providers to increase awareness and services for young children.
- *Parent Partners Plus*
Southwest Human Development’s Parent Partners Plus program is a coordinated referral system that provides families with a single entry point to access home visitation programs. Parent Partners Plus is also responsible for assessing families’ needs and referring them to the most appropriate program. The coordinated referral system simplifies and streamlines the referral process for families and for home visitation providers. The coordinated referral also provides a feedback loop for referring agencies and assists, as needed, with linking families to ancillary family support services. This single system that processes referrals increases coordination among programs, limits duplication of services, and improves the utilization of available resources. All home visitation providers in Maricopa County, representing 14 organizations, as

well as other social service providers, participate in this system and also work together to coordinate marketing, outreach and recruitment.

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 Northwest Maricopa Region. In addition to providing an overview of the region, this report looks more closely at some of the community-level variation within it.

Assets of the Northwest Maricopa Region

It is clear that the region has substantial strengths. We base this conclusion on the quantitative data reported here. A summary of identified regional assets is included below.

Population Characteristics

About two-thirds (67 %) of young children live in two-parent households.

About 12 percent of residents speak multiple languages proficiently.

Economic Characteristics

Some areas (e.g., Peoria and Surprise City) have median incomes higher than elsewhere in the state.

Lower rates of poverty for both the total population (14%) and young children (25%) in the Northwest Maricopa Region compared to Arizona as a whole (18%, 29%).

Unemployment rates in the region's cities and towns are historically lower than the statewide or county rates (with the exception of the town of Youngtown).

Steadily declining unemployment rates from 2010 to 2015.

Educational Indicators

The 85 percent four-year graduation rate in Northwest Maricopa is better than that of the county (77%) or state (76%).

Drop-out rates in the region (2%) are lower than the county (3%) or state (4%).

Early Learning

There are 78 providers participating in First Things First's Quality First program, 45 with a 3-star rating or higher.

Pre-kindergarten in Arizona Department of Education (ADE) schools in several districts (especially Deer Valley, Dysart, Glendale, and Peoria) serves many children with special-education needs.

The Arizona Early Intervention Program (AzEIP) served nearly twice as many children in 2015 (1,258) as it did in years prior, providing an important benefit to young children at risk for developmental delay.

Child Health

The vast majority of young children in the region (93%) have health insurance (although rates in some communities, e.g., Wickenburg, are much lower).

The majority (86%) of babies are born to mothers who received at least nine prenatal care visits.

Mothers giving birth in the region are more likely to have completed high school (84%) than mothers across the state (80%).

Premature births declined between 2009 (10.5%) and 2014 (9.5%), and most babies are born at a healthy weight.

Breastfeeding rates have been increasing among WIC participants (from 57.1% in 2012 to 68.9% in 2015).

Childhood obesity rates in the Northwest Maricopa Region have consistently been slightly lower than the rate across the state and have been declining (12.1% in 2012 to 10.2% in 2015).

Family Support and Literacy

Ten domestic violence shelters exist in Maricopa County to serve women and families in need.

Communication, Public Information and Awareness

51 early childhood champions have been engaged in the Northwest Maricopa Region, in addition to 146 supporters and 1,536 friends who have been trained in early childhood messaging.

An estimated 74 percent of survey respondents were very or somewhat satisfied with the community information and resources available to them about child health and development.

System Coordination among Early Childhood Programs and Services

A large majority (83%) of partners in the Maricopa County early childhood system felt that the system functioned in a coordinated (i.e., either well or partially coordinate) way.

In the areas of Family Support and Literacy and Early Learning, 94 percent of respondents reported that partners in Maricopa County are engaged in some level of collaborative activities.

Challenges in the Northwest Maricopa Region

Despite these regional assets, there continue to be challenges to fully serving the needs of families with young children throughout the region. It is particularly important to recognize that there is considerable variability in the needs of families across the region. The landscape of available services looks quite different for children growing up in Peoria and Aguila, for example.

Many of these needs have been recognized as ongoing issues by the Northwest Maricopa Regional Partnership Council and are being addressed by current First Things First-supported strategies in the region. These needs include (1) affordable, high quality and accessible child care, (2) an improved educational pipeline, and (3) additional resources for children with special needs. These and others are discussed below.

- The capacity of early care and education slots available compared to the number of young children in the region point to a shortage of affordable and accessible early care and learning opportunities in the region. Families in Maricopa County are paying an estimated 13-17 percent of their income, depending on the child's age, for a child care slot; this exceeds the recommended 10 percent of annual income. Continued regional investment in Quality First Scholarships, Registry and College Scholarships, and Child Care Health Consultation strategies may help address this issue by increasing the number and capacity of high-quality providers.
- Young children within the Northwest Maricopa Region are often progressing into an educational setting that is not performing at an optimal level. Chronic absenteeism and low passing rates on AzMERIT suggest that schools are not currently preparing all students for a successful future and career. Only one district, Deer Valley Unified District, had more than half of third graders pass the Math and English Language Arts

portions of AzMERIT. About 1 in 5 adults aged 25 and older in the Region have a bachelor's or higher degree, and in multiple sub-regions, the majority of adults have no post-secondary education (e.g., Aguila, Wittman, Youngtown). The funding of strategies targeting early childhood education and kindergarten transition helps to prepare students to succeed in school. Strategies focusing on improving the early learning landscape, including parenting education and home visitation, may help support parents as first teachers, regardless of their own education level.

- Quantitative data on early intervention referrals and numbers served point to the need for additional resources for children with developmental, behavioral, and physical health care needs. Early intervention can not only improve the developmental trajectory of individual children, but it can also reduce burdens on school districts by decreasing the need for special education services once children reach school age. Northwest Maricopa Regional Partnership Council funds Mental Health Consultation, Family Support Children with Special Needs, and Care Coordination as strategies.

Population Characteristics

A relatively low percentage of children in the Aguila area live with two parents (34%) compared to the Region (62%) or state (58%).

A high percentage of children live with relatives (17%) in the Aguila area; these families may have unique needs for support.

A high percentage of the population (ages 5 and up) does not speak English very well in the Aguila area (47%), compared to the Region (7%) or state (9%), indicating a need for service providers with the ability to serve clients in languages other than English.

Economic Characteristics

Over half of families in the region with children younger than 5 live below 185 percent of the Federal Poverty Level (FPL) in Aguila, El Mirage, Glendale, and Wickenburg.

Sharply declining TANF participation may reflect policy changes around eligibility rather than a decreased need for supports.

A quarter of children are food insecure in the county, and over two-thirds of children are likely eligible for nutrition assistance, but rates of enrollment in nutrition assistance programs (e.g., WIC, school meal programs) are not that high for young children, suggesting unmet need.

Educational Indicators

Fewer than half of 3rd grade students are meeting the expected standards for math (42%) and English language arts (ELA; 43%); in Aguila, 0 percent of children passed either the math or ELA AzMERIT test.

The 16 charter and alternative schools in the region appear to have the greatest problems with student drop-out (7%) and graduation (49%).

Early Learning

Only about 1 in 3 children ages 3 and 4 (33%) is enrolled in school.

There are many more children ages 0 to 5 than there are available child care slots; in Morristown, there are nearly 13 children 0-5 for each slot, in Waddell, about 25 children per slot, and in Youngtown, there are fewer than 10 known childcare slots in the whole community.

Child care in centers and group homes tends to be more costly in Maricopa County than elsewhere.

The cost of childcare for one child (13-17% of the median income) surpasses the Department of Health and Human Services' recommended threshold of 10 percent of a family's income.

About 4.7 percent of children in the region received early intervention services whereas research suggests that 13 percent of children likely have special needs. Thus, a large number of children in the region may have special needs but not receive services.

Child Health

Lack of health insurance is a problem for both child (Wickenburg, 38% and Wittman, 15%) and adult (Aguila, 52%) populations, making financial security and access to health care uncertain.

Pre-pregnancy obesity rates, which can be associated with problems during pregnancy and birth, have been rising among those enrolled in WIC. Over half (55%) of women using WIC had overweight or obesity prior to their pregnancies.

Breastfeeding rates for WIC mothers (68.9%) in the region lag behind the statewide rate (71.2%) and the Healthy People 2020 target (81.9%).

Family Support and Literacy

About 6 percent of young children in poverty in the Northwest Maricopa Region (compared to about 9.5 percent of young children in poverty receiving services statewide) received behavioral health services in 2015. It is estimated that about 13 percent of low-income children aged 6 to 11 years old covered by Medicaid have mental health problems, suggesting that there may be an unmet need for services.

System Coordination among Early Childhood Programs and Services

More than three out of every four (78%, n=36) partners in the early childhood system did not feel that the system was well-coordinated.

Given the sheer volume of agencies and activities happening within Maricopa County, there are concerns about duplication of efforts, fragmentation rather than cohesiveness across the different regions, and the climate of competition among grantees.

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 Northwest Maricopa Regional Partnership Council and staff, local providers, and other community stakeholders in the region. Although there are many challenges for families, leveraging unique opportunities for community collaboration, resource-sharing, and collective impact through both funded and unfunded strategies can help support the health, welfare, and development of the diverse families and young children of the Northwest Maricopa Region.

Regional Strategies

Table 73. Northwest Maricopa Regional Partnership Council Planned Strategies for Fiscal Year 2017

Strategy	Strategy description
Registry and College Scholarships	The intent of this evidence informed Professional Development strategy is to provide access to higher education for the early childhood workforce working directly with or on behalf of young children birth to age five. The expected results of supporting continuing education and degree completion is elevating and professionalizing the field, recruiting and retaining a quality early childhood workforce and supporting and increasing the quality of services provided to young children.
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.
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.
Mental Health Consultation	<p>The intent of this evidence informed strategy is to build the skills and capacity of early childhood education professionals to interact with children and their families. The expected result is the prevention, early identification, and reduction of challenging classroom behaviors and improved teacher skills. Further expected results are a decrease in negative outcomes for children, such as expulsion from preschool programs.</p> <p>Consultants are mental health professionals with expertise in children's social and emotional development working with early care and education providers. They engage in activities that promote enhanced early childhood practices and problem-solving through collaborative relationships with staff that interact with families and children. One primary focus is working within licensed child care centers or homes; however, services can also be provided to home visitation programs and contribute to professional development for family friend and neighbor (FFN) programs. Whether these expanded services are provided depends on strategy decisions made by a First Things First (FTF) Regional Partnership Council.</p>
Care Coordination/Medical Home	The intent of the evidence-based Care Coordination/Medical Home strategy is to embed a care coordinator into a clinical practice to assist at-risk families with young children to navigate the complex health care and social service systems. The expected result of effective care coordination is that children receive well child visits, the services that they need, and that they use services efficiently to avoid duplication and unnecessary stress on their families. An important component of care coordination is its association with a medical clinic that is designated as a "medical home" for the child and their family.
Oral Health	The intent of this evidence-based strategy is to provide best practice approaches that enhance the oral health status of children birth through age 5. The expected results are prevention of tooth decay and reduction in the prevalence of early childhood tooth decay and the associated risks for pain and infections that can lead to lifelong complications to health and wellbeing. The approaches for this strategy include: oral health screening for children and expectant mothers with referrals to oral health providers for follow up care as needed; fluoride varnishes for children; oral health education for families and other caregivers; and, outreach to families, other caregivers including early learning and care providers, and oral health and medical professionals.
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 Resource Center	The intent of this promising practice strategy is to provide a community hub for connecting families with children birth to age 5 to the information, resources, and services they need to support their child's optimal health and development. The expected results are improved parenting skills and social supports for families; increased knowledge of child development; and support for their child's school readiness.
Family Support--Children with Special Needs	The intent of this evidence informed strategy is to promote healthy physical, social and emotional developmental support to children and their families. The expected result is that families will gain knowledge about developmental concerns they may have and the child's development will progress as a result of the supportive interactions. The target population for this strategy is children with mild to moderate developmental concerns, and their families, who do not qualify for services through the Arizona Early Intervention Program (AzEIP) for birth to age 3, or preschool special education services for ages 3 to 5 provided through public school districts. These programs are also known as Individuals with Disabilities Education Act (IDEA) Part C and Part B programs respectively.

Parenting Education	The intent of this evidence based strategy is to offer learning activities designed to increase the knowledge and skills and promote positive parenting practices for parents and caregivers that result in enhanced child health and development when utilized by parents and caregivers. The expected results of effective parenting education programs are increased parental knowledge of child development and parenting skills, improved parent and child interactions, and more effective parental monitoring and guidance, decreased rates of child maltreatment, and better physical, cognitive and emotional development in children (Lundahl, Nimer & Parsons, 2012).
Quality First	Quality First – a signature program of First Things First – partners with regulated early childhood providers to make quality improvements that research proves help children birth to 5 thrive, such as education for teachers to expand their expertise in working with young children. It also supports parents with information about what to look for in quality early childhood programs that goes beyond health and safety to include a nurturing environment that supports their child’s learning. Quality First includes multiple components to support early care and education program quality improvement, including: valid and reliable program assessment, on-site technical assistance, and financial incentives. The Quality First Academy is included to support the assessors and technical assistance providers in their work with program staff.

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) are included.

U.S. Census and American Community Survey Data

The U.S. Census¹⁸⁴ 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 Northwest 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, which is more precise.)

The American Community Survey¹⁸⁵ 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 zip code tabulation area (ZCTA). There are 406 ZCTAs in the state of Arizona, with an average population of about 15,750 each. The ACS data for the Northwest Maricopa Region were calculated by aggregating over the 31 ZCTAs which are wholly (19) or partially (12) contained in the region. The data from partial ZCTAs were apportioned according to the percentage of the 2010 Census population in that tract living inside the Northwest Maricopa Region. The data included in this report are most recent and most reliable ACS data available; they have been averaged over the past five years, from surveys conducted between 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. For sub-region data, estimates based on a sample of fewer than 50 were excluded from the report.

Data Suppression

Data which are obtained from state agencies are subject to the First Things First Data Dissemination and Suppression Guidelines to protect the confidentiality of program participants. These guidelines preclude our 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 guidelines set by that agency. The Arizona Department of Health Services, for example, does not report counts less than six. Throughout this report, information which is not available because of suppression guidelines will be indicated by entries of "<10" or "<25" for counts or "DS" for percentages in the data tables.

For some data, an exact number was not available because it was the sum of several numbers provided by a state agency, and some numbers were suppressed in accordance with agency guidelines. In these cases, a range of possible numbers is provided, where the true number lies within that range. For example, for data from the sum of a

suppressed number of children ages 0-12 months, 13 children ages 13-24 months, and 12 children ages 25-35 months, the entry in the table would read “26 to 34.” This is because the suppressed number of children ages 0-12 months is between one and nine, so the possible range of values is the sum of the two known numbers plus one to the sum of the two known numbers plus nine. Ranges that include numbers below the suppression threshold of less than ten or twenty-five may still be included if the upper limit of the range is above ten or twenty-five. Since a range is provided rather than an exact number, the confidentiality of program participants is preserved.

Reporting Data over Time

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

$$\text{Percent change} = [(\text{Number in year 2}) - (\text{Number in year 1})] \div (\text{Number in year 1})$$

School District Data

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

Child Care Capacity Calculations

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

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

of sub-regional shapefiles, regional shapefiles, and county shapefiles. These centers were then summed by region, sub-region, county, and state.

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 Northwest Regional Partnership Council has identified the following topics as priority areas: (a) children who have exited preschool special education into regular kindergarten, (b) children in special education, and (c) length of job tenure for child-care professionals.

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 Northwest Region Data Interpretation Session was held in Peoria on September 16, 2016, and included invited community members as well as the members of the Regional Partnership Council and the Regional Director. Feedback from participating session members are included as key informant citations within the report, as appropriate.

Additional Methodology^{xxxiii}

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.^{xxxiv} 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.^{xxxv} A total of 3,630 kindergarten children in Arizona received a dental screening. In the five Maricopa regions, 292 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.^{xxxvi} Three counties (Apache, Greenlee, and La Paz) had fewer than five schools in the sampling frame. For these counties, all schools in the sampling frame were asked to participate. If a selected school did not have kindergarten or third grade, the appropriate feeder school was added to the sample. A systematic sampling scheme was used to select 99 schools. Of these, five did not have kindergarten or third grade so five feeder schools were added to the sample resulting in 104 schools representing 99 sampling intervals, of which 84 agreed to participate.

Survey Limitations

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

The parent/caregiver questionnaire was optional and was returned for only 44% (N=1,583) of the children screened. Because of this, information obtained from the questionnaire may not be representative of the state. In addition, the

^{xxxiii} This section was supplied by First Things First.

^{xxxiv} Using another funding source, ADHS expanded data collection to include third-grade children but that information is not included in this report.

^{xxxv} Schools serving children with special needs and schools located in tribal communities were excluded.

^{xxxvi} 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

information was self-reported and may be affected by both recall and social desirability bias. Because of small sample sizes, caution should be taken when interpreting results at the regional and county level.

Family Caregiver Survey 2012 Survey Methodology

The Family and Community Survey was designed to measure many critical areas of parent knowledge, skills, and behaviors related to their young children. The survey contained over sixty questions, some of which were drawn from the national survey, *What Grown-Ups Understand about Child Development*^{xxxvii}. 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 Northwest Maricopa Region, 197 respondents participated in the survey, the majority (81%) being the child's parent.

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

Coordination and Collaboration Survey Methods

System partners in 18 First Things First county-based regions were asked by First Things First to participate in the Coordination and Collaboration Survey in an effort to learn more about how system partners view their role in the region's early childhood system and to what extent they collaborate and coordinate with other system partners. Ten regions elected to conduct region-specific surveys including, Cochise, Coconino, Gila, Graham/Greenlee, La Paz Mohave, Navajo Apache, Pinal, Santa Cruz, Yavapai, and Yuma. Additionally, the six FTF regions in Maricopa County (i.e., Phoenix North, Phoenix South, East Maricopa, Northwest Maricopa, Southeast Maricopa, and Southwest Maricopa), and the two FTF regions in Pima County (Pima North and Pima South), elected to conduct combined county-wide surveys. Partners located on tribal lands will be surveyed at a later date after tribal approvals are requested and received.

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

xxxvii 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

of potential respondents, and the pool of system partners who were invited to participate is not necessarily comparable across different regions.

Possible stakeholder areas:

- 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.

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