FIRST THINGS FIRST

Southwest Maricopa

2018 NEEDS AND ASSETS REPORT

SOUTHWEST 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 Southwest Maricopa Regional Partnership Council

LETTER FROM THE CHAIR

September 11, 2017

Message from the Chair:

Since the inception of First Things First, the Southwest 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 Southwest 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 Southwest 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 Southwest 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,

Kimberly Flack, Chair

SOUTHWEST MARICOPA REGIONAL PARTNERSHIP COUNCIL

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INTRODUCTORY SUMMARY AND ACKNOWLEDGMENTS

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

This Needs and Assets Report for the Southwest 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 Southwest 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 Southwest 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 Southwest 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 Southwest Maricopa Region.

Population Characteristics

According to the U.S. Census, 28,512 children under the age of six resided in the Southwest Maricopa Region as of April 1, 2010, representing approximately 10 percent of the region's total population. This ranged from nine percent of young children living in the Arlington sub-region, to a high of 13 percent living in the Tolleson sub-region. Fifty-two percent of young children in the region are identified as Hispanic or Latino, and most of the rest (34%) are non-Hispanic white. Seven percent are African American, three percent are Asian or Pacific Islander, and two percent are American Indian. This is a higher percentage of Hispanic and Latino children than reside in Maricopa County as a whole (46%). 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 Southwest Maricopa Region, 24 percent of households have at least one child under 6 years old. The largest concentration of these families are in Tolleson, where more than a third (35%) of households have a young child. The Arlington (16%) and Goodyear sub-regions (19%) have relatively fewer households with young children. According to the American Community Survey (ACS), 33 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 13 percent in the region, the same as the county. Fifty-five 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 15 percent of these children who live with their grandparents do not have a parent present in the household.

In the region, 67 percent of residents age 5 and older speak English at home with Spanish (28%) being the second most common home language. The proportion of residents age 5 and older who speak Spanish at home is by highest in Gila Bend-Theba-Sentinel (52%) and Tolleson (53%). In these two sub-regions, there are also sizable fractions of the population who report that they do not speak English very well (Gila Bend-Theba-Sentinel 24% and Tolleson 17%). The percent of kindergarten through third grade students in the region who are English Language Learners (8%) 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 19 percent of the population aged birth to 5 lives in poverty. While poverty is relatively rare in some areas—such as

Tonopah-Wintersburg (with only 3% of young children in poverty)—nearly half of the children under six in Arlington (46%) and Gila Bend-Theba-Sentinel (40%) live in poverty. Forty-one 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 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 Buckeye (50%), Gila Bend-Theba-Sentinel (77%), and Tonopah-Wintersburg (75%). 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 (-31%) 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. More than half (59%) 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 nearly 12,000 children annually in the Southwest Maricopa Region. WIC enrollment has also declined slightly from 2012 (61% of children under five) to 2015 (58%). About 60 percent of all public- and charter-school students in the region have been eligible for free or reduced-price lunch since 2012, comparable to the state.

Of the estimated 86,731 occupied housing units in the region, two-thirds (66%) 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: 32 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, 39 percent of Southwest Maricopa Region students attained a proficient or highly proficient score on the third grade math assessment, which was similar to passing rate as across Arizona as a whole (41%). Performance on the English Language Arts (ELA) test was similar, with 38 percent of students in the region demonstrating proficiency, compared to 40 percent across the state.

Rates of chronic absences among children in first through third grade in the region were similar in 2014 (34%) and 2015 (37%) and to the state as a whole (34% and 36%, respectively). The high school drop-out rate in region decreased from three to two percent between 2012 and 2015. Four-year graduation rates in the region (2014: 81%) are consistently higher than those in Arizona as a whole (2014: 76%). Adults aged 25 and older in the region are less likely to have a bachelor's degree or higher (20%) compared to adults across Arizona (27%). One community, Gila Bend-Theba-Sentinel, had much higher rates of adults who did not complete high school (46%), as compared to the region (17%), county (13%) and state (14%).

Early Learning

According to the most recent data available in 2015 and 2016, there were 110 registered child care and early education providers in the Southwest Maricopa Region, approved to serve approximately 6,470 children. These providers are located primarily within the Avondale (n=28), Buckeye (n=27), and Goodyear (n=26) communities; and only one provider is located within the Arlington community. In the

region, there are approximately 15,890 children with all parents in the labor force but only 6,470 child care and early education slots available.

Of the 110 known child care providers in the Southwest Maricopa Region, about one fifth (n=24) are participating in the Quality First program and half (n=12) 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 1,318 in 2014 to 1,865 in 2015.

In the Southwest 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, 430 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 220 children were referred in 2015. Similar numbers (275) of children ages 0-5 were served by DDD during that time, with a slightly higher number of children in the 3-5 year-old group than the 0-2 year-old group. 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 395 children enrolled in ADE special education preschools, 48 percent have a developmental disability, 27 percent have a speech or language impairment, and all others have a severe delay (26%). About 1,600 students in kindergarten through third grade are enrolled in special education in the region, representing nine percent of all students, the same proportion as in Maricopa County schools overall (9%).

Child Health

Nine percent of young children in the Southwest Maricopa Region are estimated to be uninsured, along with 17 percent of the total population in the region. No young children in the Tonopah-Wintersburg communities lacked health insurance, whereas nearly a quarter (24%) of children in the Gila Bend-Theba-Sentinel communities had no health insurance.

In 2014, Southwest Maricopa Region residents gave birth to 4,493 babies, which was eight percent of all babies born in Maricopa County and five percent of all births in the state. Of the nearly 4,500 mothers who gave birth in the region in 2014, 39 percent were non-Hispanic White, 49 percent were Hispanic or Latina, seven percent were Black or African American, three percent were Asian or Pacific Islander, and one percent were American Indian or Alaska Native. New mothers had roughly similar levels of educational attainment to mothers across Maricopa County and statewide, although fewer had completed a bachelor's degree or more. About four in 10 mothers (41%) in the region were not married (43% Maricopa County, 45% statewide) and seven percent were in their teens (7% county, 8% statewide). A slightly lower proportion of mothers in the region reported smoking (3.0%) than across the county (3.7%) or state (4.6%), Fifty-seven percent of women participating in WIC were overweight or obese before becoming pregnant, compared to 58 percent statewide. In 2014, 68 percent of pregnant women in the region (and 66% in the state) obtained prenatal care during the first trimester.

Nearly all mothers received at least some form of prenatal care; only 4.6 percent of babies in the region were born to mothers who had had fewer than five prenatal care visits.

In the region in 2015, two Arizona Department of Health Services designated Primary Care Areas (PCAs) (Estrella Village-Tolleson Primary Care Area, 6.3%; Goodyear-Litchfield Park Primary Care Area, 6.3%) had lower rates of low birthweight babies than the county (7.1%) and the state (7.2%), and two PCAs had slightly higher rates (Avondale Primary Care Area, 7.4%; Buckeye Primary Care Area, 7.5%). The region overall (7.0%) was approximately equal to the state. The percent of premature births in the region has declined since 2009, to be approximately equal to that in the state as of 2014, with 8.9 percent in the region, and 9.0 percent across the state falling into this category. Infants participating in WIC in the region being breastfed (2015: 70.4%) lag behind the Healthy People 2020 goal of 81.9 percent of babies ever being breastfed but nears 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 Southwest Maricopa Region had completed each of the three major (DTAP, polio, and MMR) vaccine series. Rates of religious/personal exemptions for vaccinations among children in child care (2.5%) and kindergarten (3.9%) 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 Southwest Maricopa Region in 2015, 9.5 percent were obese and an additional 13 percent were overweight. Promisingly, the proportion of children with obesity decreased between 2012 and 2015, dropping from 13.1 percent in 2012 to 9.5 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, 622 pregnant or parenting women received publically funded behavioral health services in the Southwest Maricopa Region. This represents a decrease of 32 percent from the 921 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 region also decreased from 2012 (n=456) to 2015 (n=368), representing a 19 percent decrease.

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 Southwest Maricopa Region, these efforts have resulted in the recruitment of 1,247 Friends, 256 Supporters and 42 Champions during the period of FY2014 through 2016. In addition

to these strategic communications efforts, First Things First has also led a concerted effort of policymaker awareness-building throughout the state. Furthermore, the Arizona Early Childhood Alliance represents the united voice of the early childhood community in advocating for early childhood programs and services. Finally, FTF recently launched enhanced online information for parents of young children, including the more intentional and strategic placement of early childhood content and resources in the digital platforms that today's parents frequent.

System Coordination among Early Childhood Programs and Services

A majority (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, respectively. The most commonly cited barrier in moving the early childhood system in the Southwest Maricopa Region forward focused on the sheer volume of agencies and activities happening within Maricopa County.

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.

The Southwest Maricopa First Things First Region is located entirely inside Maricopa County, in the southern part of the West Valley. For this report, the region has been divided into eight sub-regions.

The **Arlington** sub-region is the 85322 zip code area. This sub-region includes the unincorporated place of Arlington, in the central part of the region. It is the least populated of the eight sub-regions.

The **Avondale** sub-region includes the 85323 and 85392 zip code areas. This sub-region contains almost all of the city of Avondale plus some nearby unincorporated areas.

The **Buckeye** sub-region is primarily defined as zip code areas 85326 and 85343, along with a small part of zip code 85361 and the majority of 85396. The entire city of Buckeye is in this sub-region. (The larger part of 85361 and a small part of 85396 are assigned to the Southwest Maricopa Region.)

Gila Bend-Theba-Sentinel includes the majority of zip code 85337 and the part of 85333 which lies in Maricopa County. (The Yuma County portion of 85333 is assigned to the Yuma Region.) The town of Gila Bend lies in this sub-region. The Tohono O'odham Reservation includes some lands in zip code 85337 near the town of Gila Bend; these lands are assigned to the Tohono O'odham First Things First Region.

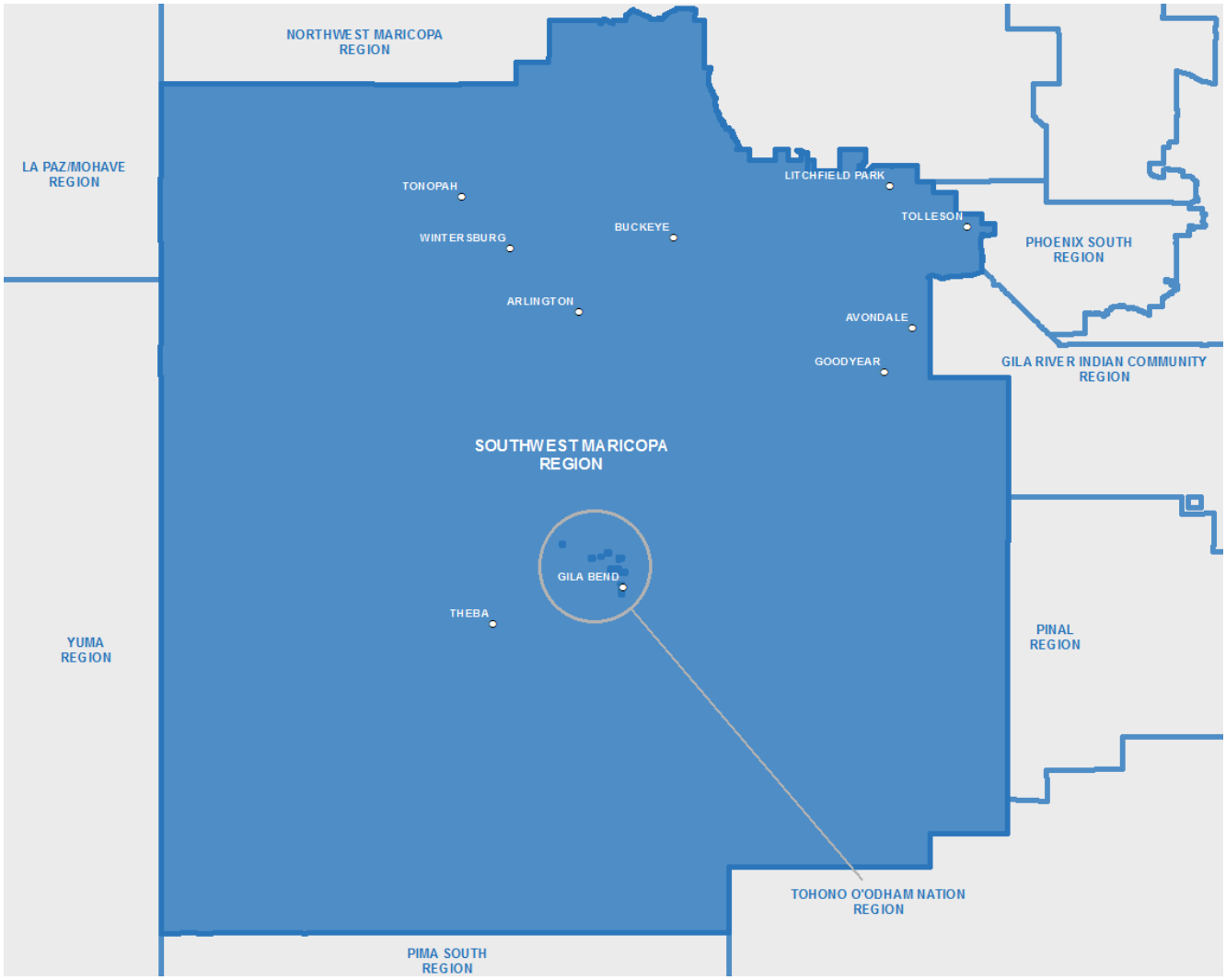
Most of the city of Goodyear lies in the **Goodyear** sub-region, which includes zip code areas 85338 and 85395. The Maricopa County part of zip code 85319, which is primarily the community of Mobile, is also included in this sub-region.

The **Litchfield Park** sub-region is primarily the 85340 zip code area, plus a small part of the 85355 zip code area. This sub-region includes almost all of the city of Litchfield Park, and small portions of the cities of Avondale, Glendale, and Goodyear. (The larger part of the 85355 is assigned to the Southwest Maricopa Region.)

The **Tolleson** sub-region is the 85353 zip code area, plus a small part of the 85339 area. This sub-region includes the city of Tolleson plus a neighboring part of the city of Phoenix (south of Buckeye Road, between 75th and 107th Avenues) and a small part of the city of Avondale.

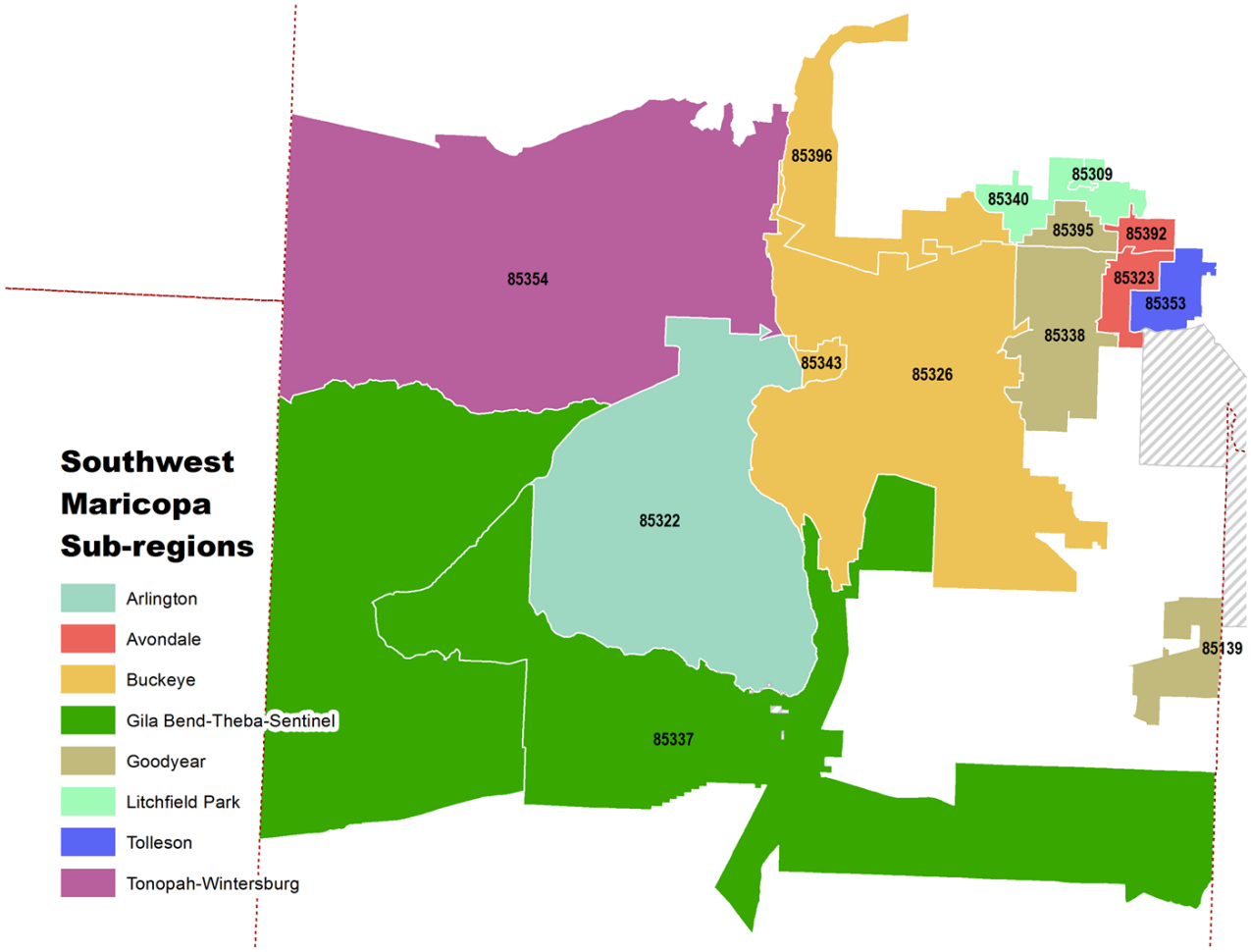
Finally, the **Tonopah-Wintersburg** sub-region is the 85354 zip code area. It includes those two unincorporated places, Harquahala Valley, and the surrounding countryside.

Figure 1. The Southwest Maricopa First Things First Region



Source: First Things First (2016).

Figure 2. The Eight Sub-Regions of the Southwest Maricopa Region



Source: U.S Census Bureau (2016). 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, 28,512 children under the age of six resided in the Southwest Maricopa Region (see Table 1) as of April 1, 2010. Overall, the region population was 273,194 in 2010 (see Table 3), meaning that 10 percent of residents are young children. This ranged from 9 percent of young children living in the Arlington sub-region, to a high of 13 percent living in the Tolleson sub-region.

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 Southwest Maricopa Region. The total number of young children in the city of Buckeye, for example, increased from 730 in 2000 to 5,565 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).

Fifty-two percent of young children in the Southwest Maricopa Region are identified as Hispanic or Latino, and most of the rest (34%) are non-Hispanic white. Seven percent are African American, three percent are Asian or Pacific Islander, and two percent are American Indian. This is a higher 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 the Gila Bend-Theba-Sentinel sub-region the majority (79%) of young children are Latino; in the Buckeye (48%), Goodyear (37%), and Litchfield Park (33%) sub-regions, Latino children are in the minority. A smaller proportion of adults (37% 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 Southwest Maricopa Region.[12]

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[i] *We cannot calculate the population of the Southwest 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
Southwest Maricopa Region	28,512	4,462	4,629	4,814	4,890	4,946	4,771
Arlington	54	8	9	9	11	7	10
Avondale	8,317	1,324	1,444	1,404	1,358	1,418	1,369
Buckeye	6,716	1,077	1,025	1,140	1,170	1,171	1,133
Gila Bend-Theba-Sentinel	270	50	62	45	43	38	32
Goodyear	5,922	875	978	982	1,020	1,055	1,012
Litchfield Park	2,468	347	340	425	444	471	441
Tolleson	4,188	684	679	710	736	694	685
Tonopah-Wintersburg	577	97	92	99	108	92	89
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
Southwest Maricopa Region	N/A	28,512	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
Southwest Maricopa Region	273,194	28,512	10%
Arlington	752	54	7%
Avondale	74,817	8,317	11%
Buckeye	64,084	6,716	10%
Gila Bend-Theba-Sentinel	2,482	270	11%
Goodyear	67,161	5,922	9%
Litchfield Park	26,214	2,468	9%
Tolleson	31,039	4,188	13%
Tonopah-Wintersburg	6,645	577	9%
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
Southwest 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
Southwest 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)
Southwest Maricopa Region	188,494	37%	51%	1%	7%	3%
Arlington	530	28%	68%	0%	2%	0%
Avondale	50,498	46%	39%	1%	8%	4%
Buckeye	44,558	34%	56%	1%	6%	2%
Gila Bend-Theba-Sentinel	1,721	63%	31%	3%	2%	1%
Goodyear	49,008	24%	63%	1%	6%	4%
Litchfield Park	18,048	21%	65%	1%	6%	5%
Tolleson	19,525	64%	22%	1%	8%	3%
Tonopah-Wintersburg	4,606	29%	67%	1%	1%	0%
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 may sum to less than 100% because persons who report two or more race categories are not included here.

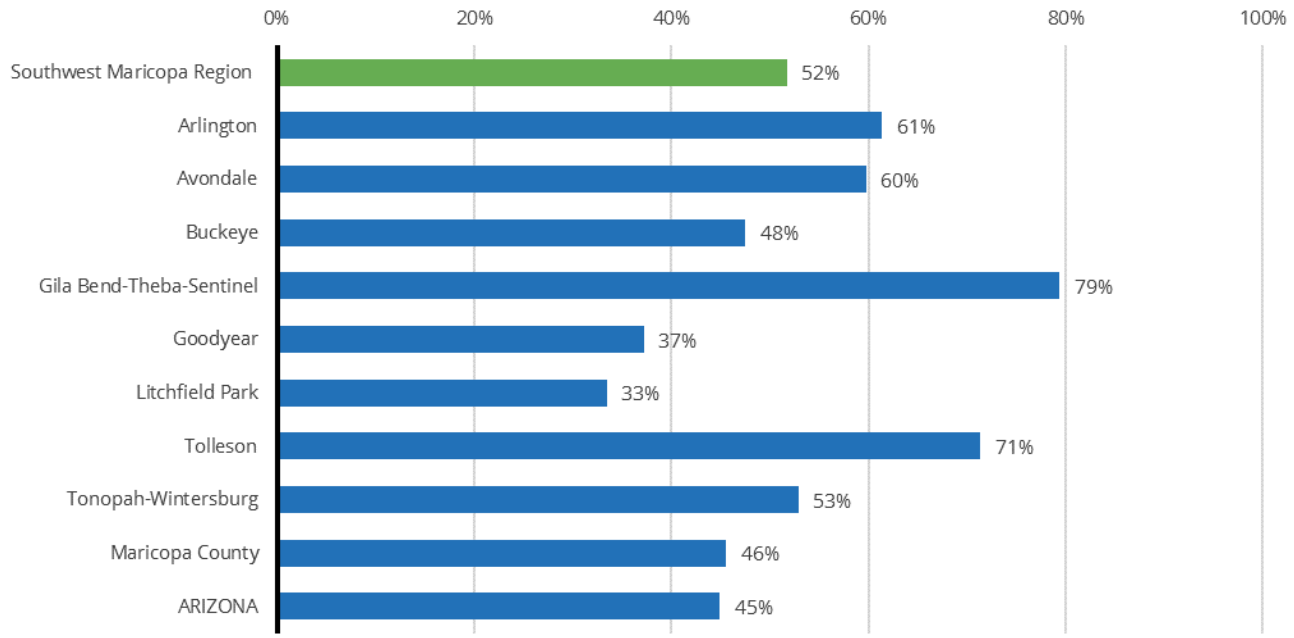
Table 7. Race and Ethnicity of the Population of Children (Ages 0 to 4) in the 2010 Census

	Population of children (ages 0-4)	Hispanic or Latino	White alone (not Hispanic or Latino)	American Indian	African-American	Asian or Pacific Islander
Southwest Maricopa Region	**23,741**	**52%**	**34%**	**2%**	**7%**	**3%**
Arlington	44	61%	30%	0%	5%	0%
Avondale	6,948	60%	24%	2%	9%	3%
Buckeye	5,583	48%	42%	1%	5%	1%
Gila Bend-Theba-Sentinel	238	79%	16%	7%	0%	0%
Goodyear	4,910	37%	47%	1%	6%	5%
Litchfield Park	2,027	33%	49%	1%	7%	5%
Tolleson	3,503	71%	14%	2%	11%	3%
Tonopah-Wintersburg	488	53%	43%	2%	0%	1%
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 may sum to more than 100% because persons 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 Southwest Maricopa Region, 24 percent of households have at least one child under 6 years old (Table 8). The largest concentration of these families are in Tolleson, where more than a third (35%) of households have a young child. The Arlington (16%) and Goodyear sub-regions (19%) have relatively fewer households with young children.

According to the American Community Survey, an estimated 33 percent of children in the Southwest Maricopa Region live with a single parent, which is slightly lower than the proportion statewide (38%) (Figure 4). More than half (55%) of the young children in Tonopah-Wintersburg live with a single parent. About three-quarters of the children in the Goodyear and Litchfield Park sub-regions 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 2 percent of children ages 0 to 5 in the Southwest Maricopa Region live with relatives other than their parents, and an additional 2 percent live with non-related persons.

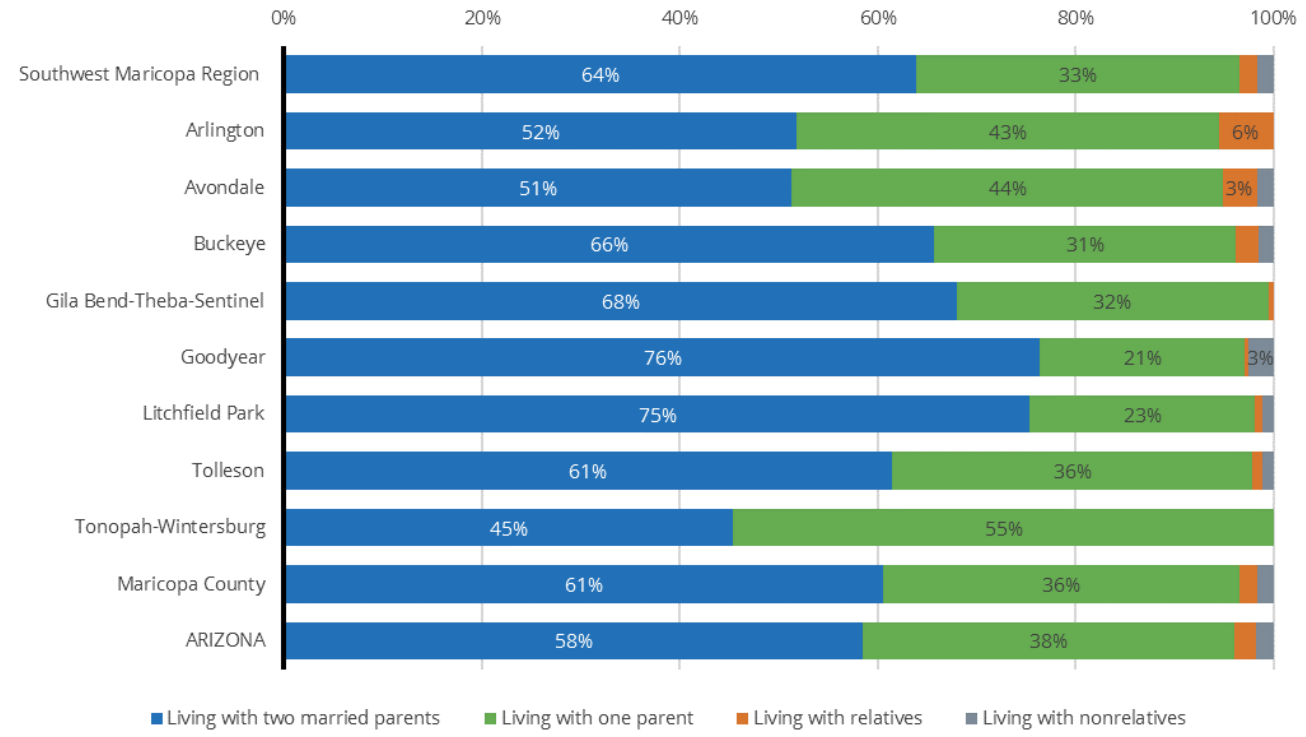
The proportion of young children (ages 0-5) living in a grandparent's household is 13 percent in the region and 12 percent in the entire county (Figure 5). It is important to note that these households may

be multigenerational–the grandparent is considered the head-of-house, but the child's parent may also live there. Table 9 provides more information about the estimated 6,773 children ages 0 to 17 living with grandparents in the Southwest Maricopa Region.[iv] For 55 percent of these children, the grandparent is responsible for the child; included in this group are the 15 percent of children for whom the grandparent is responsible **and** the child's parent is not present in the household.

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 (26%) 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 Gila Bend-Theba-Sentinel (52%) and Tolleson (37%).

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

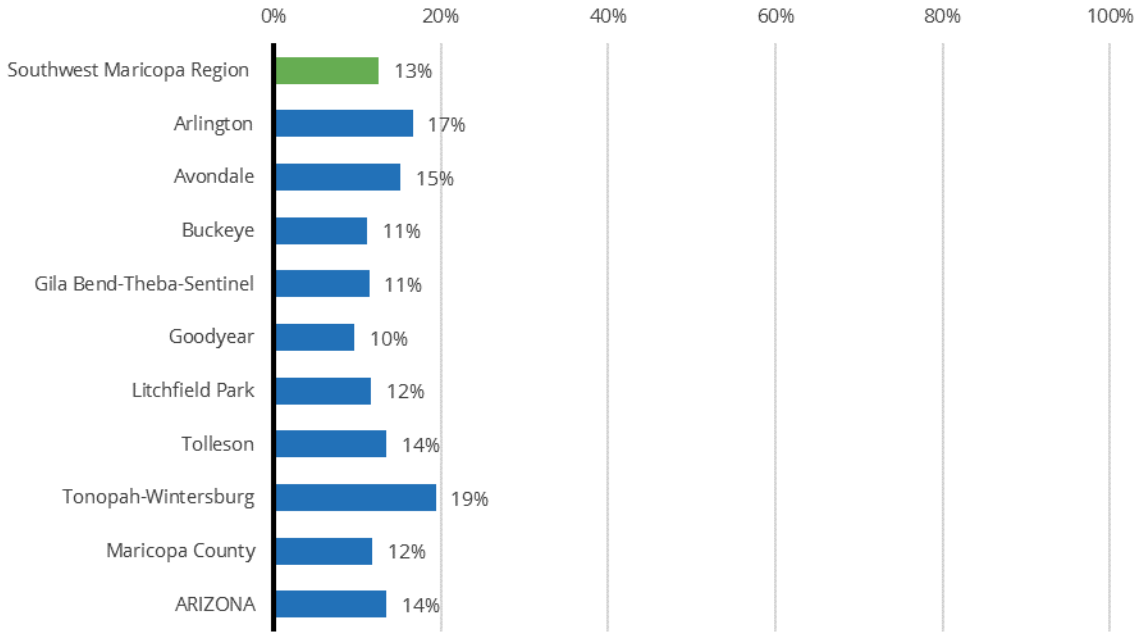
iv Please note that Figure 5 and Table are based on different data sources–and refer to different age groups–so they are not directly comparable.

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
Southwest Maricopa Region	**83,781**	**20,142**	**24%**	**70%**	**11%**	**19%**
Arlington	253	41	16%	73%	15%	12%
Avondale	22,997	5,862	25%	64%	12%	24%
Buckeye	18,497	4,661	25%	74%	10%	15%
Gila Bend-Theba-Sentinel	827	184	22%	77%	9%	14%
Goodyear	22,087	4,278	19%	77%	9%	15%
Litchfield Park	8,468	1,779	21%	75%	10%	15%
Tolleson	8,492	2,931	35%	61%	14%	25%
Tonopah-Wintersburg	2,160	406	19%	74%	12%	14%
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 5. Children (Ages 0 to 5) Living in a Grandparent's Household in the 2010 Census



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

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

	Number of children (ages 0-17) living in a grandparent's household	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)
Southwest Maricopa Region	**6,773**	**55%**	**15%**
Arlington	3	N/A	N/A
Avondale	2,654	59%	10%
Buckeye	1,947	52%	24%
Gila Bend-Theba-Sentinel	81	15%	10%
Goodyear	698	58%	25%
Litchfield Park	346	59%	18%
Tolleson	942	50%	1%
Tonopah-Wintersburg	102	46%	0%
Maricopa County	74,038	50%	13%
ARIZONA	140,038	53%	14%

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

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

	Children (ages 0-5) living with one or two parents	Children (ages 0-5) living with one or two foreign-born parents
Southwest Maricopa Region	26,939	26%
Arlington	51	10%
Avondale	7,208	24%
Buckeye	6,864	27%
Gila Bend-Theba-Sentinel	314	52%
Goodyear	5,547	20%
Litchfield Park	2,328	20%
Tolleson	4,326	37%
Tonopah-Wintersburg	302	25%
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 Southwest Maricopa Region, 67 percent of residents age 5 and older speak English at home with Spanish (28%) being the second most common home language (Table 11). Another 4 percent of the region's residents speak a language other than English or Spanish at home. In Litchfield Park (81%), home languages other than English are relatively rare. The proportion of residents age 5 and older who speak Spanish at home is by highest in Gila Bend-Theba-Sentinel (52%) and Tolleson (53%). In these two sub-regions, also, there are sizable fractions of the population who report that they do not speak English very well (Gila Bend-Theba-Sentinel 24% and Tolleson 17%) (Table 12).

A household is considered "limited-English-speaking" if there is no adult (14 or older) who speaks English well. Six percent of households in the Southwest Maricopa Region are classified as limited-English-speaking, which is about equal to the proportion of households with that designation statewide (5%) (Table 13). Gila Bend-Theba-Sentinel (19%) has the greatest proportion of such households. Throughout the region, most of the limited-English-speaking households use Spanish at home.

Similar trends are seen in the proportion of English Language Learners (ELL) in schools in the region. The percent of kindergarten through third grade students in the region who are English Language Learners in the Southwest Maricopa region (8%) is less than the county (11%) or statewide (10%) rates.

In certain districts, however, the proportion of English Language Learners is considerably higher; 30 percent of students in the Gila Bend Unified District are English Language Learners. (See Figure 10 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
Southwest Maricopa Region	**263,928**	**67%**	**28%**	**0%**	**4%**
Arlington	563	72%	28%	0%	0%
Avondale	70,209	60%	36%	0%	4%
Buckeye	61,414	72%	26%	0%	2%
Gila Bend-Theba-Sentinel	2,316	37%	52%	10%	1%
Goodyear	66,915	77%	18%	0%	5%
Litchfield Park	26,899	81%	14%	0%	5%
Tolleson	30,131	44%	53%	0%	3%
Tonopah-Wintersburg	5,481	74%	25%	0%	1%
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

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"
Southwest Maricopa Region	**263,928**	**67%**	**21%**	**11%**
Arlington	563	72%	21%	7%
Avondale	70,209	60%	27%	13%
Buckeye	61,414	72%	16%	12%
Gila Bend-Theba-Sentinel	2,316	37%	39%	24%
Goodyear	66,915	77%	15%	8%
Litchfield Park	26,899	81%	12%	7%
Tolleson	30,131	44%	39%	17%
Tonopah-Wintersburg	5,481	74%	13%	14%
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

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)
Southwest Maricopa Region	**86,731**	**34%**	**6%**	**5%**
Arlington	218	28%	9%	9%
Avondale	22,861	43%	7%	6%
Buckeye	19,204	29%	6%	5%
Gila Bend-Theba-Sentinel	820	71%	19%	19%
Goodyear	23,474	24%	4%	3%
Litchfield Park	9,175	22%	4%	3%
Tolleson	9,061	59%	9%	9%
Tonopah-Wintersburg	1,918	24%	12%	12%
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 Program[32] and Summer Food Service Program[33] are important resources aimed at addressing food insecurity by providing access to free and reduced-price food and meals in both community and

school settings. The National School Lunch Program[34] provides free and reduced-price meals at school for students whose family incomes no more than 130 percent of the federal poverty level (FPL) for free lunch and 185 percent of the FPL for reduced price lunch. The Arizona Department of Education's Child and Adult Care Food Program (CACFP) reimburses eligible child care centers, adult daycare centers, Head Starts, emergency shelters, and afterschool programs serving at-risk youth for providing healthier meals and snacks. Participants enhance their current menus to offer more fresh fruits and vegetables, whole grains, and low-fat dairy products. The goals of the CACFP program are to support the health and nutrition status of children and adults and promote good eating habits.[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 annual 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 Litchfield Park has the highest family median income ($93,438) among the six incorporated cities and towns in the region, and the town of Gila Bend has the lowest ($32,500).

[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
Southwest Maricopa Region	N/A	N/A	N/A	N/A
City of Avondale	$60,838	N/A	N/A	N/A
City of Buckeye	$64,462	N/A	N/A	N/A
Town of Gila Bend	$32,500	N/A	N/A	N/A
City of Goodyear	$75,654	N/A	N/A	N/A
City of Litchfield Park	$93,438	N/A	N/A	N/A
City of Tolleson	$40,561	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

Poverty

An estimated 14 percent of the total (all-age) population of the Southwest Maricopa Region lives in poverty, which is slightly lower than in Maricopa County as a whole (17%) and the state (18%) (Table 15). The percentage of the population aged 0-5 in poverty in the Southwest Maricopa Region (19%) is 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 Tonopah-Wintersburg (with only 3% of young children in poverty)—nearly half of the children under six in Arlington (46%) and Gila Bend-Theba-Sentinel (40%) live in poverty.

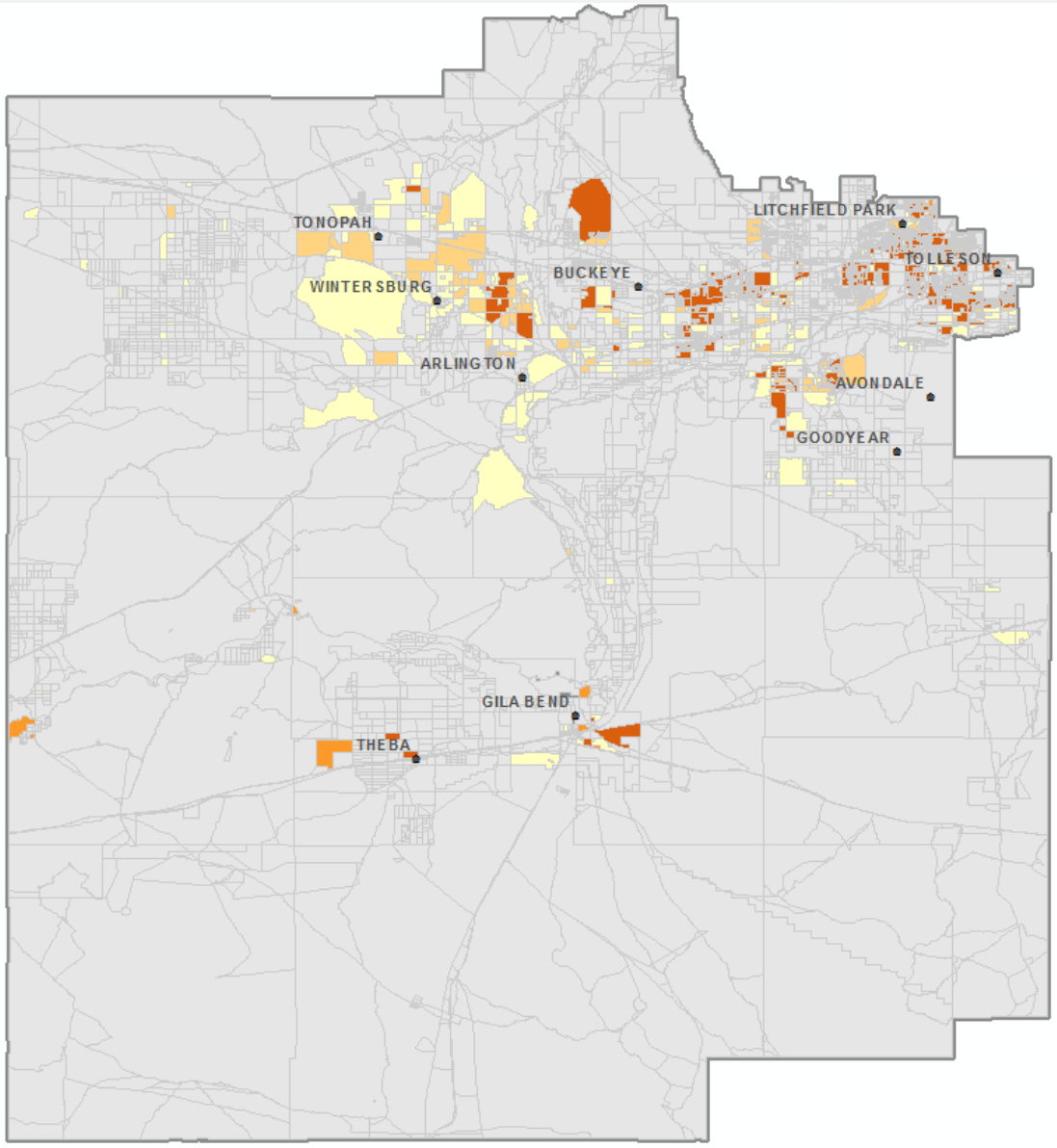
In addition to the families whose incomes fall below the federal poverty level, a greater proportion of households in the region and county are considered low-income (i.e., near but not below the federal poverty level, or FPL). Forty-one percent of families in the region with children aged four and under 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 Buckeye (50%), Gila Bend-Theba-Sentinel (77%), and Tonopah-Wintersburg (75%).

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 Southwest Maricopa Region (down 31% from 2012 to 2015) and statewide (down 39%) (Table 17). The 866 young children receiving TANF in the

Southwest 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 $4020 annually for a family of four. Beginning in 2016, Arizona became the first and only state that limits a person's lifetime benefit to 12 months. [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 6. Poverty in the Southwest Maricopa Region, by Census Tract



Legend	# of Census Blocks	Poverty 0-5	Population 0-5	% Poverty
High Poverty-High Population	1,095	4,266	19,188	22%
High Poverty-Low Population	350	521	1,235	42%
Low Poverty-High Population	352	158	3,190	5%
Low Poverty-Low Population	1,094	288	2,492	12%
No Poverty	8,558	0	2,407	0%
Total	**11,449**	**5,233**	**28,512**	**18%**

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	Number of older children (ages 6-17) for whom poverty status is known	Older children (ages 6-17) below poverty level
Southwest Maricopa Region	276,984	14%	27,451	19%	56,874	19%
Arlington	606	35%	54	46%	85	72%
Avondale	76,059	17%	7,472	23%	15,627	25%
Buckeye	62,041	18%	7,025	28%	13,247	23%
Gila Bend-Theba-Sentinel	2,587	30%	315	40%	507	33%
Goodyear	67,499	9%	5,564	9%	12,630	10%
Litchfield Park	28,547	5%	2,347	7%	6,181	8%
Tolleson	33,872	17%	4,372	17%	7,419	23%
Tonopah-Wintersburg	5,772	13%	302	3%	1,178	18%
Maricopa County	3,895,963	17%	326,901	27%	669,565	23%
ARIZONA	6,411,354	18%	522,513	29%	1,071,471	25%

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

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
Southwest Maricopa Region	**15,897**	**17%**	**24%**	**30%**	**41%**
Arlington	34	41%	41%	41%	41%
Avondale	4,420	19%	26%	33%	44%
Buckeye	4,007	26%	34%	40%	50%
Gila Bend-Theba-Sentinel	168	44%	54%	67%	77%
Goodyear	3,162	9%	14%	17%	27%
Litchfield Park	1,367	4%	6%	15%	20%
Tolleson	2,550	16%	28%	30%	44%
Tonopah-Wintersburg	189	4%	13%	38%	75%
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

Note: Each income category is included in the categories to the right. For example, families who make less than 100% FPL are also counted as making less than 130% FPL, etc.

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
Southwest Maricopa Region	**1,258**	**1,137**	**984**	**866**	**down 31%**
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 just over 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. The city of Tolleson has had consistently higher rates of unemployment over the past five years (compared to other cities and towns in the Southwest Maricopa Region), while the city of Litchfield Park has had noticeably lower rates.[viii]

For the young children in the region who live with two parents, it is about equally common that both parents are in the labor force (33%) as it is that one parent is in the labor force and one is not (32%) (Table 19).[ix] Having neither parent in the labor force is relatively rare (1%). For the young children who live with one parent, it is more common that the parent is in the labor force (26%) than not (8%).

Another way to look at the data in Table 19 is to consider the children without a parent who is not in the labor force. For the Southwest Maricopa Region, 59 percent of the children under six fall into this category (that is, the 33% who have two parents in the labor force plus the 26% who have their single parent in the labor force). This yields an estimate of about 16,000 young children in the region without a stay-at-home parent. There is considerable variation within the region, however. In Tolleson (69%) and Tonopah-Wintersburg (75%), most of the young children have no stay-at-home parent; in Arlington (31%) and Gila Bend-Theba-Sentinel (38%), a 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 Arlington (33%) and Gila Bend-Theba-Sentinel (19%) 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 small 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 for Incorporated Cities and Towns in the Southwest Maricopa Region, 2009 to 2016

	2009	2010	2011	2012	2013	2014	2015	2016
Southwest Maricopa Region	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
City of Avondale	N/A	N/A	9.4%	8.1%	7.2%	6.4%	5.6%	4.7%
City of Buckeye	N/A	N/A	10.2%	8.9%	8.5%	7.2%	6.1%	5.5%
Town of Gila Bend	N/A	N/A	8.4%	7.1%	6.5%	5.7%	5.1%	N/A
City of Goodyear	N/A	N/A	8.7%	7.6%	6.9%	5.9%	5.3%	4.7%
City of Litchfield Park	N/A	N/A	3.1%	2.6%	2.3%	2.1%	1.8%	N/A
City of Tolleson	N/A	N/A	15.6%	13.5%	12.2%	10.9%	9.7%	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 (2017). Local area unemployment statistics (LAUS).

Note: These rates are averaged over the calendar year; there is no seasonal adjustment.

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
Southwest Maricopa Region	26,939	33%	32%	1%	26%	8%
Arlington	51	20%	35%	0%	12%	33%
Avondale	7,208	30%	24%	0%	34%	12%
Buckeye	6,864	25%	42%	1%	23%	8%
Gila Bend-Theba-Sentinel	314	23%	43%	3%	15%	16%
Goodyear	5,547	44%	34%	1%	18%	3%
Litchfield Park	2,328	38%	38%	0%	17%	6%
Tolleson	4,326	38%	25%	0%	31%	6%
Tonopah-Wintersburg	302	31%	14%	0%	44%	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.

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 ages) 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 eligible for federal nutrition assistance (Table 20) on the basis of low income.

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. There were 265 fitness and recreation facilities in 2012[xi], meaning that there are 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 nearly 12,000 children annually in the Southwest Maricopa Region (Table 23). Available to these SNAP participants in the region are 128 SNAP retailers (46.85 retailers per 100,000 residents) (Table 22).

WIC enrollment has also declined slightly (Table 25) from 2012 (61% of children under five) to 2015 (58%). Table 26 provides a single month snapshot of participation in the program in January of 2015; 79 percent of women, 85 percent of infants, and 77 percent of children who were enrolled in WIC in the region claimed their benefits in the month of January. There were 27 reported WIC retailers (9.88 retailers per 100,000 residents) (Table 22).

Schools are an important part of the nutrition assistance system, especially for children that may be food insecure. Approximately 60 percent of all public- and charter-school students in the Southwest Maricopa Region have been eligible for free or reduced-price lunch since 2012 (Table 27). This is comparable to the statewide percentage, 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 noticeably in the Mobile district (from 70% in 2012 to 94% in 2016) and in the Union Elementary District (from 59% in 2012 to 84% in 2016). The school districts in the region with the lowest rates of eligibility for free or reduced-price lunch in 2016 are Litchfield (37%) and Wickenburg (38%). (Note that the data in Table 27 refer only to schools located inside the Southwest Maricopa Region boundaries. See Figure 10 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 decreased by 16 percent from 2012 to 2015 (Table 27), which was a larger decline than in the state as a whole (down 10%).

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[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*

[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*

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

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)
Southwest Maricopa Region	N/A	N/A	N/A	N/A	N/A	N/A
Maricopa County	3,947,379	16%	67%	1,011,476	25%	68%
ARIZONA	6,731,491	17%	67%	1,622,078	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
Southwest 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
Southwest Maricopa Region	128	46.85	27	9.88
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; Special Supplemental Nutrition Program for Women, Infants, and Children: Find a Store; 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
Southwest Maricopa Region	13,618	13,812	13,284	11,879	down 13%
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
Southwest Maricopa Region	18,554	4,766	5,230	8,558
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 2010 US Census	2012	2012	2013	2013	2014	2014	2015	2015
Southwest Maricopa Region	23,741	14,396	61%	14,095	59%	13,934	59%	13,788	58%
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
Southwest Maricopa Region	79%	79%	85%	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
Southwest Maricopa Region Schools	**58%**	**59%**	**59%**	**60%**	**60%**
Agua Fria Union High School District	41%	41%	41%	40%	40%
Arlington Elementary District	84%	85%	87%	81%	80%
Avondale Elementary District	69%	70%	70%	70%	72%
Buckeye Elementary District	72%	73%	73%	74%	65%
Buckeye Union High School District	53%	54%	53%	57%	57%
Gila Bend Unified District	75%	75%	75%	75%	75%
Liberty Elementary District	53%	51%	47%	48%	49%
Litchfield Elementary District	37%	38%	37%	36%	37%
Littleton Elementary District	79%	77%	78%	78%	84%
Mobile Elementary District	70%	79%	52%	86%	94%
Palo Verde Elementary District	68%	76%	79%	78%	78%
Paloma School District	53%	72%	72%	72%	72%
Pendergast Elementary District	51%	53%	51%	56%	42%
Saddle Mountain Unified School District	68%	65%	71%	77%	69%
Sentinel Elementary District	86%	84%	65%	81%	77%
Tolleson Elementary District	82%	83%	82%	83%	85%
Tolleson Union High School District	64%	65%	65%	67%	67%
Union Elementary District	59%	86%	86%	85%	84%
Wickenburg Unified District	35%	32%	37%	41%	38%
Southwest Maricopa Region Charter Schools	75%	75%	78%	77%	78%
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: The school-district data in this table include only the schools that are located within the Southwest Maricopa Region.

Housing, Homelessness, and Transportation

Of the estimated 86,731 occupied housing units in the Southwest Maricopa Region, one-third (34%) are occupied by renters and two-thirds (66%) are occupied by homeowners (Table 28). Slightly lower homeownership rates are seen in the Avondale (57%) and Gila Bend-Theba-Sentinel (54%) sub-regions. The homeownership rate in the region is a bit higher than it is in the county and state (61% and 63%, respectively). Residents of the Southwest Maricopa Region have a similar housing cost burden to residents of the state as a whole: 32 percent of the region's housing units require their residents to contribute more than 30 percent of their household income toward housing (Table 29). Housing costs are somewhat less burdensome in the Arlington (15%) and Gila Bend-Theba-Sentinel (24%) sub-regions.

In the Southwest Maricopa Region, an estimated 83 percent of the population has lived in the same house for the past year (Table 30). The rate of the population living in the same house is even higher in the Gila Bend-Theba-Sentinel (95%) sub-region. In each sub-region, the majority of those who had moved in the past year moved from elsewhere in Maricopa County.

About 4 percent of the households in the Southwest Maricopa Region have no vehicle available to them, according to the American Community Survey (Table 31). This is a smaller percentage than in the county as a whole (7%). Among the sub-regions, the percentage without vehicles is higher in Arlington (8%) and Gila Bend-Theba-Sentinel (also 8%). The map in Figure 7 shows that certain parts of the other sub-regions have concentrations of households without vehicles: central Avondale, the Cashion neighborhood south of Tolleson, and central Buckeye.

Table 28. Owner- and Renter-Occupied Housing Units

	Number of occupied housing units	Owner-occupied units	Renter-occupied units
Southwest Maricopa Region	**86,731**	**66%**	**34%**
Arlington	218	61%	39%
Avondale	22,861	57%	43%
Buckeye	19,204	68%	32%
Gila Bend-Theba-Sentinel	820	54%	46%
Goodyear	23,474	70%	30%
Litchfield Park	9,175	73%	27%
Tolleson	9,061	64%	36%
Tonopah-Wintersburg	1,918	78%	22%
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 29. The Cost of Housing, Relative to Household Income

	Number of occupied housing units	Occupied housing units which cost 30% of household income, or more
Southwest Maricopa Region	**86,731**	**32%**
Arlington	218	15%
Avondale	22,861	34%
Buckeye	19,204	33%
Gila Bend-Theba-Sentinel	820	24%
Goodyear	23,474	29%
Litchfield Park	9,175	31%
Tolleson	9,061	35%
Tonopah-Wintersburg	1,918	27%
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 30. Mobility of the Population During the Previous Year

	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
Southwest Maricopa Region	**283,568**	**83%**	**12%**	**1%**	**4%**
Arlington	581	82%	15%	0%	2%
Avondale	75,157	82%	14%	0%	4%
Buckeye	66,657	81%	12%	2%	5%
Gila Bend-Theba-Sentinel	2,524	95%	4%	0%	1%
Goodyear	71,060	83%	12%	1%	4%
Litchfield Park	28,465	83%	13%	0%	4%
Tolleson	33,387	85%	12%	1%	2%
Tonopah-Wintersburg	5,737	85%	11%	0%	3%
Maricopa County	3,895,703	81%	14%	1%	4%
ARIZONA	6,480,318	81%	13%	2%	4%

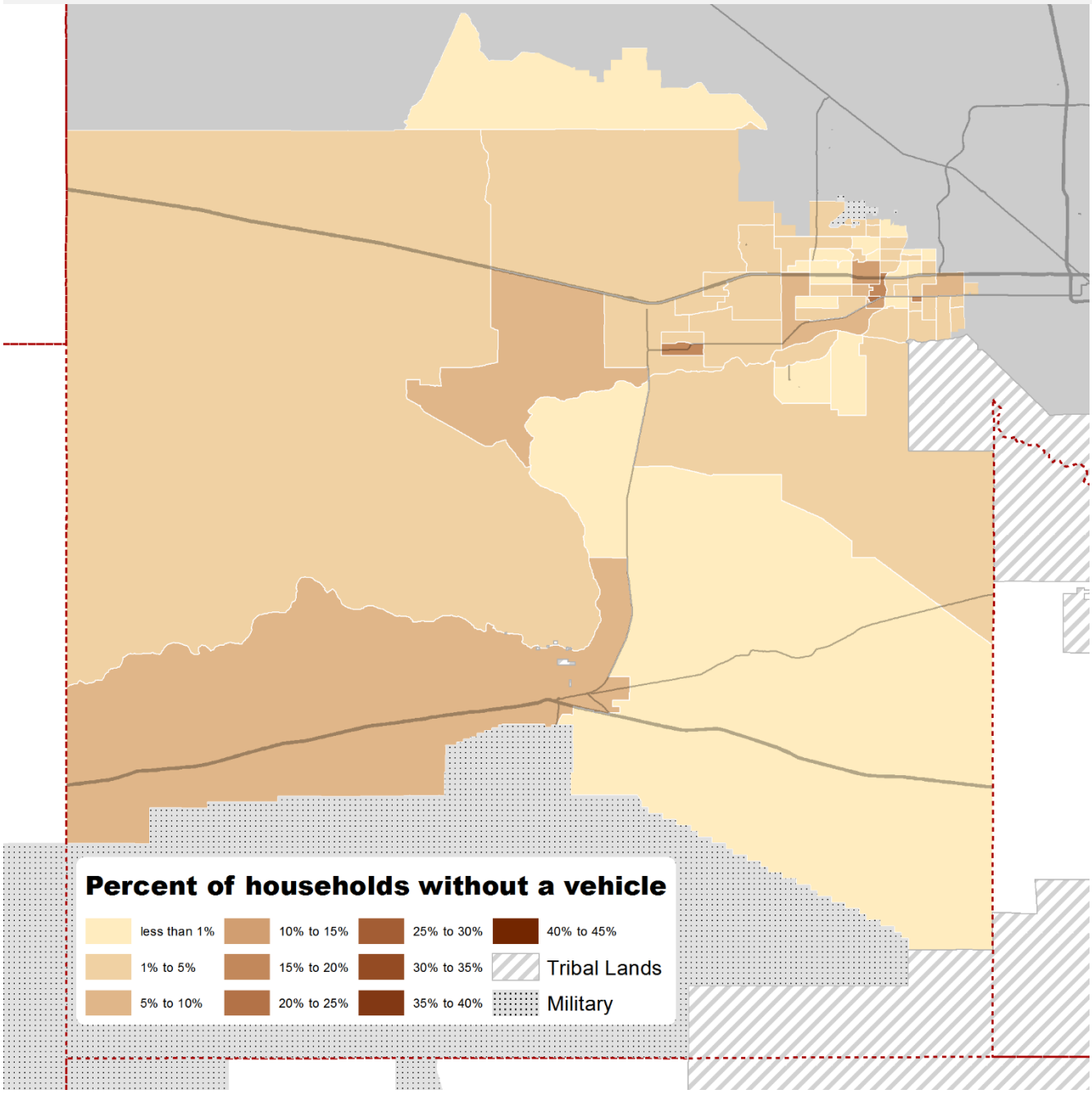
Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B07001

Table 31. Estimated Percent of Households With No Vehicle Available

	Estimated number of households	Households with no vehicle available
Southwest Maricopa Region	86,731	4%
Arlington	218	8%
Avondale	22,861	5%
Buckeye	19,204	3%
Gila Bend-Theba-Sentinel	820	8%
Goodyear	23,474	4%
Litchfield Park	9,175	1%
Tolleson	9,061	4%
Tonopah-Wintersburg	1,918	5%
Maricopa County	1,424,244	7%
ARIZONA	2,387,246	7%

Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B08201

Figure 7. Percent of Households Without a Vehicle, by Census Tract



Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B08201

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]

[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*

Beyond the direct connections between caregivers' education and their own literacy, the ability to read to, share with, and teach young children in the home is influenced by parental and familial stress levels, income levels, and educational levels. Families in poverty are often grappling with issues of day-to-day survival which may limit time spent in developmentally enriching activities. Parents with higher educational attainment may be less vulnerable to these issues and are more likely to have children with positive outcomes related to school readiness and educational achievement, as well improved health, social and economic outcomes.[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 College and Career Ready Standards established in 2010. Students who receive a proficient or highly proficient score are considered adequately prepared for success in the next grade. In the 2014-2015 school year, 39 percent of Southwest Maricopa Region students attained these scores on the third grade math assessment, which was a similar passing rate as across Arizona as a whole (41%) (Figure 8). Performance on the English Language Arts (ELA) test was similar, with 38 percent of Southwest Maricopa students demonstrating proficiency, compared to 40 percent across the state (Figure 9). A portion of the 46 percent of Southwest 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 districts in the region in math were in the Palo Verde Elementary District (59% passing math), Wickenburg School District (58% passing math) and the Litchfield Elementary District (52% passing math), while the Southwest Maricopa region Charter Schools (53%), Litchfield Elementary District (52%) and Liberty Elementary District (44%) performed better than region and state on the English Language Arts test (Table 32). The districts with the lowest proficiency rates were the Gila bend Unified District (11% passing math, 3% passing ELA) and the Littleton Elementary District (24% passing math, 17% passing ELA) (Table 33). District boundaries are shown in Figure 10.[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]

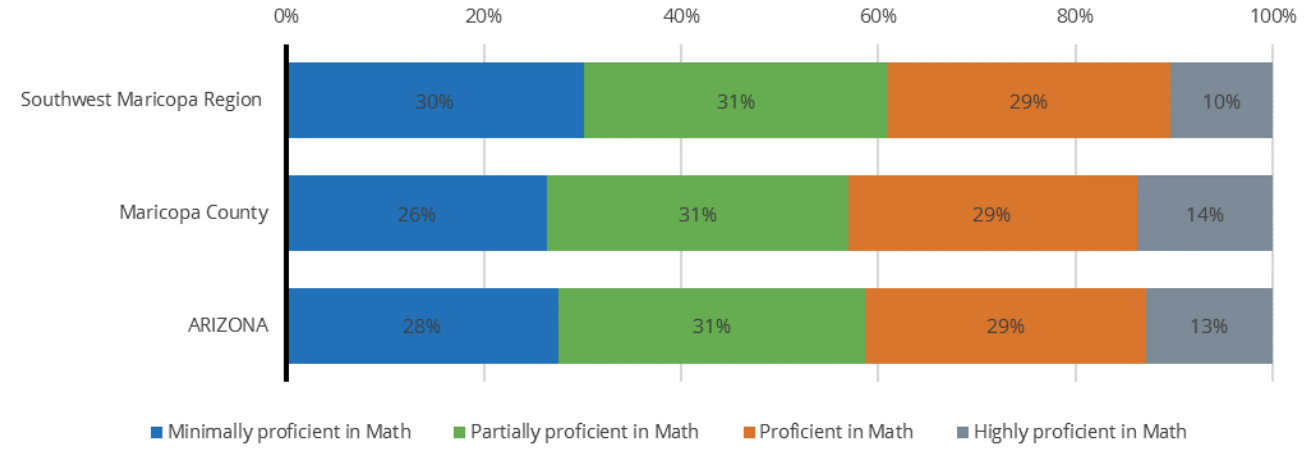
[xv] *Note that in the data provided the scores reported are a combined ELA score of reading and writing. Students may have a minimally proficient ELA score and still meet the Move On When Reading requirement.*

[xvi] *Information on individual schools is available through the Arizona Department of Education's website: http://www.azed.gov/research-evaluation/aims-assessment-results/.*

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 Southwest Maricopa Region, we see that some of the districts with the highest proportions of children eligible for free or reduced-price lunch, such as Littleton Elementary District (84% eligible) (see Table 27), also have the highest proportions of students not passing the AzMERIT assessments in the third grades (Table 32 and Table 33).

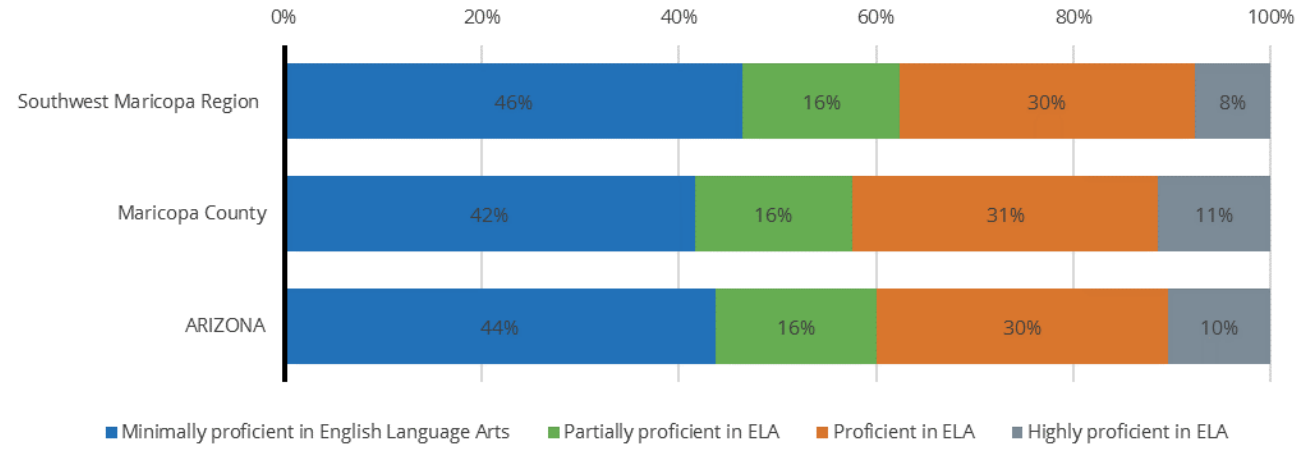
Student performance in the Southwest Maricopa Region, and statewide, suggests that there is much work to be done to support early literacy and to strengthen scholastic achievement, particularly among young children of color and children in poverty.

Figure 8. AzMERIT Math Test Results for Third-Graders in the 2014-2015 School Year



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

Figure 9. 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 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)
Southwest Maricopa Region Schools	**30%**	**31%**	**29%**	**10%**	**39%**
Arlington Elementary District	27%	42%	31%	0%	31%
Avondale Elementary District	36%	35%	22%	6%	29%
Buckeye Elementary District	37%	30%	24%	8%	33%
Gila Bend Unified District	89%	8%	3%	0%	3%
Liberty Elementary District	23%	36%	27%	13%	41%
Litchfield Elementary District	21%	26%	37%	16%	52%
Littleton Elementary District	45%	31%	20%	3%	24%
Palo Verde Elementary District	18%	23%	50%	9%	59%
Paloma School District	DS	DS	DS	DS	DS
Pendergast Elementary District	34%	37%	24%	5%	30%
Saddle Mountain Unified School District	33%	35%	23%	9%	32%
Tolleson Elementary District	23%	32%	36%	9%	45%
Union Elementary District	38%	30%	26%	6%	32%
Wickenburg Unified District	16%	26%	29%	29%	58%
Southwest Maricopa Region Charter Schools	20%	31%	33%	16%	49%
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 Southwest Maricopa Region.

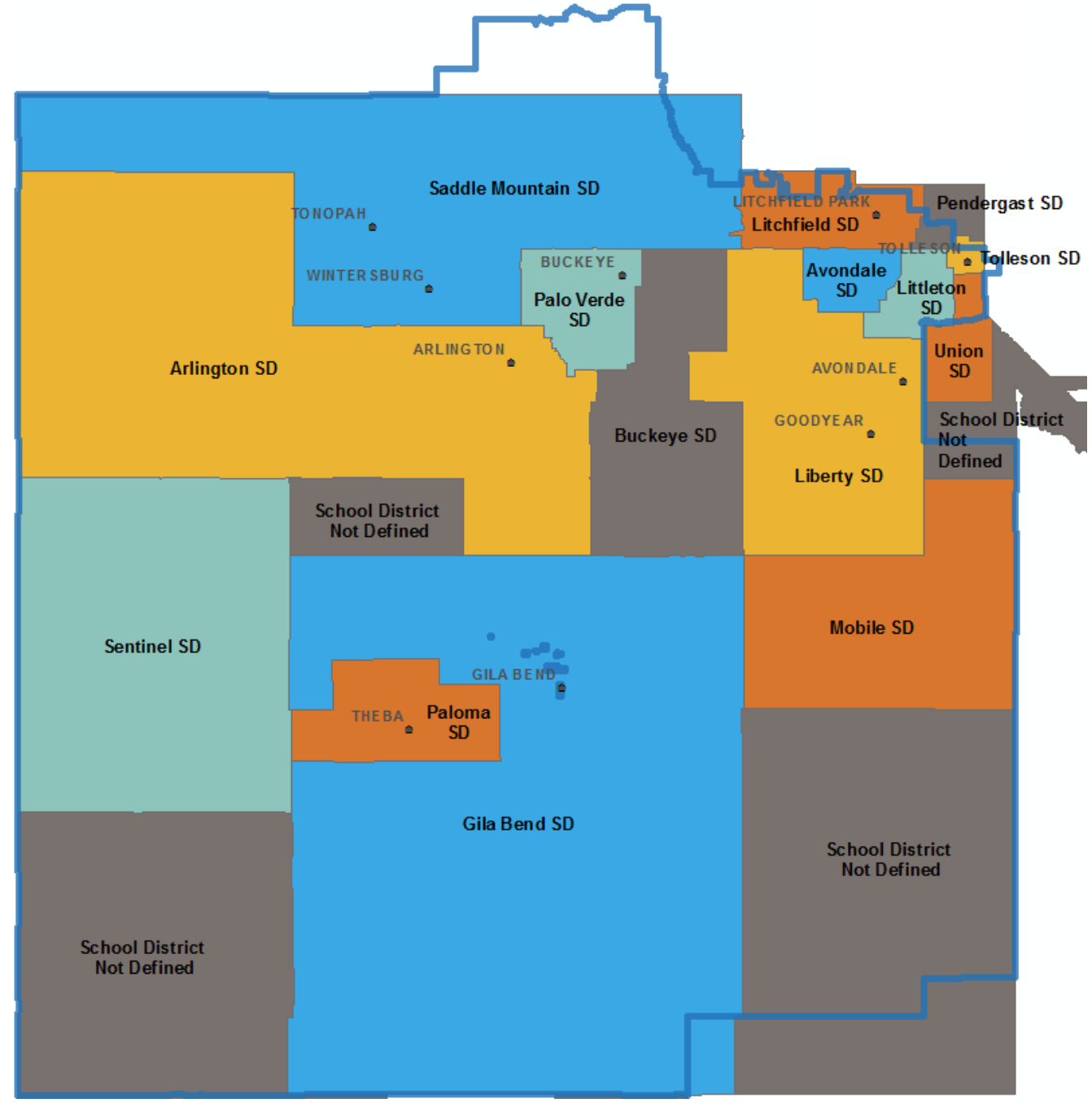
Table 33. AzMERIT English Language Arts Test Results for Third-Graders in 2014-15, by School District

	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)
Southwest Maricopa Region Schools	**46%**	**16%**	**30%**	**8%**	**38%**
Arlington Elementary District	54%	27%	19%	0%	19%
Avondale Elementary District	53%	16%	26%	5%	31%
Buckeye Elementary District	48%	18%	28%	6%	34%
Gila Bend Unified District	72%	17%	11%	0%	11%
Liberty Elementary District	40%	16%	36%	8%	44%
Litchfield Elementary District	33%	15%	39%	13%	52%
Littleton Elementary District	68%	14%	15%	2%	17%
Palo Verde Elementary District	43%	20%	30%	7%	38%
Paloma School District	DS	DS	DS	DS	DS
Pendergast Elementary District	53%	20%	23%	4%	27%
Saddle Mountain Unified School District	71%	10%	13%	7%	20%
Tolleson Elementary District	59%	18%	19%	3%	22%
Union Elementary District	58%	17%	21%	4%	25%
Wickenburg Unified District	48%	10%	32%	10%	42%
Southwest Maricopa Region Charter Schools	32%	16%	41%	12%	53%
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 Southwest Maricopa Region.

Figure 10. School Districts of the Southwest Maricopa Region



Source: First Things First.

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 34 shows these percentages for elementary school districts in the region. Rates of chronic absences in the Southwest

Maricopa Region were similar in 2014 (34%) and 2015 (37%) to the state as a whole (34% and 36%, respectively). Chronic absences in 2015 were highest in the Paloma School District (63%) and Gila Bend Unified District (62%), while the rates were lowest in the Mobile Elementary District (13%). 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 Southwest Maricopa decreased from three to two percent between 2012 and 2015. The rate in Southwest Maricopa has been below the county and state rate of 3 to 4 percent since 2014 (Table 35). Gila Bend Unified District (6%) had drop-out rates that were higher than that of the region and state overall.

Four-year graduation rates in the Southwest Maricopa region (81% in 2014) are consistently higher than those in Arizona as a whole (76% in 2014). All but two districts outperformed both the state and county in four-year graduation rates in 2014. Southwest Maricopa Region Charter Schools (37%) and Gila Bend Unified District (68%) had the lowest rate of four-year graduations across the region in 2014 (Table 35).

Adults aged 25 and older in the Southwest Maricopa Region are less likely to have a bachelor's degree or higher (20%) compared to adults across Arizona (27%) (Table 36). The percent of adults with less than a high school education in the region (17%) is slightly higher than the county (13%) or state (14%). However, one community, Gila Bend-Theba-Sentinel, had much higher rates of adults who did not complete high school (46%), as compared to the region, county and state. Adults in the Litchfield Park area have the highest educational attainment in the sub-regions, with the highest rates of bachelor's and advanced degrees (32%).

Table 34. Chronic Absences, 2014 and 2015

	Number of schools	Number of students in 2014	Students with chronic (more than 10) absences in 2014	Percent of students with chronic absences in 2014	Number of students in 2015	Students with chronic (more than 10) absences in 2015	Percent of students with chronic absences in 2015
Southwest Maricopa Region Schools	**60**	**15,967**	**5,486**	**34%**	**16,860**	**6,320**	**37%**
Arlington Elementary District	1	82	32	39%	88	30	34%
Avondale Elementary District	8	1,905	698	37%	1,936	700	36%
Buckeye Elementary District	6	1,847	589	32%	1,888	718	38%
Gila Bend Unified District	1	93	22	24%	111	69	62%
Liberty Elementary District	5	1,048	387	37%	1,208	510	42%
Litchfield Elementary District	10	3,844	1,289	34%	4,006	1,439	36%
Littleton Elementary District	6	2,096	868	41%	2,145	889	41%
Mobile Elementary District	1	13	12	92%	<10	<10	13%
Palo Verde Elementary District	1	159	56	35%	188	87	46%
Paloma School District	1	29	14	48%	35	22	63%
Pendergast Elementary District	3	892	299	34%	927	349	38%
Saddle Mountain Unified School District	2	348	114	33%	374	139	37%
Sentinel Elementary District	1	11	<10	27%	<10	<10	25%
Tolleson Elementary District	2	488	172	35%	549	227	41%
Union Elementary District	2	753	205	27%	811	269	33%
Wickenburg Unified District	1	100	25	25%	85	28	33%
Southwest Maricopa Region Charter Schools	9	2,259	701	31%	2,493	841	34%
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 Southwest Maricopa Region.

Table 35. 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
Southwest Maricopa Region Schools	**23**	**3%**	**3%**	**2%**	**2%**	**84%**	**81%**	**80%**	**81%**
Agua Fria Union High School District	4	3%	2%	2%	1%	82%	81%	82%	84%
Buckeye Union High School District	5	2%	2%	1%	1%	87%	86%	83%	87%
Gila Bend Unified District	1	7%	5%	6%	6%	48%	64%	85%	68%
Saddle Mountain Unified School District	1	N/A	N/A	N/A	N/A	86%	88%	88%	94%
Tolleson Union High School District	6	2%	2%	2%	2%	87%	83%	82%	81%
Southwest Maricopa Region Charter Schools	6	10%	9%	4%	4%	54%	44%	35%	37%
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 Southwest Maricopa Region.

Table 36. 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
Southwest Maricopa Region	**174,810**	**17%**	**27%**	**36%**	**20%**
Arlington	349	29%	37%	22%	12%
Avondale	44,577	22%	25%	34%	18%
Buckeye	41,302	18%	30%	37%	15%
Gila Bend-Theba-Sentinel	1,457	46%	26%	18%	11%
Goodyear	48,138	9%	25%	39%	27%
Litchfield Park	17,441	8%	21%	40%	32%
Tolleson	17,977	26%	32%	30%	13%
Tonopah-Wintersburg	3,568	22%	36%	34%	8%
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

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.[76,77] 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.[78] 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.[79] 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).[80]

Child care subsidies can be a support for families who have financial barriers to accessing early learning services.[81] 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.)[82] 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.[83] 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.[84]

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.[85]

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. [86]

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.[87,88]

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."[89] 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,[90] and are at an increased risk for maltreatment and neglect.[91, 92] Almost half (46%) of families with a child with special needs in Arizona have incomes below 200 percent of the federal poverty level.[93]

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.[94,95,96] 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),[97] the Arizona Early Intervention Program (AzEIP),[98] and the Division of Developmental Disabilities (DDD).[99]

What the Data Tell Us

Child Care and Preschool

According to the data from the American Community Survey, 22 percent of children ages 3 and 4 in the Southwest Maricopa Region were enrolled in nursery school, preschool, or kindergarten, meaning that relatively fewer children are enrolled in early education, compared to children statewide (36%) (Figure 11). Higher rates of participation occur in the Gila Bend-Theba-Sentinel (45%) and Goodyear (33%) communities compared to the region, while the Arlington community reports no (or very low) participation. The Litchfield Park and Tonopah-Wintersburg (31%) communities also report higher rates of early education, compared to that of the region.

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 110 registered child care and early education providers in the Southwest Maricopa region, approved to serve approximately 6,470 children (Table 37). These providers are located primarily within the Avondale (n=28), Buckeye (n=27), and Goodyear (n=26) communities. The Arlington community has only one child care facility—located in a public school—which suggests that care for infants is relatively unavailable in this area. The Arizona Department of Economic Security's 2014 Market Rate Survey,[100] 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.

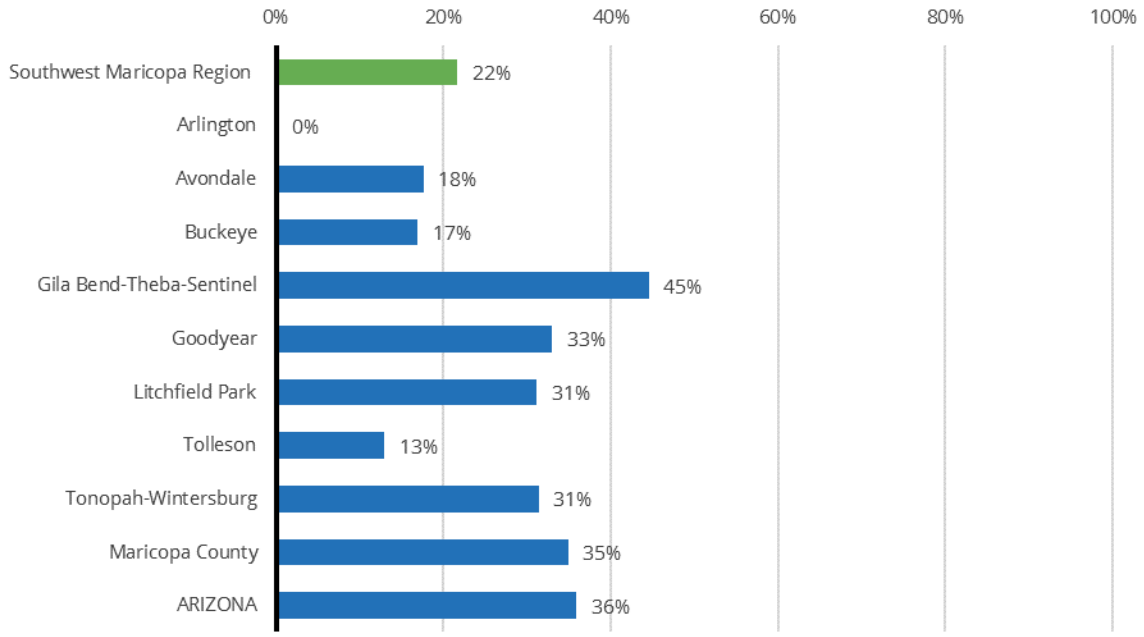
The number of children with all parents in the labor force provides another estimate of how many children may currently need child care. In the Southwest Maricopa Region, there are approximately

15,890 children without a parent not in the labor force (that is, children of single parents in the labor force, and children of two parents both in the labor force) but only 6,470 child care and early education slots available. Within the region, the capacity of early care and education centers to meet this estimate of child care demand is largely unmet. In the Goodyear and Tolleson, the estimated demand well exceeds the number of available slots; while Avondale and Buckeye communities also lacked sufficient capacity to meet the estimated demand. 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 could bring benefit to communities in the area with a current capacity shortage.

Of the 110 known child care providers in the Southwest Maricopa Region, about one fifth (n=24) are participating in the Quality First program. Most of these programs (n=12) have a 3-star rating, which is given to programs that "meet quality standards."[101] Five of these 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 38). Three programs in the Southwest Maricopa Region have achieved the 4-star rating, indicating they are exceeding quality standards.

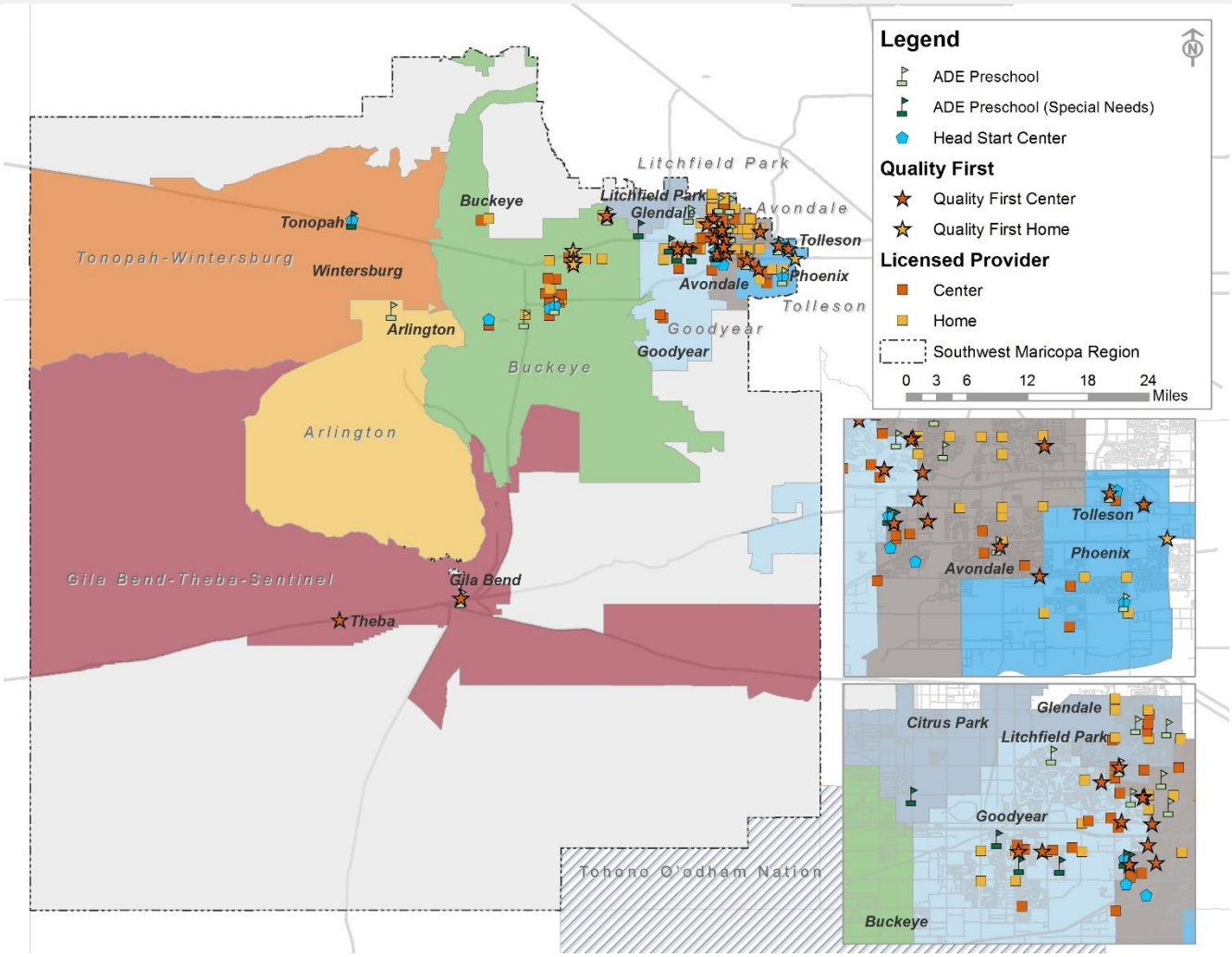
There are 22 schools in the Southwest Maricopa Region that provide pre-kindergarten classes; a little more than one third of these are in the Litchfield Elementary District, where 352 children are enrolled in pre-kindergarten (Table 39). There are also high numbers of children enrolled in preschool in the Buckeye Elementary District (n=119) and the Littleton Elementary District (n=109). Over half of the students in the Buckeye (61%) and Littleton (52%) districts have special needs, whereas only 28 percent of Litchfield Elementary District students do.

Figure 11. 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

Figure 12. Child Care Locations in the Southwest Maricopa Region



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

Table 37. 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	
Southwest Maricopa Region	110	6,470	24	2,557	13	399	17	437	56	3,075
Arlington	1	<10	0	0	0	0	1	<10	0	0
Avondale	28	1,833	6	764	4	216	3	77	15	776
Buckeye	27	957	5	282	4	145	2	149	16	381
Gila Bend-Theba-Sentinel	2	60	2	60	0	0	0	0	0	0
Goodyear	26	2,311	7	1,047	0	0	6	92	13	1,172
Litchfield Park	12	790	1	78	0	0	3	79	8	633
Tolleson	12	497	3	326	4	38	1	20	4	113
Tonopah-Wintersburg	2	19	0	0	1	N/A	1	19	0	0
Maricopa County	1,608	109,609	489	50,636	151	5,240	190	7,156	778	46,577
ARIZONA	3,053	173,566	911	74,760	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 (2016)

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

Table 38. 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	
Southwest Maricopa Region	0	0	5	904	12	1,465	3	51	0	0	4	137	24	2,557
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 39. Pre-Kindergarten Enrollment

	Number of schools with pre-kindergarten	Number of students enrolled	Number of students in special education	Percent of students in special education
Southwest Maricopa Region Schools	22	799	355	44%
Arlington Elementary District	1	<10	0	0%
Avondale Elementary District	5	46	46	100%
Buckeye Elementary District	1	119	73	61%
Gila Bend Unified District	1	16	<25	DS
Liberty Elementary District	1	30	<25	DS
Litchfield Elementary District	9	352	99	28%
Littleton Elementary District	1	109	57	52%
Mobile Elementary District	0	0	0	N/A
Palo Verde Elementary District	0	0	0	N/A
Paloma School District	0	0	0	N/A
Pendergast Elementary District	1	84	38	45%
Saddle Mountain Unified School District	1	19	<25	DS
Sentinel Elementary District	0	0	0	N/A
Tolleson Elementary District	1	87	<25	DS
Union Elementary District	1	20	<25	DS
Wickenburg Unified District	0	0	0	N/A
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 Southwest Maricopa Region.

Cost of Care

The cost of care in Maricopa County varies by the type of care and the age of the child receiving care; the median cost in the county is relative to the cost of like care across the state differs depending on the situation. For example, residents in Maricopa County tend to pay higher prices for child care

centers (e.g., $44.19 per day for infant care vs. $42, Table 40) and certified group homes (e.g., $30 per day for infant care vs. $27, Table 42), but slightly lower prices for child care in approved family homes (e.g. $20 per day vs. $22, Table 41) than parents statewide. Across all kinds of care, parents can expect to pay more for infant care, because the 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 (13% to 17%) for a child care slot as other families statewide (Table 43). However, to avoid being overburdened, the Department of Health and Human Services recommends that parents spend no more than 10 percent of their family income on child care. Families in the 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, as would families (such as single parents) who have incomes lower than the county median.

Subsidies from the Department of Economic Security (DES) can help families should the cost of 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 Southwest Maricopa Region remained relatively constant from 2013 to 2015; the most recent data from 2015 showed 196 children whose families were hoping to receive support (Table 44). Additionally, 85 percent of DCS-involved children received a subsidy, suggesting that this is an important support for children in the child welfare system (Table 45).

Table 40. 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
Southwest 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 41. 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
Southwest 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 42. 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
Southwest 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 43. 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
Southwest 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 44. 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
Southwest Maricopa Region	1,311	1,447	2,122	1,286	1,318	1,865	187	216	196
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 45. 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
Southwest Maricopa Region	1,029	873	85%
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.[102] In the Southwest Maricopa Region and across Arizona, more children were referred and served by AzEIP in FY2015 than in either of the two years prior (Table 46). In 2015, 430 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 0-2, this means that the AzEIP services, designed to prevent and address developmental delays, are used by

approximately 3 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. [103]

Between 2012 and 2015, the number of children ages 0-2 and 3-5 being referred to the Division of Developmental Disabilities (DDD) in the Southwest Maricopa Region has increased; over 220 children were referred in 2015 (Table 47). Similar numbers (275) of children ages 0-5 were served by DDD during that time, with a slightly higher number of children in the 3-5 year-old group than the 0-2 year-old group. The children ages 3-5 also received many 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, show significant delays in one or more of these areas of development: physical, cognitive, communication, social emotional or self-help. [104]

The number of preschoolers in special education in Southwest Maricopa Region schools has remained relatively constant over the past four years (Table 51). Among the approximately 395 children, 48 percent have a developmental disability, 27 percent have a speech or language impairment, and all others have a severe delay (26%) (Table 52). There are no children reported to have a vision or hearing impairment; however, 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. [105]

Several districts across the region have high concentrations of preschool students with special needs. In the Paloma School District, all children (100%) needed services for developmental disabilities (Table 52), and there was also a high need for these same services in the Tolleson (60%) and Union (62%) Elementary Districts. Almost half of all students in the Avondale Elementary District (40%) needed services for a severe delay while about half of students with specific needs required services for speech or language impairment in the Saddle Mountain Unified School District (44%). About 1,600 students in kindergarten through third grade are enrolled in special education in the region, representing 9 percent of all students enrolled. This is the same as the Maricopa County Schools rate (9%) and slightly lower than the statewide rate (10%).

The National Survey of Children with Special Health Care Needs estimated that 7.6 percent of children from birth to five (and about 17% of school-aged children) in Arizona have special health care needs.[xvii,106] The survey also estimates that nearly one in three Arizona children with special health care needs have an unmet need for health care services (compared to about one in four nationally). Further data on children with special health care needs in Arizona and Maricopa County should be available in early 2017 with the publication of the results of the 2016 Arizona Children's Health Survey..[xviii]

[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."*

[xviii] *For more information on the Arizona Children's Health Survey, visit http://directorsblog.health.azdhs.gov/take-the-arizona-childrens-survey/*

Table 46. Arizona Early Intervention Program (AzEIP) Referrals and Services for Children (Ages 0 to 2), 2013 to 2015

	Children (ages 0-2) referred to AzEIP during FY 2013	Children (ages 0-2) referred to AzEIP during FY 2014	Children (ages 0-2) referred to AzEIP during FY 2015	Children (ages 0-2) served by AzEIP during FY 2013	Children (ages 0-2) served by AzEIP during FY 2014	Children (ages 0-2) served by AzEIP during FY 2015
Southwest Maricopa Region	659	623	718	198	219	430
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 47. 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
Southwest Maricopa Region	94	113	144	118	81	83	97	109
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 48. 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
Southwest Maricopa Region	55	<25	<25	<25	43	45	46	58
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 the state fiscal year."

Table 49. 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
Southwest Maricopa Region	159	151	138	116	146	155	160	159
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 50. 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
Southwest Maricopa Region	11,130	8,683	7,702	6,188	22,627	23,259	23,497	22,643
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.

Table 51. 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
Southwest Maricopa Region Schools	32	432	410	395	395
Arlington Elementary District	0	0	0	0	0
Avondale Elementary District	6	58	44	52	52
Buckeye Elementary District	5	62	54	57	57
Gila Bend Unified District	1	11	1	0	0
Liberty Elementary District	1	44	33	<25	<25
Litchfield Elementary District	9	116	134	115	115
Littleton Elementary District	1	63	66	71	71
Mobile Elementary District	0	0	0	0	0
Palo Verde Elementary District	1	<25	<25	0	0
Paloma School District	1	0	0	<25	<25
Pendergast Elementary District	3	0	<25	<25	<25
Saddle Mountain Unified School District	2	<25	<25	<25	<25
Sentinel Elementary District	0	0	0	0	0
Tolleson Elementary District	1	38	31	35	35
Union Elementary District	1	<25	<25	<25	<25
Wickenburg Unified District	0	0	0	0	0
Southwest 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 Southwest Maricopa Region.

Table 52. Types of Disabilities Among Preschoolers in Special Education, 2015

	Developmental Disability	Hearing Impairment	Severe Delay	Speech or Language Impairment	Vision Impairment
Southwest Maricopa Region Schools	**48%**	**0%**	**26%**	**27%**	**0.3%**
Avondale Elementary District	33%	0%	40%	27%	0%
Buckeye Elementary District	33%	0%	37%	28%	2%
Liberty Elementary District	48%	0%	13%	39%	0%
Litchfield Elementary District	52%	0%	20%	28%	0%
Littleton Elementary District	52%	0%	25%	23%	0%
Paloma School District	100%	0%	0%	0%	0%
Pendergast Elementary District	0%	0%	0%	100%	0%
Saddle Mountain Unified School District	50%	0%	6%	44%	0%
Tolleson Elementary District	60%	0%	17%	23%	0%
Union Elementary District	62%	0%	38%	0%	0%
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 school-district data in this table include only the schools that are located within the Southwest Maricopa Region.

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

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.[107] 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.[108,109] 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.[110,111,112]

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. [113] 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.[114,115] Children who lack health insurance are also more likely to be hospitalized and to miss school.[116]

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.[117] Arizona became the only state without an active CHIP program. However, in May 2016, the Arizona legislature voted to lift the freeze on KidsCare,[118] and in July 2016 applications began to be accepted for the first time in six years, with coverage beginning September 1, 2016.[119] 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.[120]

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.[121] 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.[122,123,124]

A mothers' weight status can also influence her child's health. Women who are obese before they become pregnant have pregnancies with a higher risk of birth complications and neonatal and infant mortality.[125,126] Babies born to obese women are at risk for chronic conditions in later life such as diabetes and heart disease.[127] 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.[128]

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. [129]

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.[130] 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.[131] Healthy People 2020 aims to increase the proportion of infants who were ever breastfed to 81.9 percent.[132]

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.[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 Plan[142], 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 9 percent of young children in the region were estimated to be uninsured, along with 17 percent of the total population in the Southwest Maricopa Region (Table 53). These rates are similar to uninsured rates across the entire county and statewide for young children (9 and 10%, respectively) and all ages (16% in both). Rates of health insurance coverage varied by community. No young children in the Tonopah-Wintersburg communities lacked health insurance, whereas nearly a quarter (24%) of children in the Gila Bend-Theba-Sentinel communities had 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]

Compared to young children, adults in all communities were less likely to have insurance coverage. For example, despite excellent coverage of young children, more than one in five adults (22%) in the Tonopah-Wintersburg communities lacked health insurance; in the Gila Bend-Theba-Sentinel communities the same was true for nearly two in every five adults (39%).

Table 53. 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
Southwest Maricopa Region	27,915	9%	277,636	17%
Arlington	54	9%	612	30%
Avondale	7,600	13%	76,183	20%
Buckeye	7,135	10%	62,119	17%
Gila Bend-Theba-Sentinel	315	24%	2,587	39%
Goodyear	5,712	6%	67,880	11%
Litchfield Park	2,374	5%	28,565	11%
Tolleson	4,423	9%	33,918	23%
Tonopah-Wintersburg	302	0%	5,772	22%
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, Southwest Maricopa Region residents gave birth to 4,493 babies, which was 8 percent of all babies born in Maricopa County and 5 percent of all births in the state (Table 54). In keeping with the projected population growth in Southwest Maricopa, the number of births in the county is expected to increase through 2040, with the steepest increase between 2020 and 2025 (up 5,299 births), and then tapering down (up 2,025 births between 2035 and 2040) (Table 55). Birthing facilities will need to adapt to this increase in demand in the coming years.

Table 54. Live Births During Calendar Year 2014, by Mother's Place of Residence

	Total number of births to Arizona-resident mothers in 2014
Southwest Maricopa Region	4,493
Maricopa County	55,285
ARIZONA	86,648

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

Table 55. Projected Number of Births Per Year, 2015 to 2040

	2015	2020	2025	2030	2035	2040
Southwest 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 nearly 4,500 mothers who gave birth in the Southwest Maricopa Region in 2014, 39 percent were non-Hispanic White, 49 percent were Hispanic or Latina, 7 percent were Black or African America, 3 percent were Asian or Pacific Islander, and 1 percent were American Indian or Alaska Native (Figure 13). Compared to mothers across Maricopa and the state as a whole, mothers in the Southwest Maricopa Region were more likely to be Hispanic or Latina and less likely to be White, non-Hispanic, Asian, or Native American. New mothers in the Southwest Maricopa Region had roughly similar levels of educational attainment to mothers across Maricopa County and statewide, although fewer had completed a bachelor's degree or more (Table 56).

The population of new mothers in the Southwest Maricopa Region was also similar to mothers across the county and statewide on other attributes. About 4 in 10 mothers (41%) in the region were not married (43% Maricopa County, 45% statewide) and 7 percent were in their teens (7% county, 8% statewide) (Table 57). In Southwest 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 slightly lower proportion of mothers in the Southwest Maricopa Region reported smoking (3.0%) than across 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 57). 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 Alaska native (2.9%), Hispanic or Latina (1.8%), and 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%), which is to be expected given that low-income women are more likely to have obesity in the United States.[152] In the Southwest Maricopa Region, this rate was similar; 27 percent of women had overweight, and 30 percent had obesity, for a total of 57 percent who had overweight or obesity before becoming pregnant (Figure 14). The rate of obesity in the region, county, and the state has increased since 2012 (see Figure 15); in Southwest Maricopa, it rose to 30.5 percent in 2015 after having been fairly stable around 29.3 percent for several years. This increase mirrors worrisome national trends as well.[153]

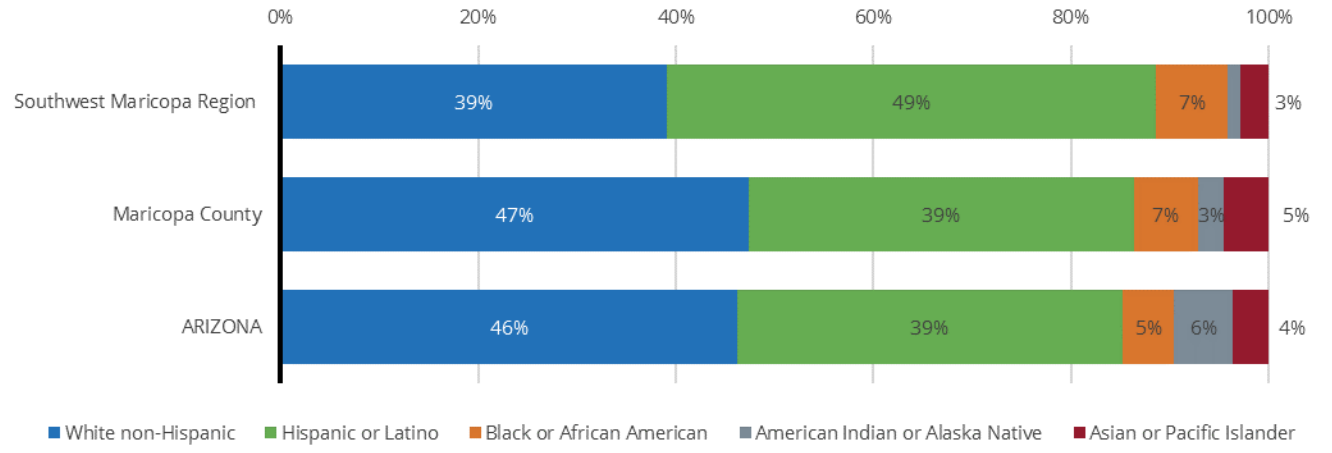
Table 56. Live Births During Calendar Year 2014, by Mother's Educational Attainment

	Less than high school	High school or GED	Some college or professional education	Bachelor's degree or more
Southwest Maricopa Region	16%	29%	35%	20%
Maricopa County	20%	24%	30%	26%
ARIZONA	20%	25%	31%	23%

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

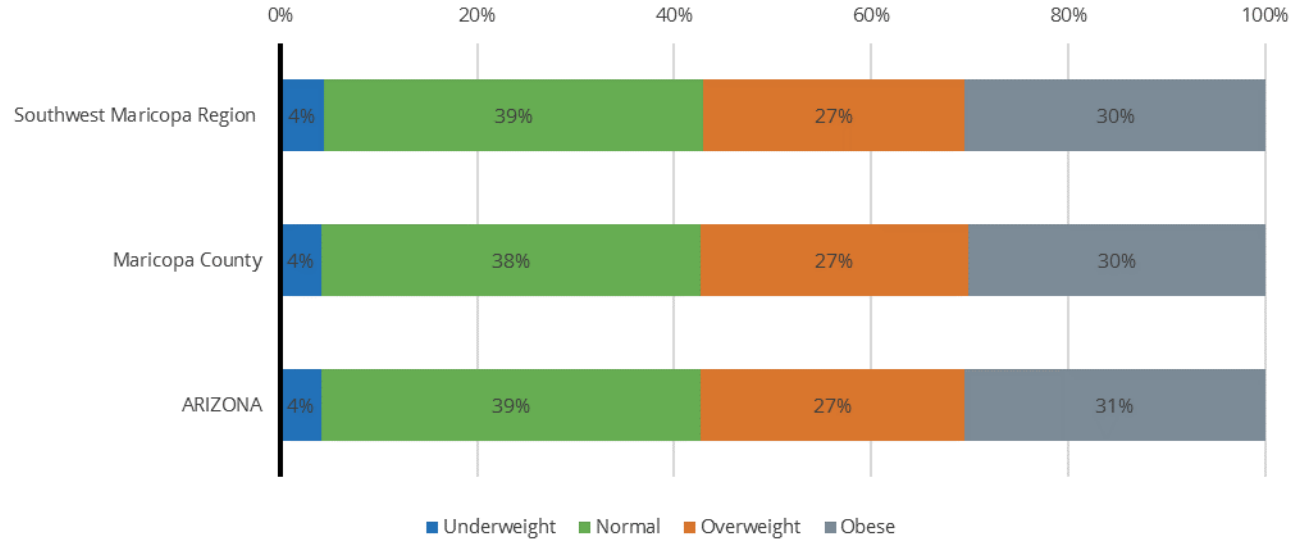
[xix] *Note that the Centers for Disease Control now use language consistent with the perspective that obesity is a disease state. We have adopted that language. See https://www.cdc.gov/obesity/data/adult.html.*

Figure 13. Race and Ethnicity of Mothers Giving Birth in 2014



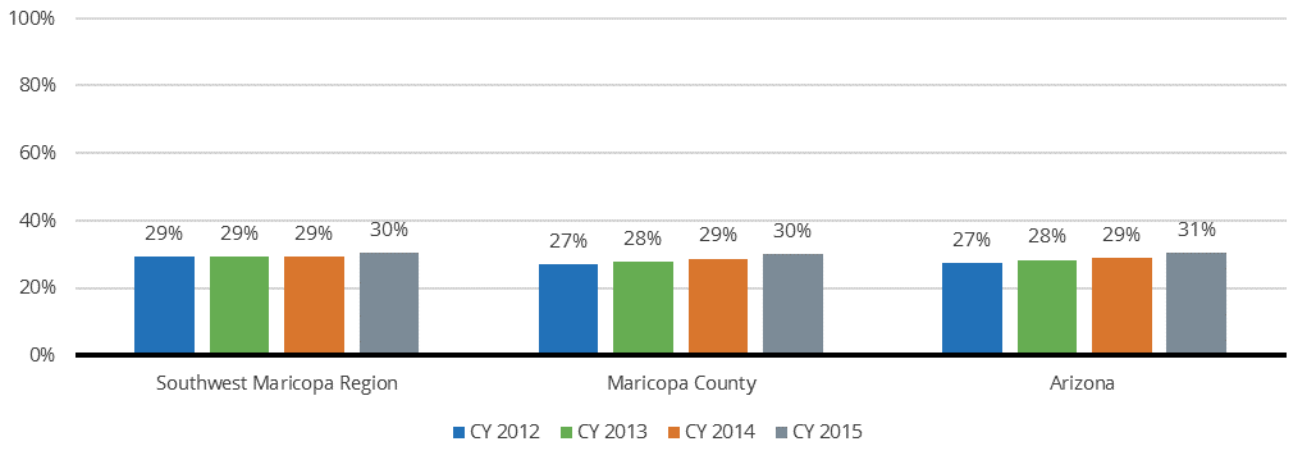
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 14. Pre-Pregnancy Weight Status for WIC Women, 2015



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

Figure 15. Pre-Pregnancy Obesity Rates for WIC Women, 2012 to 2015



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

Table 57. 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
Southwest Maricopa Region	41%	7%	2%	51%	3%
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.

Prenatal Care

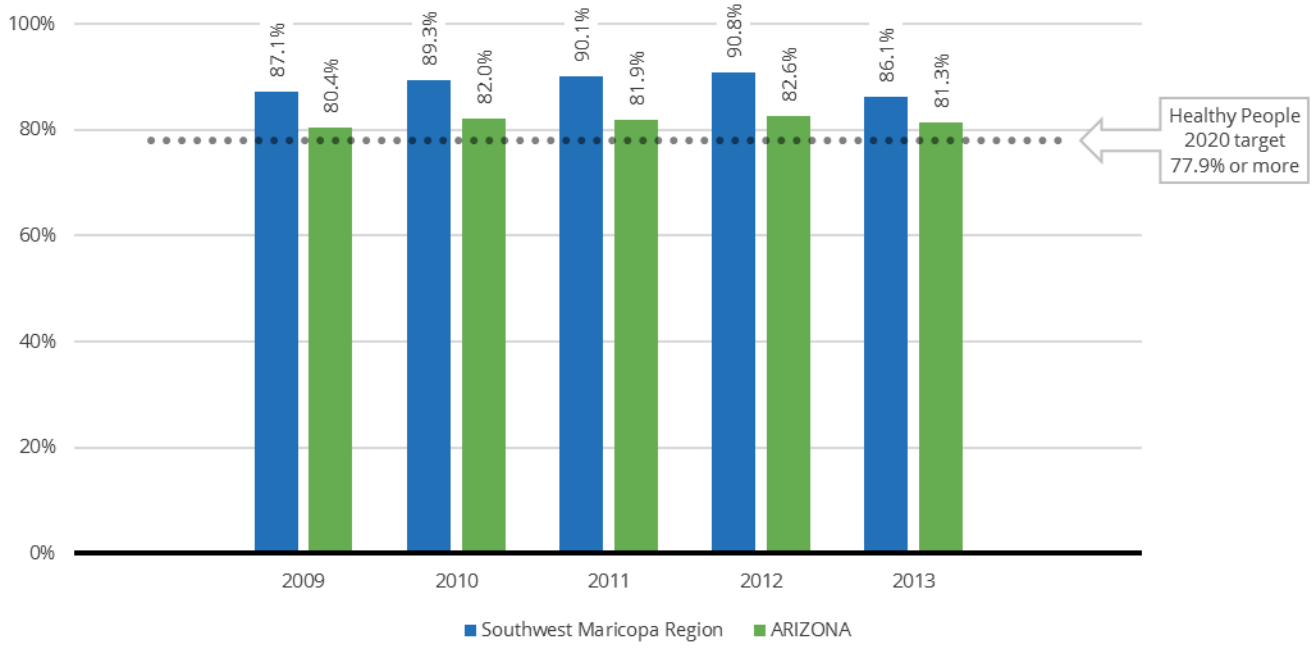
The Healthy People 2020 goal is that at least 77.9 percent of pregnant women receive prenatal care that begins in the first trimester of pregnancy. Prior to 2014, the percent of women with early prenatal care was never lower than 86 percent, meeting the Healthy People 2020 goal each year from 2009 to 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, 68 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 4.6 percent of babies in the Southwest Maricopa Region were born to mothers who had had fewer than five prenatal care visits (Table 58). The Southwest Maricopa Region had a slightly lower proportion of mothers with few prenatal visits, compared to the state, where 6.5 percent of births were to mothers who had fewer than five prenatal care visits.

The Arizona Department of Health Services designates Primary Care Areas (PCAs) as geographically based areas in which most residents seek primary medical care from the same place. [155] There are 4 primary care areas that coincide with the Southwest Maricopa Region, and attainment of prenatal care varied within these smaller areas. Within the Southwest Maricopa Region, babies in the Estrella Village-Tolleson Primary Care Area were the most likely to have been born to mothers who had not received any prenatal care, and babies born in the Goodyear-Litchfield Park Primary Care Area were the most likely to have received prenatal care, although the difference was small.

Figure 16. 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.

Table 58. 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
Southwest Maricopa Region	2%	3%	13%	48%	33%	5%	68.0%
Maricopa County	2%	3%	13%	49%	32%	5%	67.2%
ARIZONA	2%	4%	15%	47%	31%	6%	66.0%

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

Table 59. Percent of Births With No Prenatal Care, by Primary Care Area, 2012 to 2015

	2012	2013	2014	2015
Southwest Maricopa Region	N/A	N/A	N/A	N/A
Avondale Primary Care Area	0.9%	0.8%	2.1%	1.5%
Buckeye Primary Care Area	0.9%	0.9%	1.5%	0.9%
Estrella Village-Tolleson Primary Care Area	1.4%	0.9%	2.4%	1.7%
Goodyear-Litchfield Park Primary Care Area	0.7%	0.6%	1.4%	#N/A
Maricopa County	1.0%	0.9%	1.6%	1.5%
ARIZONA	1.2%	1.4%	2.1%	2.2%

Source: Arizona Department of Health Services (2016). Bureau of Health Systems Development. Primary Care Area statistical profiles.

Birth Outcomes

With regard to perinatal health, babies from the Southwest Maricopa Region fared similarly to babies born statewide. In the region in 2015, two PCAs (Estrella Village-Tolleson Primary Care Area, 6.3%; Goodyear-Litchfield Park Primary Care Area, 6.3%) had lower rates of low birthweight babies than the county (7.1%) and the state (7.2%), and two PCAs had slightly higher rates (Avondale Primary Care Area, 7.4%; Buckeye Primary Care Area, 7.5%). The region overall (7.0%) was approximately equal to the state (Figure 17). The percent of premature births in the region has declined since 2009, to be approximately equal to that in the state as of 2014, with 8.9 percent in the region, and 9.0 percent across the state falling into this category (Figure 18). 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

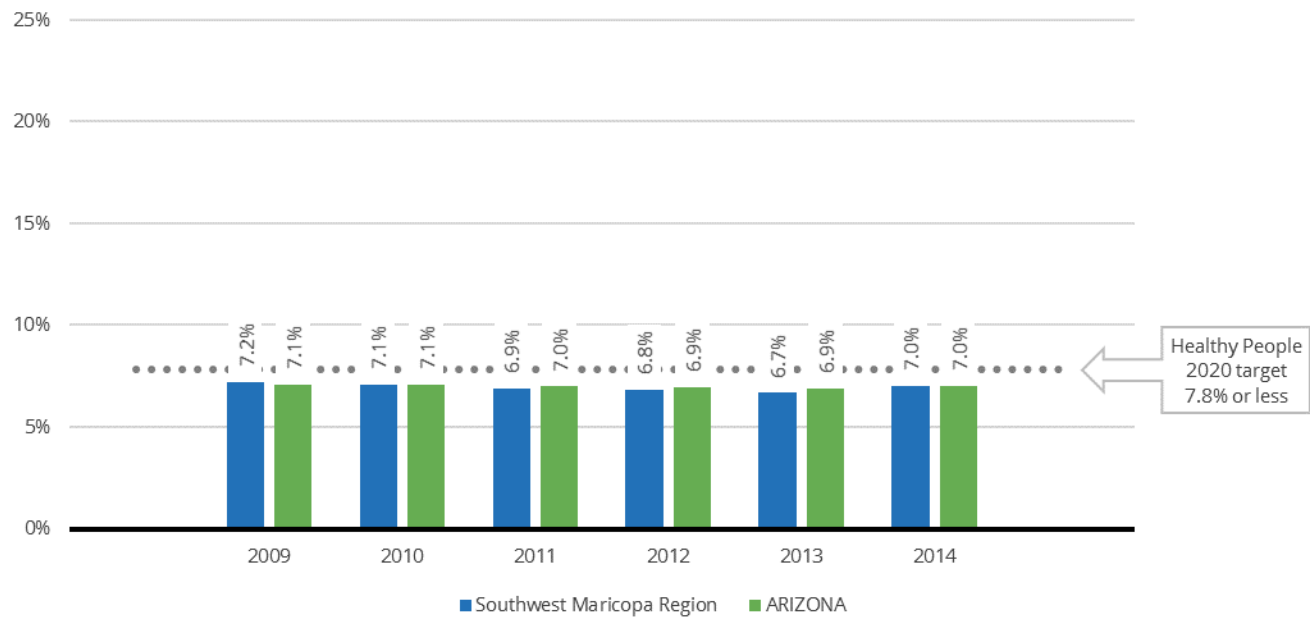
Southwest Maricopa Region has achieved the Healthy People 2020 goal for both low birthweight births and preterm births. The percentage of newborns admitted to the NICU in the region (7%) was comparable to that across the county or state (7% for both) (Table 61).

Infants enrolled in WIC fell below the Healthy People 2020 goal of 81.9 percent of babies ever being breastfed in the Southwest Maricopa Region (2015: 70.4%), as did babies in Arizona (71.2%) (Figure 19). Rates in the Southwest Maricopa Region have typically been slightly lower than rates in Maricopa County and Arizona as a whole, but rates across all geographies consistently rose between 2012 and 2015. In the region, the rate rose by nearly 13 percentage points during that time, and in 2015, surpassed the rate in Maricopa County. Data on the complete (i.e., including those not participating in WIC) Southwest Maricopa Region infant population are unavailable. However, data from the National Immunization Survey on children born in 2013 estimated the Arizona statewide rate of infants ever-breastfed was 85.0 percent, suggesting that WIC participants are less likely to be breastfed than other infants.[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, 5 out of every 100 newborns (5.0%) did not pass an initial hearing screen. However, only 0.6 percent of newborns required a diagnostic evaluation and a very small proportion, 0.1 percent, of all babies were found to have confirmed hearing loss (Table 62). This was similar to the proportion across the state with confirmed hearing loss.

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



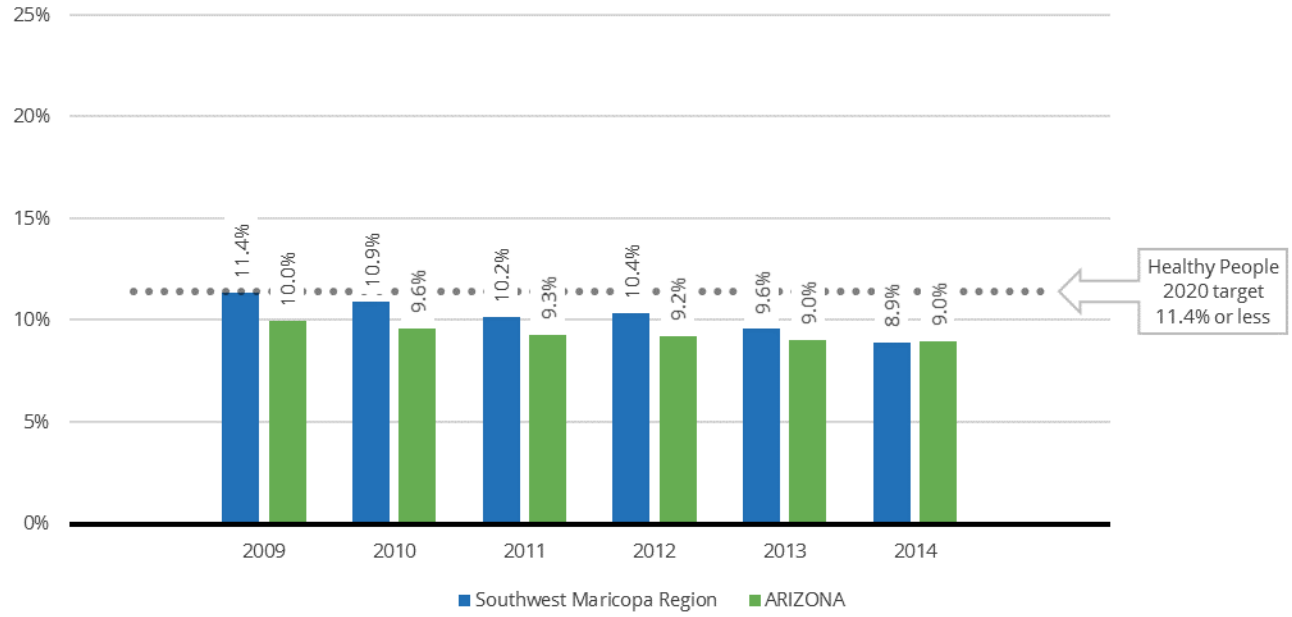
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Table 60. Percent of Babies Born With Low Birthweight (5.5 Pounds or Less), by Primary Care Area

	2012	2013	2014	2015
Southwest Maricopa Region	N/A	N/A	N/A	N/A
Avondale Primary Care Area	6.5%	6.1%	6.2%	7.4%
Buckeye Primary Care Area	5.3%	7.6%	8.1%	7.5%
Estrella Village-Tolleson Primary Care Area	7.7%	6.4%	6.8%	6.3%
Goodyear-Litchfield Park Primary Care Area	7.5%	6.8%	7.0%	6.3%
Maricopa County	6.8%	6.9%	7.0%	7.1%
ARIZONA	6.9%	6.9%	7.0%	7.2%

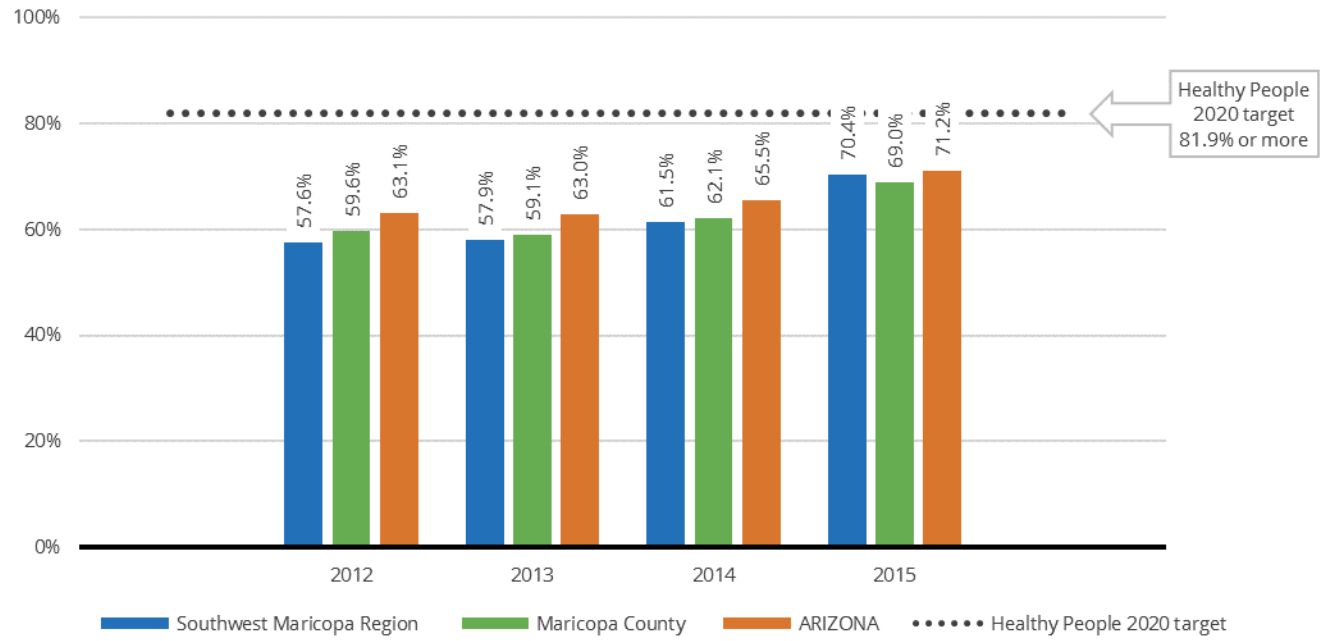
Source: Arizona Department of Health Services (2016). Bureau of Health Systems Development. Primary Care Area statistical profiles.

Figure 18. Percent of Babies Born Premature in 2009-2014 (37 Weeks or Less)



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

Figure 19. WIC Infants Who Were Ever Breastfed, 2012 to 2015



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

Table 61. NICU Admissions

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

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

Table 62. Newborn Hearing Screening Results

	Newborns with hearing screening	Newborns not passing initial screen	Newborns requiring diagnostic evaluation	Newborns with confirmed hearing loss
Southwest Maricopa Region	4,428	5%	1%	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 Southwest Maricopa Region had completed each of the three major (DTAP, polio, and MMR) vaccine series; the regional rates were slightly higher than those of the county and state (Table 63). The Healthy People 2020 target for vaccination coverage for children ages 19-35 months for these vaccines is 90 percent,[156] 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.[xxi] 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.[xxii] Rates for the three major (DTAP, polio, and MMR) vaccine series for children in kindergarten were similar to rates for children in child care, even though more kindergarteners had claimed non-medical exemptions (Table 64). 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 religious/personal exemptions for vaccinations among children in child care (2.5%) and kindergarten (3.9%) 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 63. 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
Southwest Maricopa Region	3,700	92%	95%	95%	94%	87%	94%	95%	2.5%	0.5%
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 64. 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
Southwest Maricopa Region	4,896	94%	94%	94%	96%	97%	3.9%	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 Southwest 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 Southwest Maricopa 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

[xxiii] *Please see appendix for methodology.*

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

the Healthy People's 2020 target (26%), there remains a need for focused oral health efforts on primary prevention across the state.

Oral health care may be an under-emphasized issue with regards to children with special needs, because of the other perhaps more salient health needs. In addition to the chronic conditions that children with special health care needs face, they also are twice as likely to have unmet oral health care needs that their typical peers, and face additional barriers to care including inaccessibility of dental offices and limited dentists willing to treat children with special healthcare needs.[157]

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.[158] 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 these deaths, 287 (38%) were neonates (less than four weeks), 178 (23%) were infants (between four weeks and one year), and 101 (13%) were young children (between 1 and 4 years old). In addition, there were 201 deaths (26%) in the 5- to 17-year-old group.

Most of the neonatal deaths were from natural causes (primarily prematurity or congenital anomaly). The leading cause of infant death was suffocation. And the primary causes of death for the 1- to 4-year-olds were drowning, cardiovascular disease, and motor vehicle accidents. In 2015, 10 percent of perinatal deaths, 48 percent of infant deaths, and 57 percent of young child deaths in Arizona were deemed preventable.

Fatalities were overrepresented among African American children (9% of child deaths) and American Indian children (9% of child deaths) in the state. African American children (ages 0 to 17) were disproportionately more likely to die from natural causes, including prematurity, unintentional injuries such as motor vehicle crashes and drowning, SUID, maltreatment-related deaths and homicide. The mortality rate for African American children (ages 0 to 17) was 74.4 deaths per hundred thousand population, which was higher than the overall rate of 47.3 per 100,000. Hispanic neonates and infants have an elevated risk of death attributed to prematurity.

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. The infant mortality rate in Arizona in 2015 was 5.5 deaths per thousand live births.

Weight Status

Based on data from the Centers for Disease Control and Prevention (CDC), adult obesity increased slightly overall in Maricopa County between 2011 and 2013 (from 22.6% to 25.4%) (Table 65). 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.[xxv] State 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 Southwest Maricopa Region in 2015, 9.5 percent had obesity and an additional 13 percent have overweight (Figure 20). Promisingly, the proportion of children with obesity declined steadily between 2012 and 2015, dropping from 13.1 percent in 2012 to 9.5 percent in 2015 (Table 66). This pattern mirrors national patterns, where 2014 saw a decrease from 2010 among WIC participants ages 2 to 4.[159] Based on these data, the Southwest Maricopa Region is very close to 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. Considering that a little over half of the population in Southwest Maricopa participates in WIC, the population of children in the region overall may be meeting the Healthy People 2020 goal.

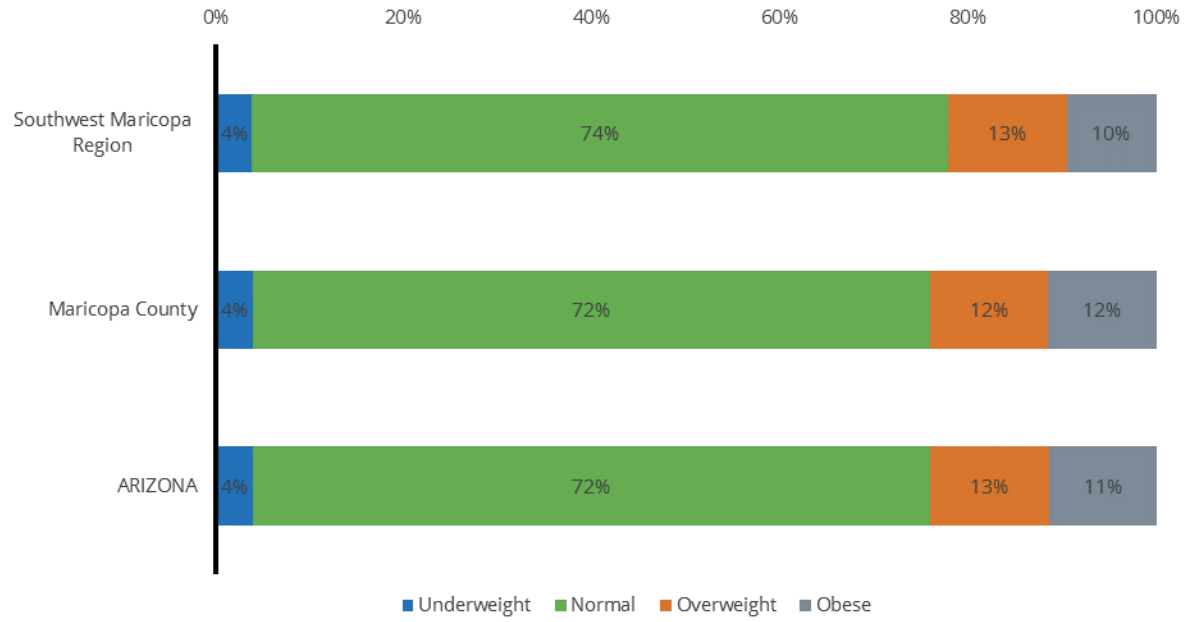
Table 65. Adult Obesity Rate, According to the CDC

	CDC adult obesity rate, 2011	CDC adult obesity rate, 2012	CDC adult obesity rate, 2013
Southwest Maricopa Region	N/A	N/A	N/A
Maricopa County	23%	22%	25%
ARIZONA	25%	26%	27%

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

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

Figure 20. WIC Children's Weight Status, 2015



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

Table 66. 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
Southwest Maricopa Region	13.1%	11.4%	10.1%	9.5%	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.

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[160,161] and promote better social, physical, academic and economic outcomes later in that child's life.[162,163] Parental and family involvement is positively linked to academic skills and literacy in preschool, kindergarten and elementary school.[164] 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.[165] Reading aloud, singing songs, practicing nursery rhymes, and engaging in conversation primes children to reach their full potential. To assess the degree to which these activities are happening across the state, the First Things First 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.[166]

Not all children are able to begin their lives in the most positive, stable environments. Adverse Childhood Experiences (ACEs)[167] 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.[168] Children in Arizona are more likely to have experienced two or more ACEs (31.1%) than children across the country (21.1%).[169] 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. [170] 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.[171]

[xxvi] *For more information on Read On Arizona, visit* http://readonarizona.org/

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.[172] 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. [173] 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.[174]

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.[175] 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.[176] 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.[177]

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

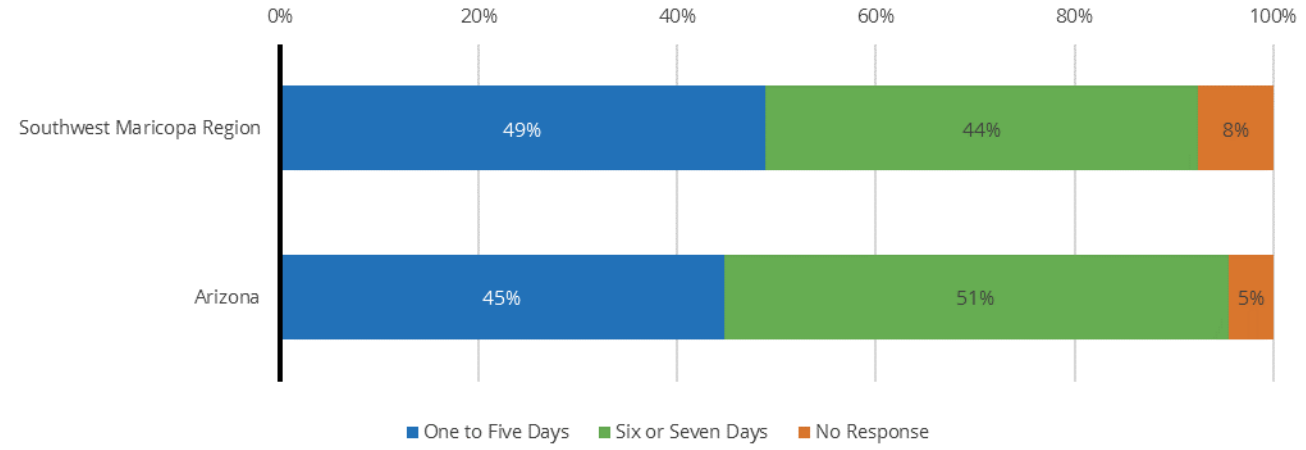
What the Data Tell Us

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.[179] Interventions known to have a positive impact on these skills include shared-reading interventions, parent and home programs, and preschool and kindergarten programs.[180]

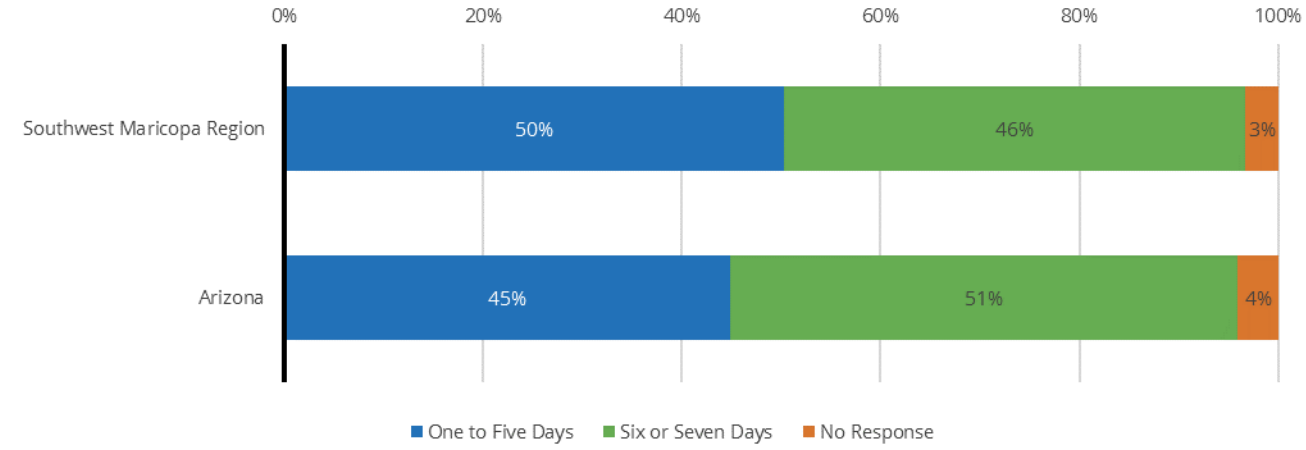
The First Things First Family and Community Survey is a phone-based survey designed to measure many critical areas of parents' knowledge, skills, and behaviors related to their young children. In the Southwest Maricopa Region, 150 people responded to the 2012 First Things First Family and Community Survey. 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 Southwest Maricopa Region were less likely to report reading to their children (44%) and telling stories to their children (46%), but as likely to report drawing with their child (47%) six or seven days a week compared to parents across the state (51%, 51% and 47%, respectively) (see Figure 16, Figure 17, and Figure 18). Parents in the Southwest Maricopa Region also showed a lower level of understanding that brain development can be impacted prenatally or right from birth (70%) than did respondents across the state as a whole (80%) (see Figure 19).

Figure 21. Responses to "During the past week, how many days did you or other family members read stories to your child?"



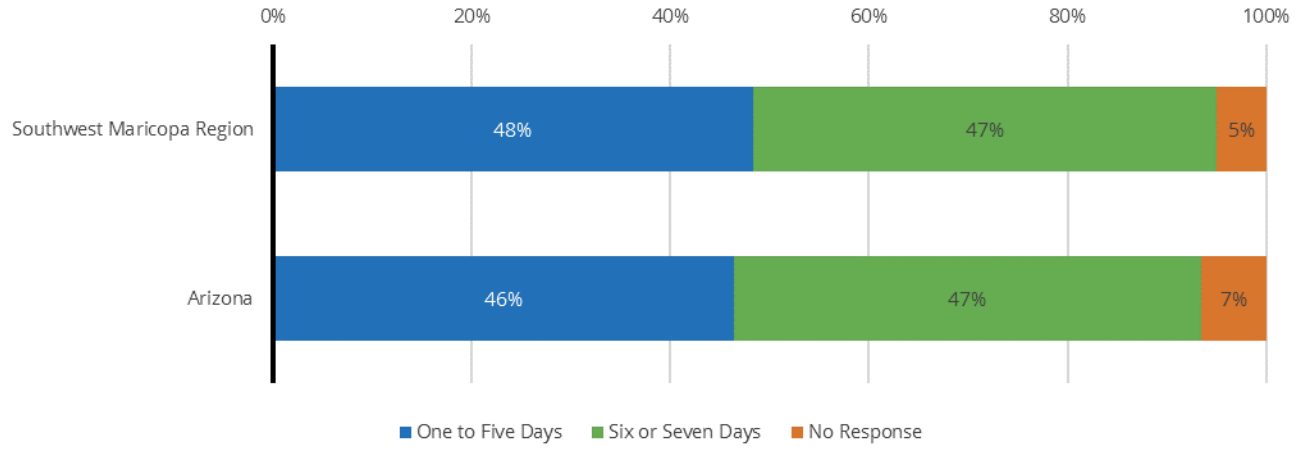
Source: First Things First (2014). [2012 Family and Community Survey dataset]. Unpublished data.

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



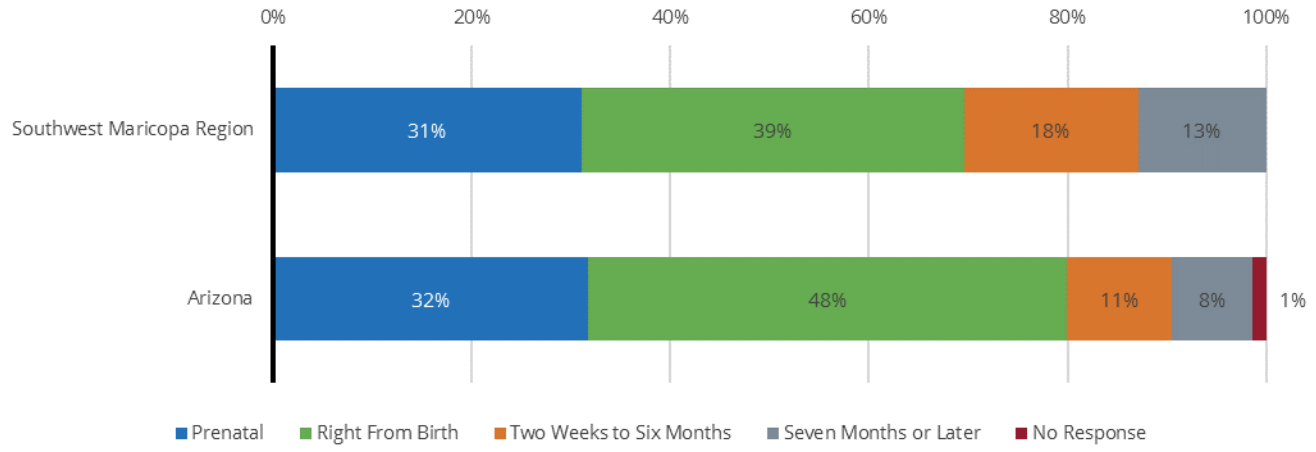
Source: First Things First (2014). [2012 Family and Community Survey dataset]. Unpublished data.

Figure 23. Responses to "During the past week, how many days did your child/children scribble, pretend draw or draw with you or another family member?"



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

Figure 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 1-September 30, 2015 reporting period. In the last two reporting periods available, reports were lower, with 24,787 reports in the last period available, April 1-September 30, 2016.[181] According to this latest report, of 14,350 reports of abuse and neglect received during that period for Maricopa County, 1,709 (12%) reports resulted in a removal from the home (Table 67); note this number reflects all children, not just those aged birth to 5. The proportion of reports resulting in

removal were the same as (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 68).

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 69). More than one in 10 children (13%) entering out-of-home care had been removed at least once in the prior two years.

Table 67. 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
Southwest 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. Retrieved from https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirments_Apr16_Sept16.pdf

Table 68. Department of Child Safety Substantiated Maltreatment Reports, April to September 2016

	Number of substantiated maltreatment reports	Neglect	Physical Abuse	Sexual Abuse	Emotional Abuse
Southwest 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. Tables 19. Retrieved from https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirments_Apr16_Sept16.pdf

Table 69. 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
Southwest 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. Tables 31. Retrieved from https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirments_Apr16_Sept16.pdf

Domestic Violence

The Arizona Department of Economic Security produces an annual report on domestic violence shelters including county-level data on the populations served and services provided. 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 70). 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 70. 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
Southwest 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, 622 pregnant or parenting women received publically funded behavioral health services in the Southwest Maricopa Region (Table 71). This represents a decrease of 32 percent from the 921 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 Southwest Maricopa Region also decreased from 2012 (n=456) to 2015 (n=368), representing a 19 percent decrease (Table 72). This represents approximately seven percent of young children in poverty in the Southwest 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 problems[182], suggesting that there may be an unmet need for services for over 300 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.[183] This suggests that there may be a higher proportion of children not in the child welfare system who would benefit from behavioral health services statewide. 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.[184]

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

[xxviii] *Representing the difference between the 368 low-income children (4%) currently served, and the estimated 704 (13%) likely in need.*

Table 71. Number of Pregnant or Parenting Women Receiving Behavioral Health Services, 2012 to 2015

	2012	2013	2014	2015	Change from 2012 to 2015
Southwest Maricopa Region	921	850	627	622	down 32%
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 72. Number of Children (Ages 0 to 5) Receiving Behavioral Health Services, 2012 to 2015

	2012	2013	2014	2015	Change from 2012 to 2015
Southwest Maricopa Region	456	429	285	368	up 19%
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 73. First Things First Engagement of Early Childhood Supporters, SFY2014 Through SFY2016

	Friends	Supporters	Champions
Southwest Maricopa Region	1,247	256	42
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.

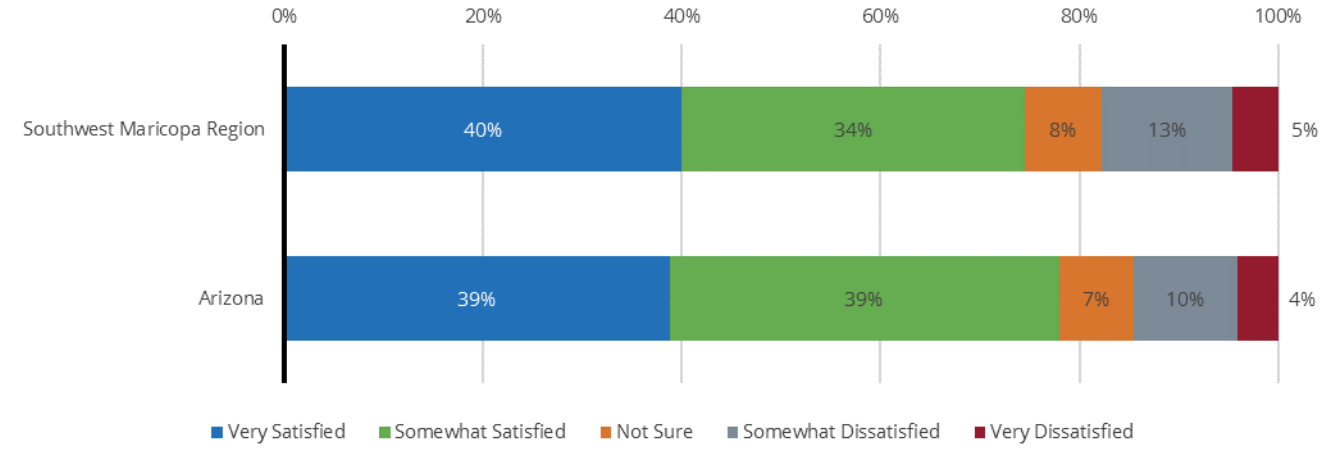
Furthermore, the Arizona Early Childhood Alliance – comprised of early childhood system leaders like FTF, the United Ways, Southwest Human Development, Children's Action Alliance, Read On Arizona, Stand for Children, Expect More Arizona and the Helios Foundation – represent the united voice of the early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

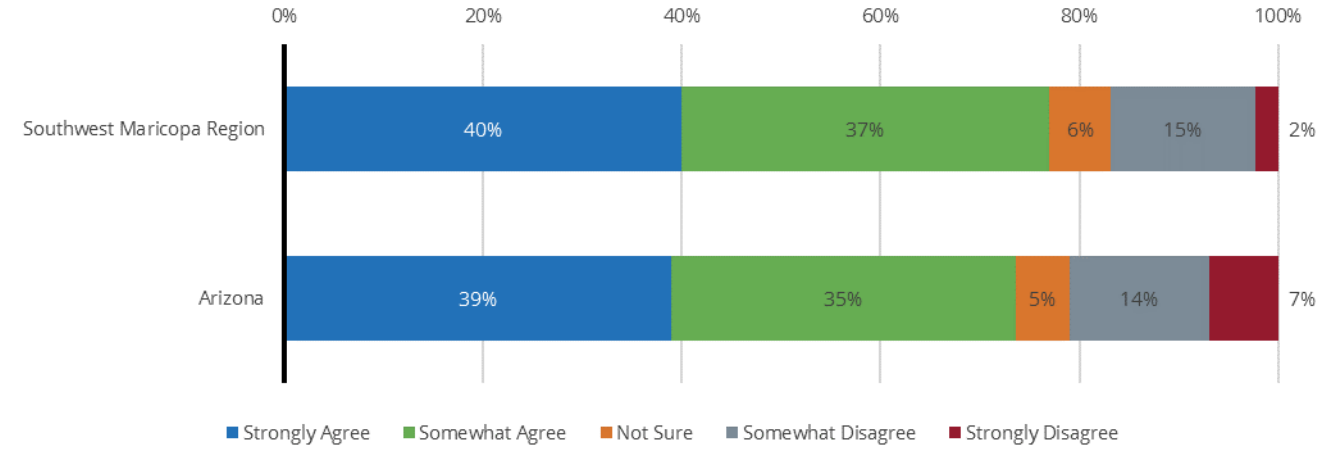
In addition to measuring parent knowledge, skills, and behaviors related to their young children, the 2012 First Things First Family and Community Survey collected data on parents' perceptions regarding resources available to young children and their families across Arizona. Results from the survey demonstrated that residents in the Southwest Maricopa Region had similar levels of satisfaction with available information and resources, and agreement with ease of locating services, compared to the state. Forty percent of Southwest 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 20). Seventy-seven percent of Southwest Maricopa Region respondents "strongly agreed" 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 21). Respondents in both the region and the state were more likely to indicate satisfaction (46% in the region, 43% in the state) than dissatisfaction (16% in the region, 29% in the state) with how care providers and government agencies work together and communicate (see Figure 22). A large percentage of respondents in the region also indicated they were "not sure" (38%) how satisfied they were with providers and agencies' cooperation and communication.

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



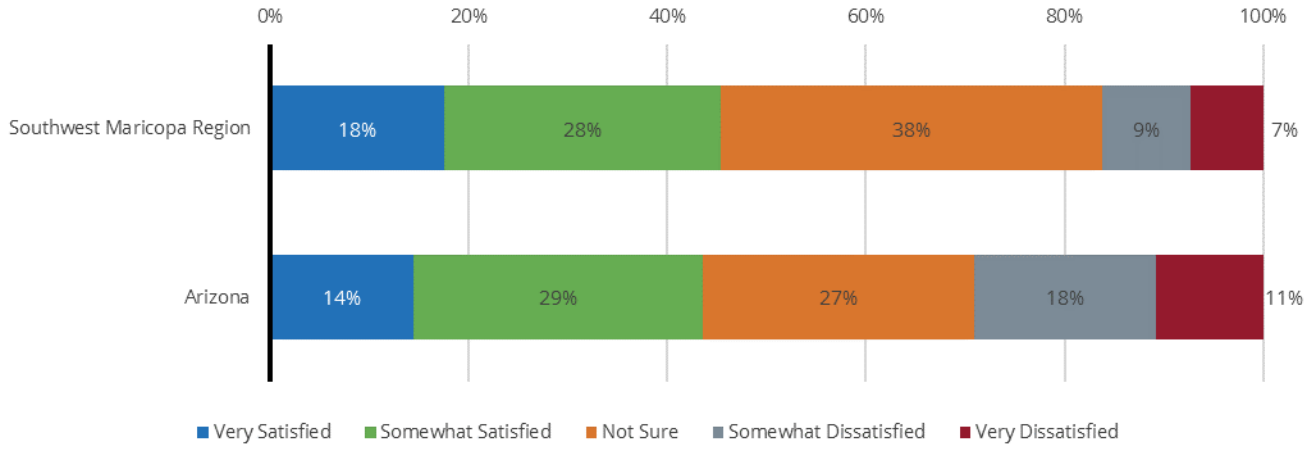
Source: First Things First (2014). [2012 Family and Community Survey dataset]. Unpublished data.

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." 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.[xxx]

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

[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.*

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 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.

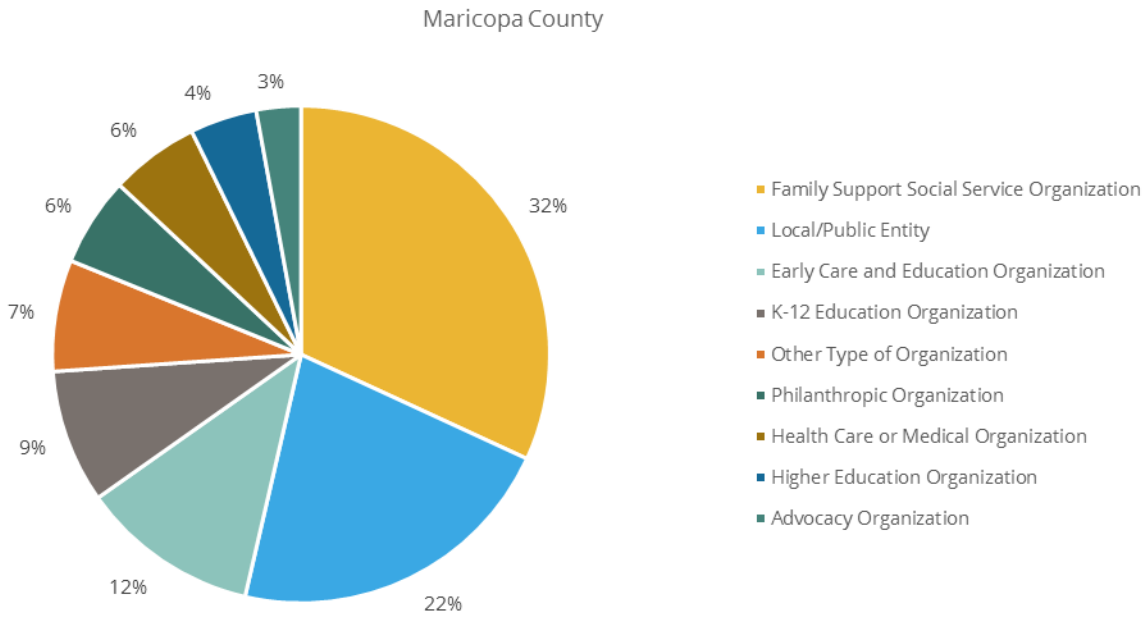
What the Data Tell Us

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)



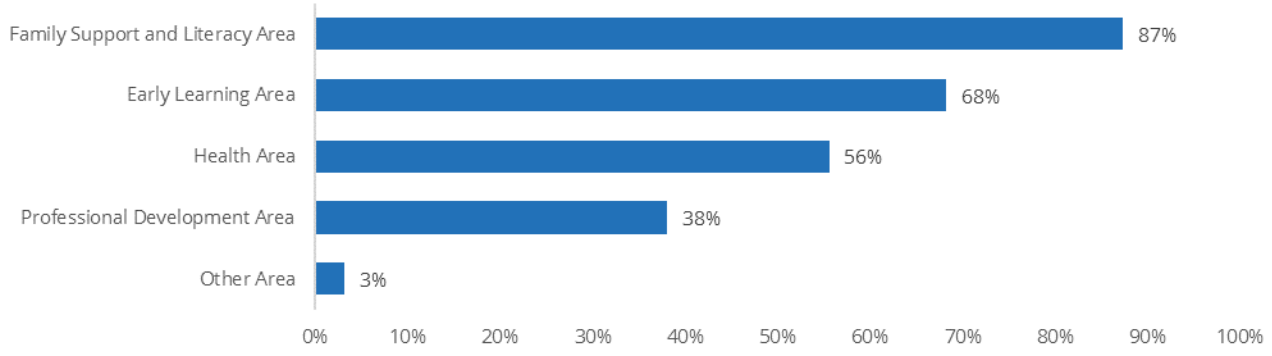
Source: First Things First (2016). [2016 Coordination and Collaboration Survey dataset]. Unpublished data.

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)

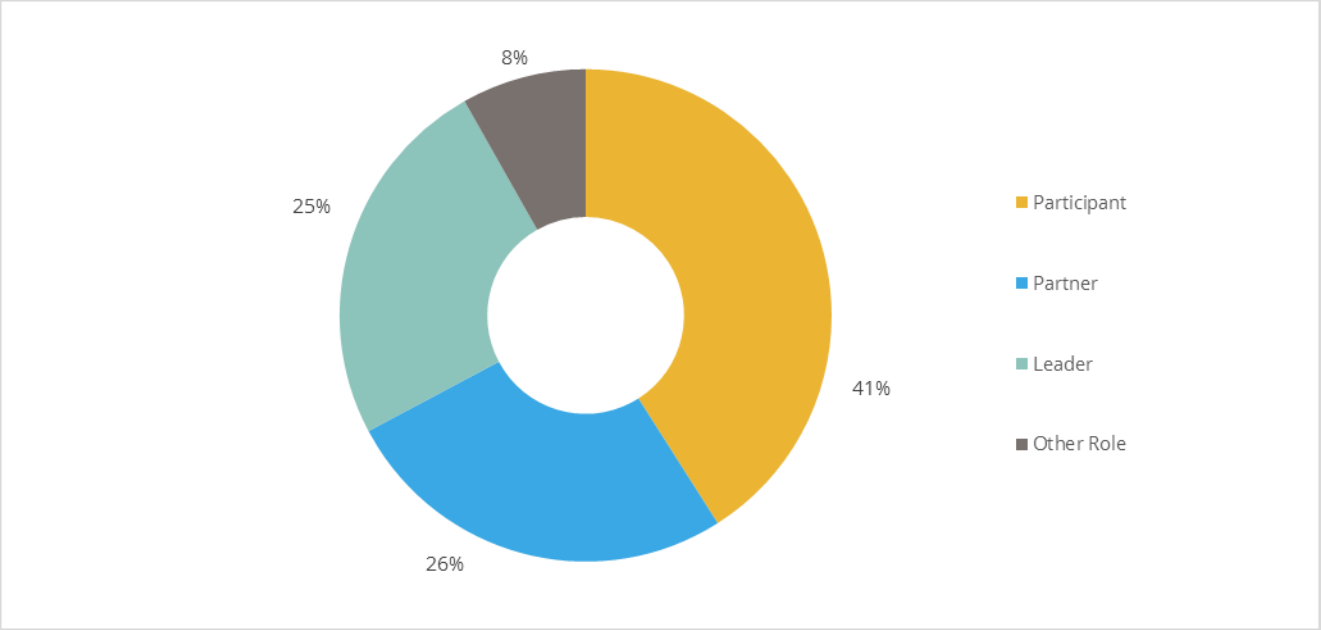


Source: First Things First (2016). [2016 Coordination and Collaboration Survey dataset]. Unpublished data.

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.

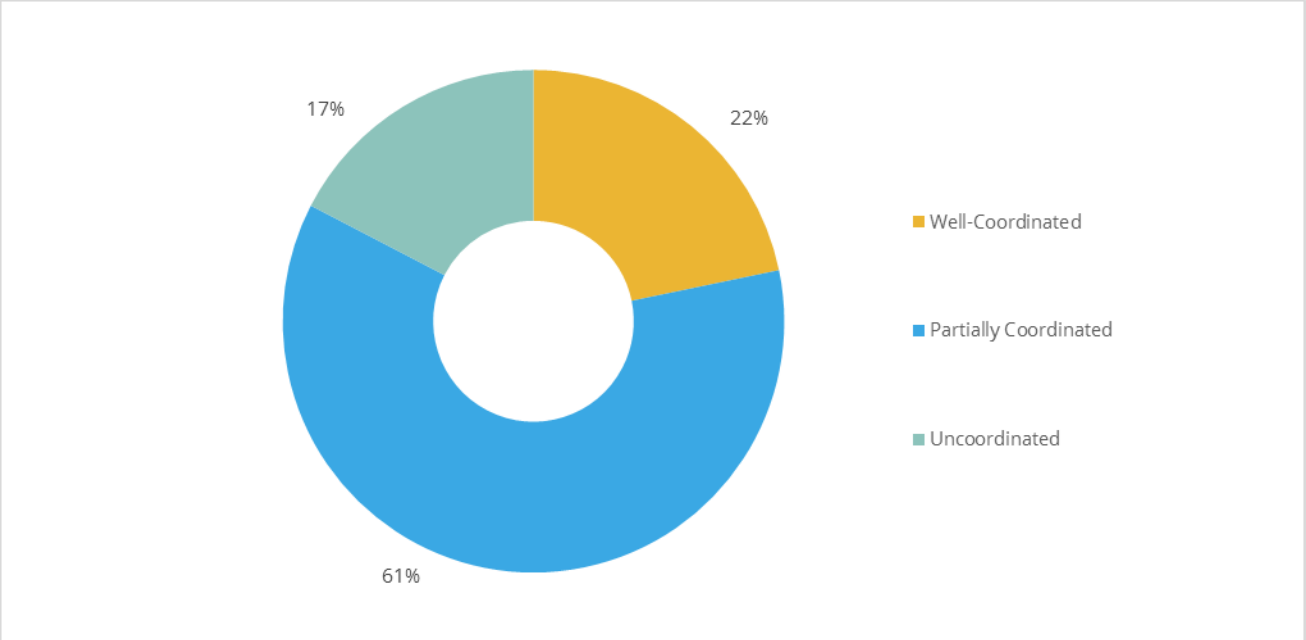
System Partners' Perspective on Systems Building

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).

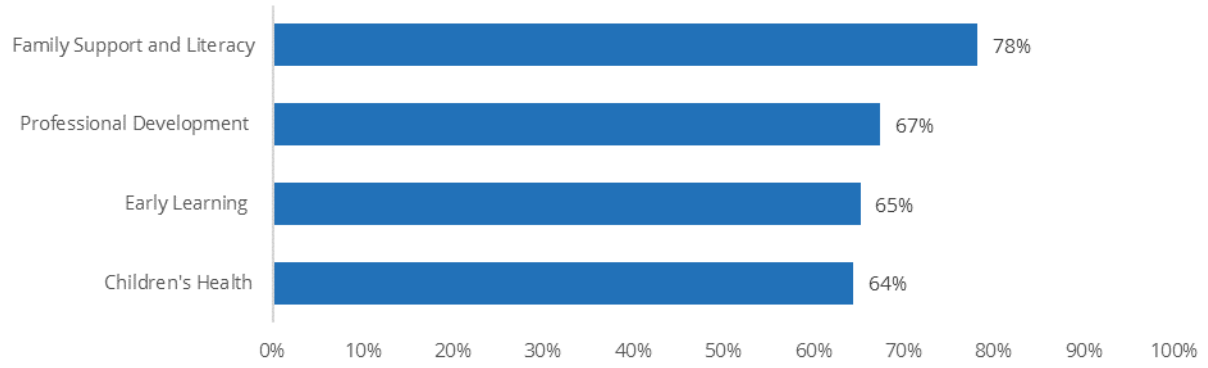
Figure 31. Describe the Early Childhood System in Maricopa County (N=46)



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)

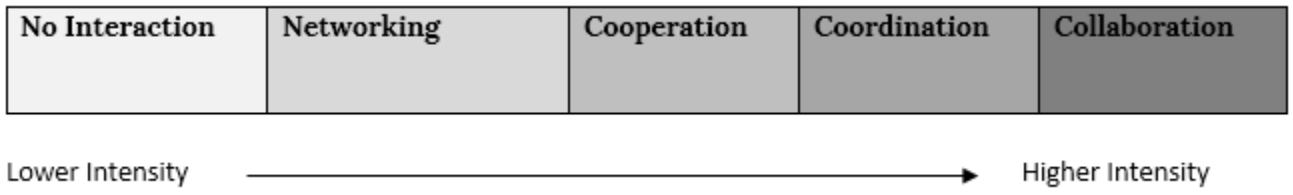


Source: First Things First (2016). [2016 Coordination and Collaboration Survey dataset]. Unpublished data.

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

[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.*

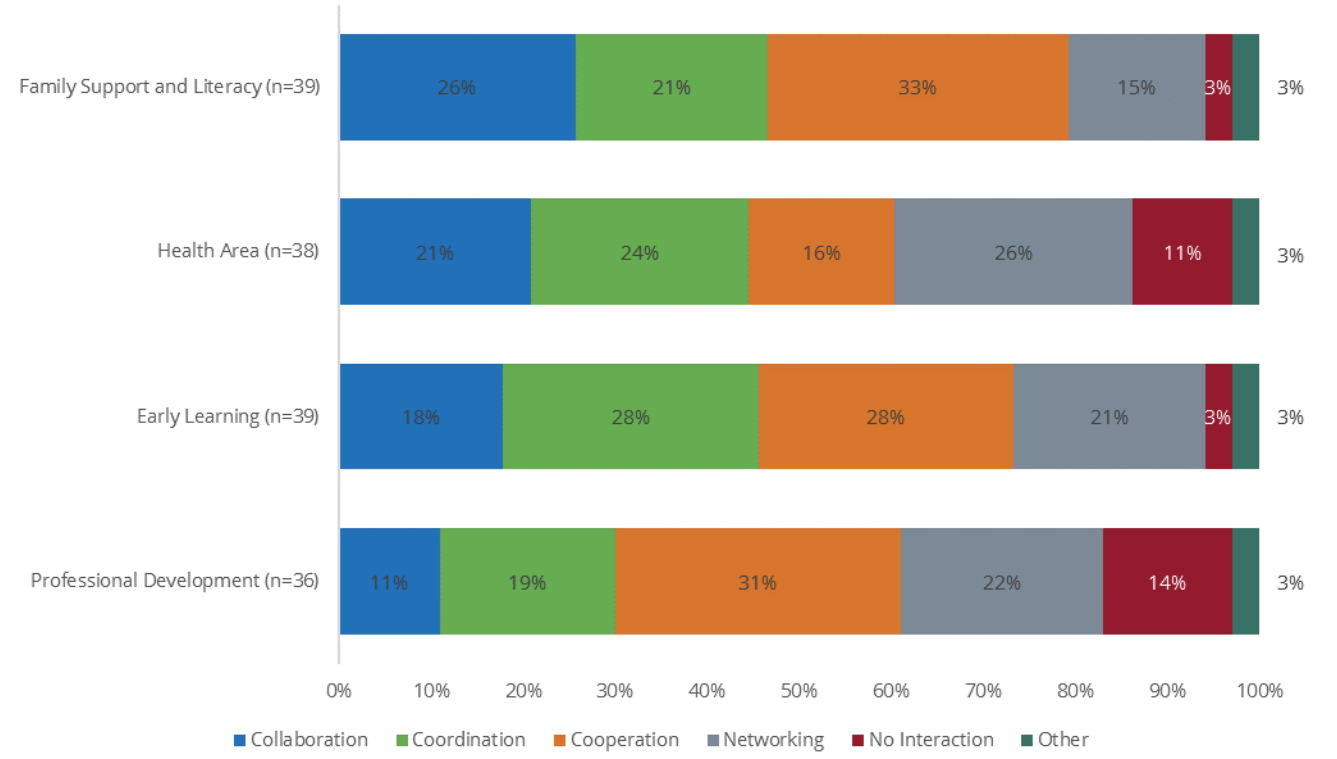
about the subject at hand. Each organization retains authority and keeps resources separate. There is very little risk associated with cooperation.

- *Coordination*: Involves more formal relationships in response to an established mission. Coordination involves some planning and division of roles and opens communication channels between organizations. Authority rests with individual organizations, however, risk increases. Resources are made available to participants and rewards are shared.
- *Collaboration*: Collaboration is characterized by a more durable and pervasive relationship. Participants bring separate organizations into a new structure, often with a formal commitment to a common mission. The collaborative structure determines authority and leadership roles. Risk is greater. Partners pool or jointly secure resources, and share the results and rewards.

Respondents were asked to refer to the Continuum of Collaboration and to indicate the level of collaboration that is occurring among partners in 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.

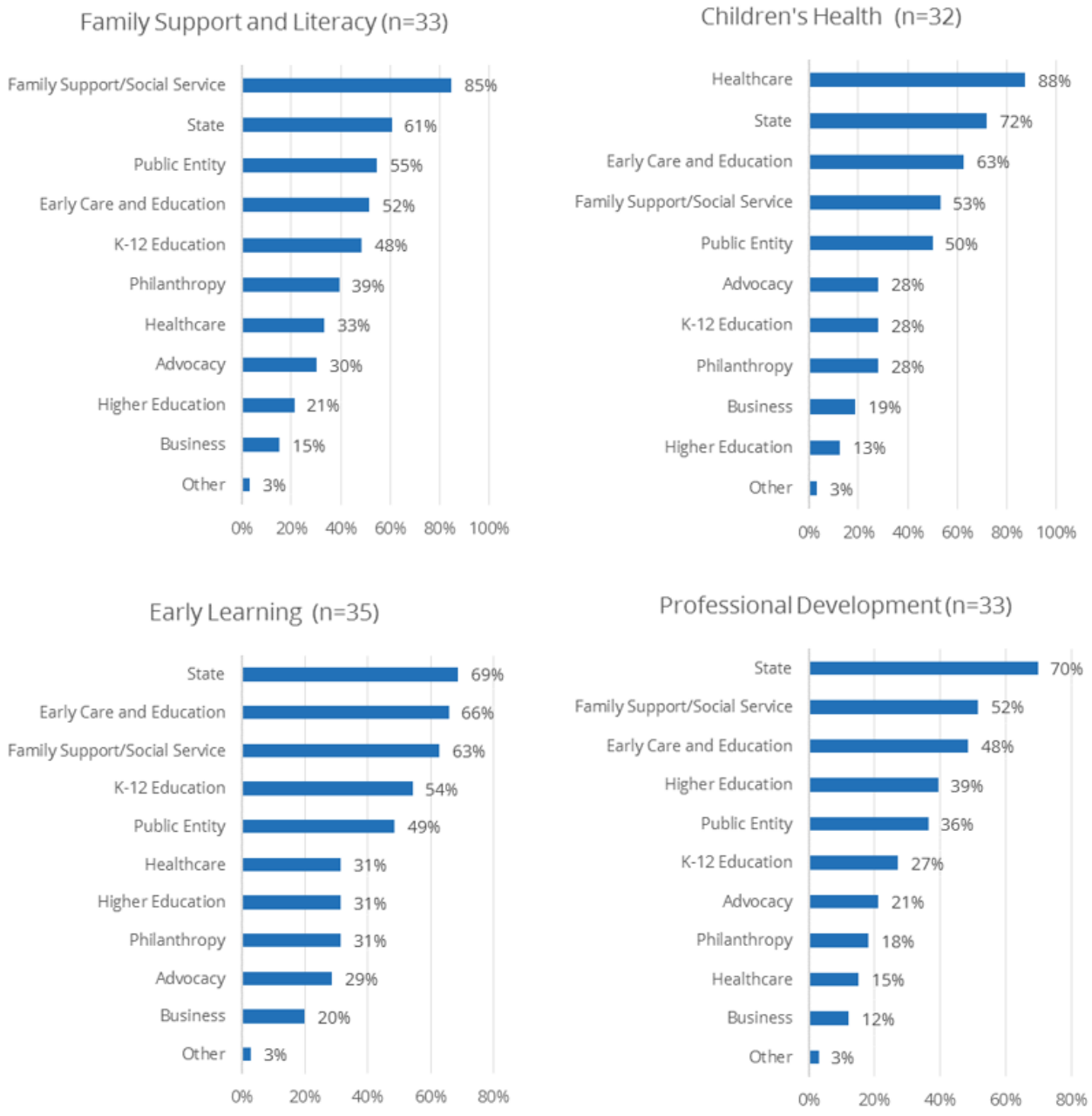
Sectors involved in the Early Childhood System Building

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



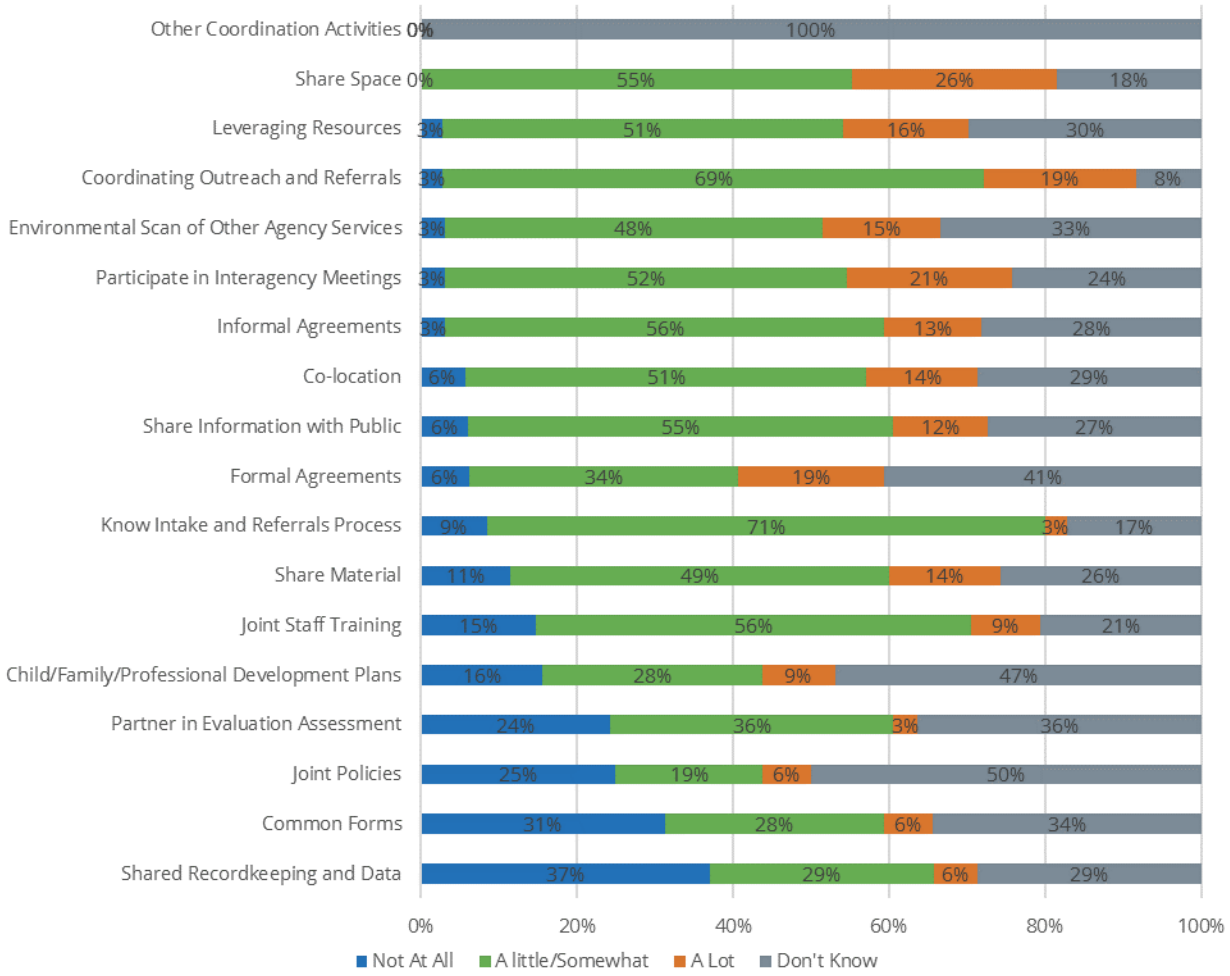
Source: First Things First (2016). [2016 Coordination and Collaboration Survey dataset]. Unpublished data.

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.

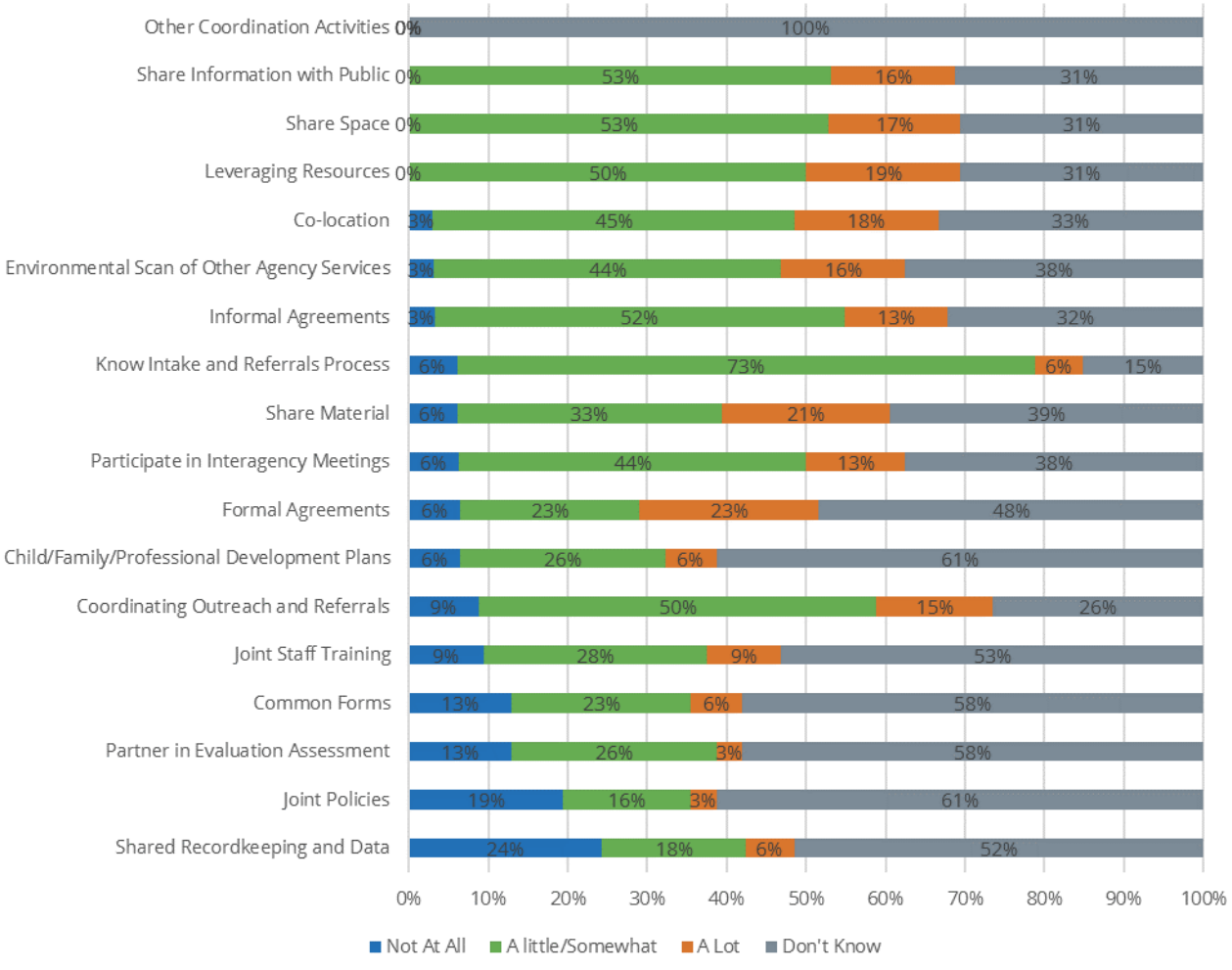
Figure 36. Frequency of Activities: Family Support & Literacy (n=37)



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.

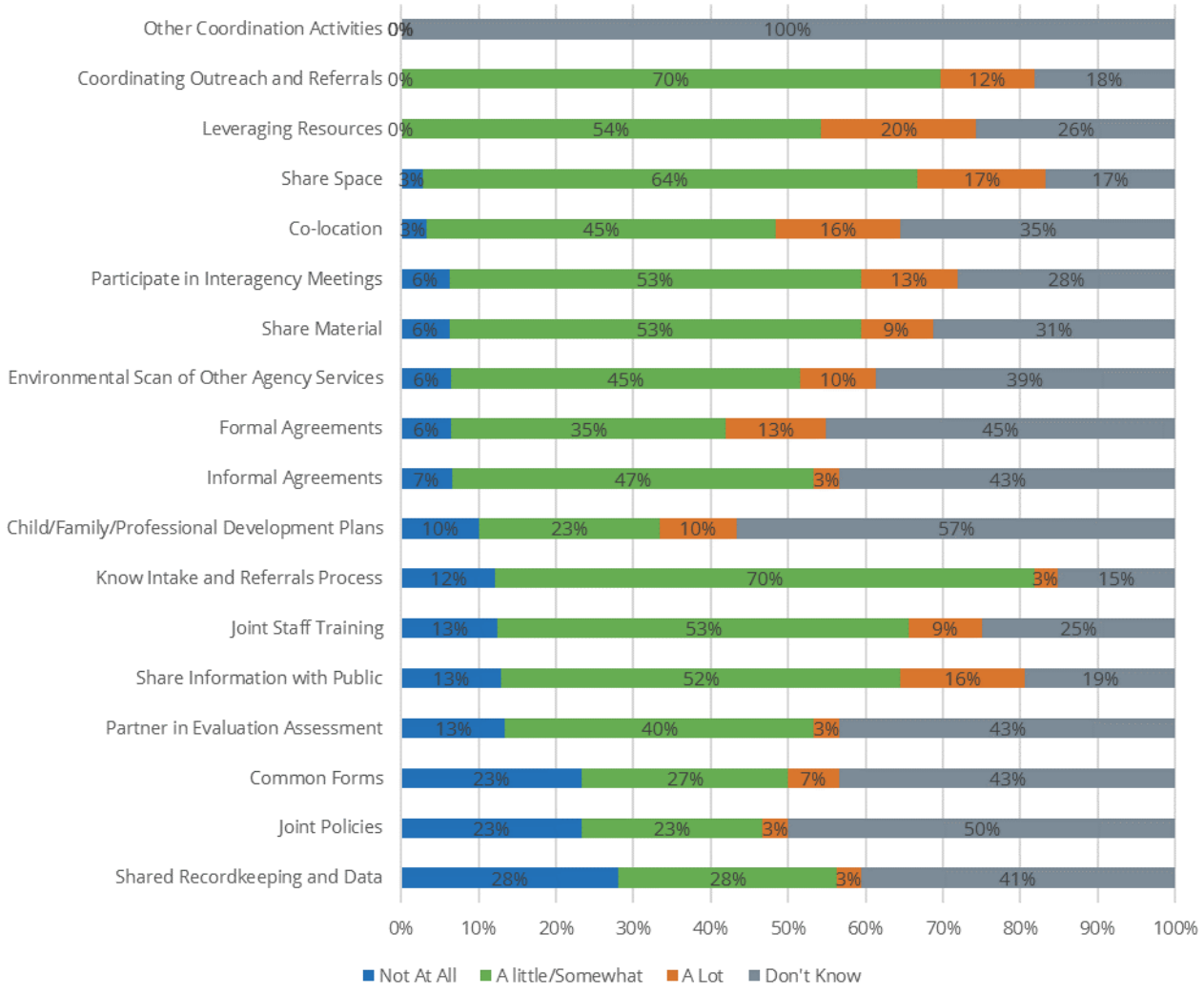
Figure 37. Frequency of Activities: Children's Health (n=36)



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.

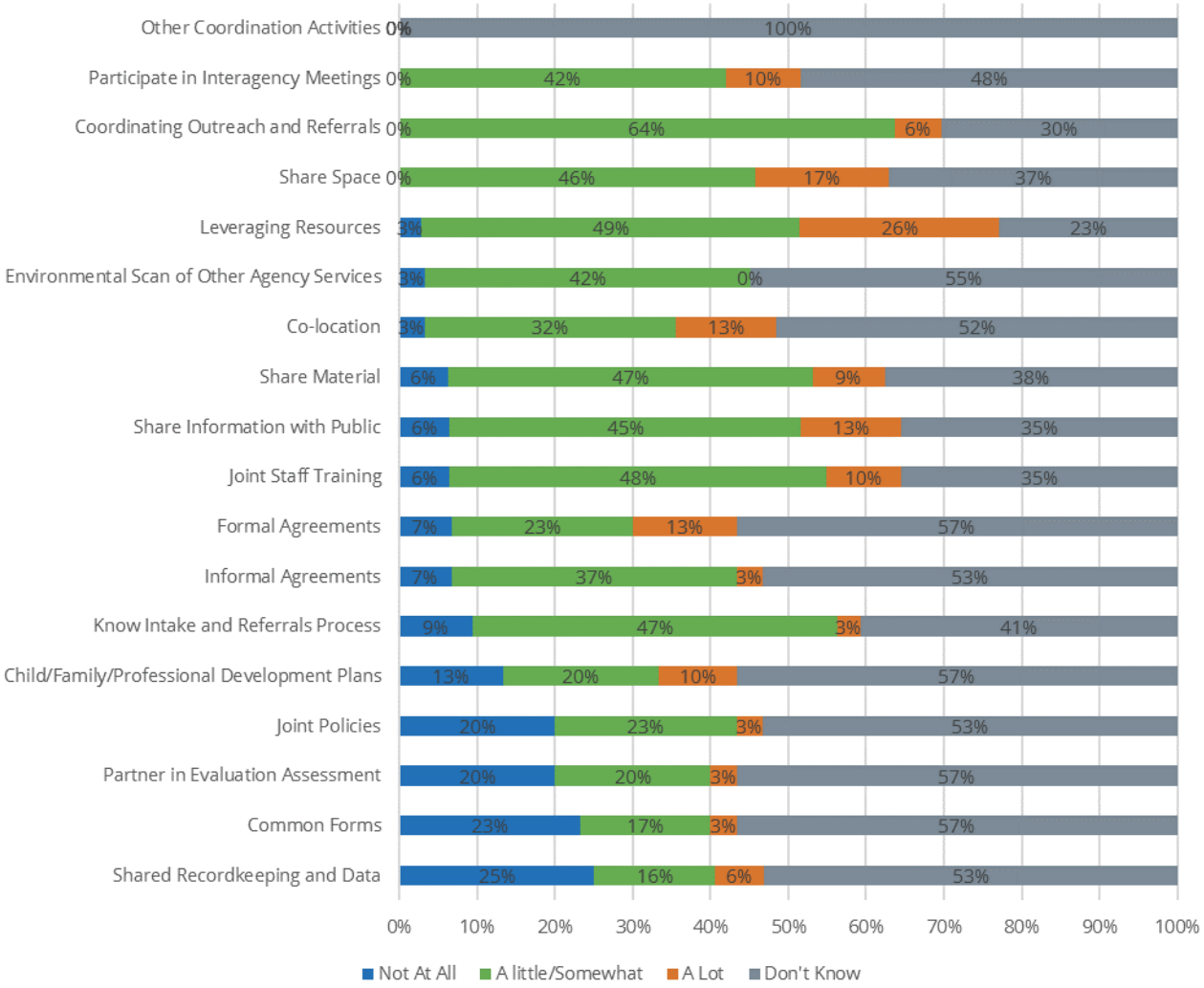
Figure 38. Frequency of Activities: Early Learning (n=35)



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 stymying 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 Southwest 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 Southwest Maricopa Region

Population Characteristics

- Nearly two-thirds of young children live in two-parent households.
- Over 20 percent of Southwest Maricopa residents speak multiple languages proficiently.
- In the Gila Bend-Theba-Sentinel area, 10 percent of residents speak a native language at home, representing an asset for cultural preservation and strengthening children's sense of identity.

Economic Characteristics

- Poverty rates in the Southwest Maricopa Region are lower than for the state as a whole (19% vs 29% for young children, and 14% vs 18% for all ages), although in the Arlington area the rates are higher (46% for young children, and 35% for all ages).
- Steadily declining unemployment rates.
- The Region has more SNAP retailers per capita than the rest of the state (47 vs 63 retailers per 100,000 residents), making it easier for residents to use SNAP benefits.
- A lower percentage of households in the Southwest Maricopa Region have no vehicle (4%), compared to the state (7%); however, the rates are higher in the Arlington (8%) and Gila Bend-Theba-Sentinel (8%) areas.

Educational Indicators

- The four-year graduation rate is higher in Southwest Maricopa (81%) than in Arizona overall (76%); rates are especially good in Buckeye Union High School District and Saddle Mountain Unified School District.

Early Learning

- 24 providers participating in the Quality First program, 15 with a 3- or 4-star rating.
- Pre-kindergarten in Arizona Department of Education (ADE) schools, particularly in Avondale, serves many children with special education needs.
- Arizona Early Intervention Program (AzEIP) served nearly twice as many children in 2015 (430) as it did in years prior, providing an important benefit to young children at risk for developmental delay.

Child Health

- Relatively fewer mothers giving birth in the Region during 2014 reported using tobacco during pregnancy (3%) than in the state as a whole (5%).
- The majority (81%) of babies are born to mothers who received at least nine prenatal care visits.
- Rates of prematurity have been slowly but steadily falling in the Region from 2009 (11.4%) to 2014 (8.9%), and most babies are born at a healthy weight.
- Breastfeeding rates have been increasing among WIC participants.
- Relatively fewer children in childcare in the Region (2.5%) have received religious exemptions from vaccination, compared to the county (3.9%) or the state (3.5%).
- Relatively fewer children in kindergarten in the Region (3.9%) have received personal exemptions from vaccination, compared to the county (4.9%) or the state (4.5%).
- The childhood obesity rate for WIC children in the Region (9.5%) is lower than in the county (11.5%) or state (11.4%).

Family Support and Literacy

- 10 domestic violence shelters exist in Maricopa County to serve women and families in need, at least two of which (Faith House and New Life Center) are in the West Valley.

Communication, Public Information and Awareness

- 42 early childhood "champions" are engaged in the Southwest Maricopa Region, along with 256 "supporters" who have been trained in early childhood messaging.

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 way.
- In the areas of Family Support and Literacy and Early Learning, over 90 percent of respondents reported that partners in Maricopa County are engaged in some level of collaborative activities.

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.

Challenges in the Southwest 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 Litchfield Park and Gila Bend, for example.

Many of these needs have been recognized as ongoing issues by the Southwest Maricopa Regional Partnership Council and are being addressed by current First Things First-supported strategies in the region. A table of Southwest Maricopa Regional Partnership Council funded strategies for fiscal year 2017 is provided in the appendix. These needs include:

A need for affordable, high quality and accessible child care – The capacity of early care and education slots available compared to the number of young children in the region point to a shortage of affordable and accessible early care and learning opportunities in the region. Families in Maricopa County are paying 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, Family, Friend, and Neighbor Care, and Child Care Health Consultation strategies may help address this issue, especially with a focus toward communities with the greatest need for early care and education providers.

A need for services for grandparents raising grandchildren and other kinship caregivers – High percentages of children in some communities (such as Buckeye and Goodyear) live with relatives or grandparents who are responsible for their care. Grandparent-headed families in all parts of the region are likely to have unique needs related to raising young children in all parts of the region. Additional services for kinship caregivers in the region could help support these families. The Friend, Family, Neighbor Care Program, a funded strategy of the Regional Partnership Council, is helping to support kinship caregivers by offering professional development.

A need for additional resources for children with special needs –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. The Southwest Maricopa Regional Partnership Council has recognized this need and is supporting Family Support--Children with Special Needs and Care Coordination as strategies.[185]

A need for an improved educational pipeline – Young children in some districts within the Southwest Maricopa Region are often progressing into an educational setting that is not performing at an optimal level. Chronic absenteeism, comparatively high drop-out rates and low graduation rates, and low passing rates on AzMERIT suggest that schools are not currently preparing all students for a successful future and career. About 1 in 5 adults aged 25 and older in the Southwest Maricopa Region has a bachelor's or higher degree, and in many sub-regions, the majority of adults have no post-secondary education. In the Gila Bend-Theba-Sentinel, Arlington, and Tolleson sub-regions, more than one in every four adults did not complete high school. The funding of strategies targeting early childhood education and kindergarten transition helps to prepare students to succeed in school. Strategies focusing on parenting education and home visitation may help support parents as first teachers, regardless of their own education level.

A need for enhanced collaboration across the different programs working within the region and the many Maricopa-based regions. Participants in the Coordination and Collaboration Survey raised concerns around duplication of effort, the complexities created when families move into a different region, and competition for funding stymying support for collaboration.

Population Characteristics

- Relatively high percentage of children in the Tonopah-Wintersburg area living with one parent (55%), compared to the Region (33%) or state (38%).
- Relatively high percentages of children (ages 0-17) living with a responsible grandparent with no parent present in Buckeye (24%) and Goodyear (25%) areas, compared to the Region (15%) or state (14%). These families may have unique needs for support.
- Relatively high percentages of the population (ages 5 and up) do not speak English very well in the Gila Bend-Theba-Sentinel area (24%), compared to the Region (11%) or state (9%), creating a need for service providers with the ability to serve clients in languages other than English.

Economic Characteristics

- Sharply declining TANF participation may reflect policy changes around eligibility rather than a decreased need for supports.
- Nearly three-quarters of families in the region with children younger than 5 live below 185 percent of the Federal Poverty Level (FPL) in Tonopah-Wintersburg and Gila Bend-Theba-Sentinel.
- A quarter of children are food insecure in the county, and over two-thirds of children are likely eligible for nutrition assistance.
- Unemployment in Tolleson is nearly twice as high as elsewhere in Maricopa County.

Educational Indicators

- Passing rates for third-grade students on the AzMERIT tests are somewhat lower in the Region (39% pass Math and 38% pass English Language Arts) than in the county as a whole (43% pass Math and 42% pass ELA).
- Over a third of students in grades 1-3 were chronically absent in nearly all the Southwest Maricopa districts, and in most districts chronic absenteeism worsened between 2014 and 2015.
- The Gila Bend Unified District struggles with especially high rates of chronic absenteeism, drop-out, and low graduation rates.
- Charter and alternative schools in the region also appear to face high levels of student drop-out and low graduation rates.

Early Learning

- Only about 1 in 5 children ages 3 and 4 is enrolled in school.
- There are many more children ages 0 to 5 than there are available child care slots; for example, there are 577 children 0-5 in Tonopah-Wintersburg and 19 slots in childcare facilities.
- Child care in centers and group homes tends to be more costly in Maricopa County than elsewhere.
- The cost of childcare for one child surpasses the Department of Health and Human Services' recommended threshold of 10% of a family's income.
- About 3 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

- Among mothers whose prenatal care status was known (in 2014), 74.4 percent began prenatal care in the first trimester, which does not meet the Healthy People 2020 goal of 77.9 percent.
- Breastfeeding rates among WIC mothers in the Region (70.4%) are well under the Healthy People 2020 target of 81.9 percent.

Family Support and Literacy

- The decreases in mothers and children receiving behavioral health services have been greater in the Region (down 32% for mothers, down 19% for children) than in the state (down 24% for mothers, up 10% for children).
- About seven percent of young children in poverty in the Southwest 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

- Three out of every four partners (78%, n=36) 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.

Despite the challenges outlined in this report, the Southwest Maricopa Region has substantial strengths to support parents and caregivers of young children. A continued coordinated approach to the challenges will ensure that children grow up healthy and ready for school. 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 Southwest 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 Southwest Maricopa Region.

Table of Regional Strategies

Table 74. Southwest Maricopa Regional Partnership Council Planned Strategies for Fiscal Year 2017

Strategy	Strategy description
Family Resource Centers	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.
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).
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 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.
Kindergarten Transition	The intent of this promising practice strategy is to use a community of practice model that brings together local groups of early care and education program providers with administrators and teachers from public elementary school sites offering kindergarten. The expected result is a collaborative and coordinated kindergarten transition approach and plan that increases the effectiveness of transition into kindergarten for children and families in the local community.

Family, Friend, and Neighbor Care	The intent of this evidence informed strategy is to provide professional development and financial resources to family, friend and neighbor caregivers. The expected result is an improvement in the quality of caregiving, teaching and learning for children in unregulated home based early care and education settings.
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.
Nutrition, Physical Activity, and Obesity Prevention	The intent of this strategy is to provide evidence based community and place-based interactive health education to support children birth to age 5 in achieving and maintaining a healthy weight. Interactive health education will focus on healthy nutrition and physical activity and be provided to children, families, early child care and education professionals, and others in the community who care for young children. The expected result is reduction in risk factors for poor nutrition and insufficient physical activity, which in turn can reduce the prevalence of overweight and obesity during early childhood. A healthy weight during early childhood is highly predictive of achieving a healthy weight at all ages, as well as reduction in psychosocial and health consequences of overweight and obesity.
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.

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. Census[186] 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 Southwest Maricopa Region presented in this report were calculated by identifying each block in the region, and aggregating the data over all 4,274 of those blocks. (Blocks which had zero population were ignored.) 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 Survey[187] 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 Southwest Maricopa Region were calculated by aggregating over the 17 ZCTAs which are wholly (9) or partially (8) 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 Southwest 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 10. 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.

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 Southwest Maricopa Region Data Interpretation Session was held at the Pendergast Community Center on October 25, 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. For the current report, the Southwest Maricopa council identified the following topics as priority areas: (a) households with no vehicle available, (b) known childcare locations, and (c) projected population increases within the region.

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 6 regions, 259 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

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xxxiii This section was supplied by First Things First.

xxxiv Using another funding source, ADHS expanded data collection to include 3rd 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

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

Survey Limitations

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

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

Family Caregiver Survey 2012 Survey Methodology

The Family and Community Survey was designed to measure many critical areas of parent knowledge, skills, and behaviors related to their young children. The survey contained over sixty questions, some of which were drawn from the national survey, *What Grown-Ups Understand About Child Development*[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 Southwest Maricopa Region, there were 150 participants in the survey, of whom 89 percent were parents of the child, and the other 11 percent were other relatives.

[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

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

Coordination and Collaboration Survey Methods

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

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

Possible stakeholder areas:

- 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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