



# 2015 BUILDING BRIGHT FUTURES

Arizona's Early Childhood Opportunities Report

 **FIRST THINGS FIRST**



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# # FIRST THINGS FIRST

## THE BIG PICTURE OF ARIZONA'S LITTLE KIDS

The number of young children in Arizona is expected to grow by 14 percent over the next five years. A child's early years hold the key to their success – and our state's. Children who are healthy and prepared when they enter kindergarten do better in school and are more likely to graduate and enroll in college. Well-educated adults are more prepared for the job opportunities of a global marketplace and to contribute to the strength of their communities.

About 90 percent of a child's brain growth happens before kindergarten, and those early experiences affect whether their brain will develop in ways that promote optimal learning. Poverty, exposure to family violence and lack of access to quality early learning experiences are all factors that can negatively impact a child's early development, and subsequently, their long-term success. A review of some key data points reveals that many of Arizona's babies, toddlers and preschoolers face significant challenges when it comes to stable, nurturing environments and high-quality early learning experiences that will put them on a trajectory for success in kindergarten and beyond.

This document provides state-national comparisons in three key areas: strong families, healthy children and prepared students. In the following pages, additional data points – and trends at the county level – also are identified. Taken together, these points reveal opportunities across several areas to help more Arizona families provide the stable, nurturing environments children need in order to thrive. This brief also describes ways in which First Things First, a critical partner in Arizona's early childhood system, is working to expand opportunities for children to develop the tools they need to be ready for school and set for life!

# THE BIG PICTURE

## STRONG FAMILIES

Family stability can affect the resources a child has that either support or restrict their optimal development. Poverty and its effects – including unreliable access to food, housing and child care – can impact a child’s physical and emotional development.

**The number of young children in Arizona grew much faster between 2000 and 2010 than in the nation as a whole.**

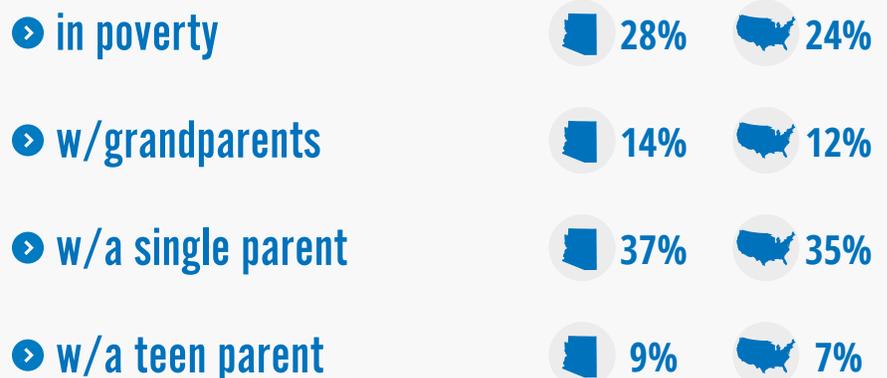


**The percentage of households with young children in Arizona is about the same as in the U.S.**



Arizona’s young children are more likely than their peers nationally to be born into challenging situations like poverty and being raised by single parents, teenage parents or grandparents. They also are less likely to receive the supports that can help mitigate the effects of poverty on their overall well-being. Compared to the U.S. as a whole:

### MORE YOUNG CHILDREN IN AZ LIVE



**Fewer Arizona children (ages 0-17) receive TANF.**



First Things First helps strengthen families by giving parents options when it comes to fulfilling their role as their child’s first teachers, including kits for families of newborns with resources to support their child’s health and learning, community-based parenting education, voluntary home-based coaching for families with multiple challenges, support for families of children with special needs, and referrals to existing programs that meet the family’s specific challenges.

# THE BIG PICTURE

## HEALTHY KIDS

Children's health encompasses not only their physical health, but also their mental, intellectual, social and emotional well-being. Factors such as a mother's prenatal care, access to health care and health insurance, and receipt of preventive care such as immunizations and oral health care all influence a child's current health and also their long-term development and success.



Arizona's babies are born healthier than their peers nationally, which is encouraging.

### FEWER AZ BABIES ARE BORN

▶ w/low birth weight



7%



8%

▶ premature



9%



11%

Yet, too many children lack the necessary immunizations before they enter school, and many lack access to care to prevent dental problems – a key cause of school absenteeism later on.

### MORE YOUNG CHILDREN IN AZ

▶ lack health insurance



9%



5%

▶ have untreated tooth decay



27%



21%

First Things First supports healthier kids by supporting pregnant mothers; giving parents tools to promote good nutrition and healthy weight; expanding access to oral health screenings and preventive fluoride varnishes; building awareness of health insurance options available for families with children; helping early educators meet the social-emotional needs of kids in their care; and, improving health practices in home- and center-based child care settings.

# THE BIG PICTURE

## EDUCATED YOUNG STUDENTS

Quality early learning promotes success in school and in life. The quality of a child's early experiences impacts whether their brain will develop in ways that promote optimal learning. Research has demonstrated that children with access to quality early learning environments are more prepared for kindergarten: they have increased vocabulary, better language, math and social skills, have more positive relationships with classmates, and score higher on school-readiness assessments. They are less likely to need special education services or be held back a grade, and are more likely to graduate and go on to college.



Compared to the U.S. as a whole:

### Far fewer of Arizona's 3- and 4-year-olds attend preschool



Healthy development is important for school readiness. Early identification of developmental delays – through regular screenings starting at birth – is a critical first step to ensuring that children receive the intervention and support that can mitigate the impact of the delays on their future learning. Left unaddressed, many developmental issues can become learning problems later in a child's life.

### Fewer of Arizona's young children received developmental or sensory screenings



First Things First promotes early learning by: completing more than 31,000 screenings to detect developmental or sensory issues that can become learning problems later on; working with almost 1,000 child care and preschool providers statewide to enhance the quality of early learning programs for more than 50,000 young children statewide; funding scholarships helped more than 16,600 children access early learning in the past year alone; working with relatives and friends who provide child care to increase their knowledge of brain development and young children's learning; and helping early educators expand their skills working with infants, toddlers and preschoolers.



# SUMMARY OF ARIZONA DATA ON YOUNG CHILDREN

# INTRODUCTION

The partners in Arizona’s early childhood system – encompassing a diverse array of public and private entities dedicated to improving overall well-being and school readiness for children birth to 5 statewide – rely on data to inform policy and program decisions, enhance services for families and expand the resources available for early childhood programs. This includes the First Things First Board and its 28 regional partnership councils across Arizona. Every year, the FTF Board and volunteer councils must make decisions about how to prioritize funding for programs to support children and families in communities throughout Arizona. In order to do so, they review an array of data that provides an indication of the context in which young children are living, playing, growing, and beginning their education. This information is then used as a starting point for discussions with early childhood stakeholders – including educators, service providers, community leaders, and families – on how to maximize the resources in their area and yield the most positive outcomes for Arizona’s youngest children.

This biennial report serves as a resource for anyone seeking to better understand the state of Arizona’s children – both challenges and opportunities. The focus of this statewide report is different than many summary reports compiled by other state or national organizations, in that the data include state agency service data rather than relying primarily on survey or self-reported data. In many cases, this data is also available at the county level, which is a more detailed level than many national reports. This highlights not only how Arizona may differ from the country as a whole on these metrics, but also how the experiences of children in different counties across the state may vary dramatically. Although county lines do not match the boundaries of the FTF regional partnership councils in all cases, the information provides an important look at general geographic trends. The biennial FTF Regional Needs and Assets reports – published in even numbered years – provide additional detail at the FTF regional level.

An overview of some of the notable findings in the state and counties is provided in this Data Summary across the areas of:

- Family Characteristics
- Economic Circumstances
- Education
- Child Health and Well-Being

Detailed statewide data tables are provided after this summary. The corresponding county-level data tables (where available) can be viewed at: [azftf.gov/state-county-data](https://azftf.gov/state-county-data).



## FAMILY CHARACTERISTICS

### WHY IT MATTERS

At the national, state and local levels, the characteristics and various compositions of families can influence the availability of resources and supports for those families.<sup>1</sup> These include the number of schools, health care facilities and resources, and social services and programs that are available and accessible to young children, their families, and other caregivers. Knowledge of a number of population characteristics can also support the continuation or the development of resources that are most appropriate for the particular needs or challenges of a region. For example, by analyzing and comparing available data, policymakers and program providers can identify underserved or at-risk families or areas. Characteristics such as population size, ethnic composition, and household income should all be considered when designing programs, resources, and policies for a community, county or region. Failure to consider differences in composition of the young child and adult populations may create a situation in which the actions of adult decision-makers who set funding and programmatic priorities may not align with the needs of young families within their regions.

In addition, family structures and stability can affect the resources a child has that either support or restrict their optimal development.<sup>2,3</sup> There is a wealth of research that describes how a variety of factors – including poverty, access to resources such as preventative health and early education, and the quality of a child’s interactions with adult caregivers – can affect outcomes for young children.

For example, raising young children poses a particular challenge for aging grandparents, as grandparents raising or supporting their grandchildren often lack information on resources, support services, benefits and policies available to aid in their caregiving role.<sup>4</sup> Decisions that take in to account a variety of data regarding the structure and stability of children’s home and community environments have a greater chance to improve the well-being, economic security and educational outcomes for children.

1 US Department of Health and Human Services. Health Resources and Services Administration, Maternal and Child Health Bureau. (2014). *Child Health USA 2014. Population Characteristics.*

2 Center for American Progress. *Valuing All Our Families.* (2015). *Progressive Policies that Strengthen Family Commitments and Reduce Family Disparities.*

3 Kidsdata.org. *Summary: Family Structure.*

4 American Association for Marriage and Family Therapy. *Grandparents Raising Grandchildren.*

# HOW ARIZONA'S YOUNG CHILDREN ARE FARING

## Population Change

Arizona is home to a diverse population of young children. While the overall population of children birth to 5 years old decreased slightly between 2010 and 2015, the number of young children statewide is expected to increase by 14 percent over the next five years (See Figure 1).

Between the two most recent Censuses (2000-2010), the population of young children age birth to 5 in Arizona increased by about 20 percent, which was four times greater than the increase across the U.S. as a whole (5%) (See Figure 2). The pattern over the next 10 years is somewhat varied however, the number of births overall was on the decline from 2007 through 2013.

The decline in the birth rate appears to have stabilized, with a slight (2%) increase in births between 2013 and 2014 (See Figure 3). The overall population of young children in the state reflects these changes, with a small decrease in the projected population of young children expected in the state through 2015, followed by an increase in the population of children birth to 5 years old into 2020 (See Figure 1).

## Race and Ethnic Composition

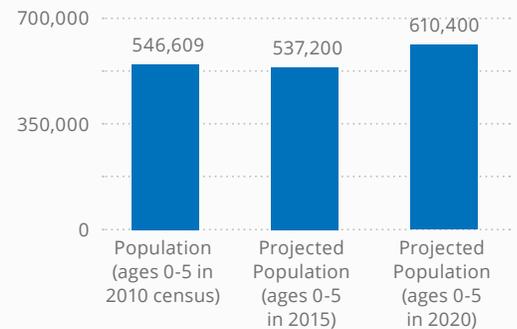
The ethnic makeup of Arizona's youngest children differs from that of the nation as a whole. Almost half of children between birth and 5 years old in Arizona are Hispanic or Latino, compared to only a quarter across the country (See Figure 4). Young American Indian children make up five percent of young children in the state, which is substantially greater than the one percent across the U.S.

## Primary Household Language

Language preservation and revitalization have been recognized by the U.S. Department of Health & Human Services as keys to strengthening a community's culture and encouraging communities to move toward social unity and self-sufficiency.<sup>5</sup> Special consideration should be given to respecting and supporting the numerous Native American languages spoken by families, particularly in tribal communities around the state. As a reflection of Arizona's diverse population, a language other than English is spoken in over a quarter of households in Arizona (27%), compared to only a fifth (20%) of households across the country. Spanish is the most common other language spoken in both Arizona (20%) and across the country (13%). In Arizona, a Native North American language is spoken in two percent of households; across the country, less

Figure 1

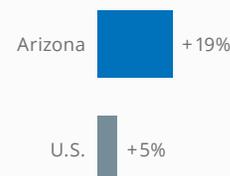
Arizona's population of young children is projected to grow by 2020.



Population of Children (ages 0-5) in Arizona, 2010 to 2020. Arizona Dept of Administration, Employment and Population Statistics, "2012-2050 State and county population projections" & 2010 US Census.

Figure 2

The number of young children in Arizona grew much faster between 2000 and 2010 than in the nation as a whole.

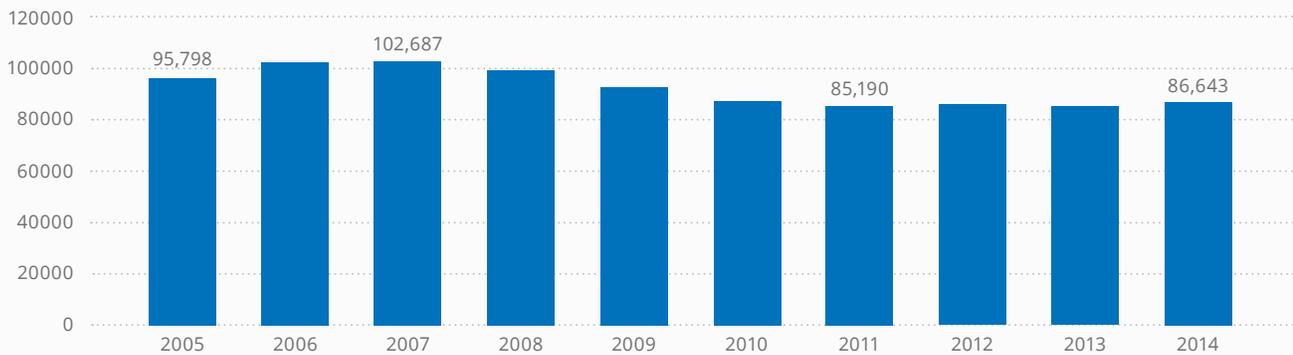


Population Change for Population Ages 0-5, 2000-2010. US Census Bureau (2010). 2010 Decennial Census, Summary File 1, Table P14.

<sup>5</sup> US Department of Health & Human Services Administration for Native Americans

Figure 3

Births in Arizona decreased during the economic downturn.

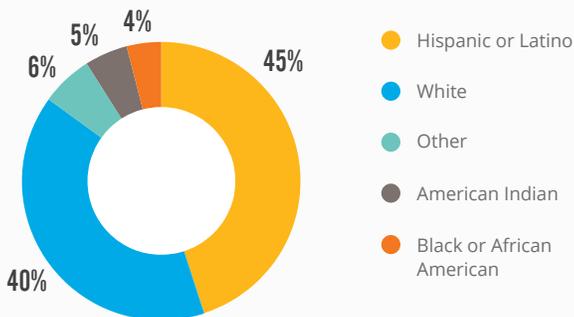


Arizona Births, 2005-2014, Arizona Department of Health Services (2015). [Infant and Maternal Health Data]. Unpublished data received through First Things First State Agency Data Request.

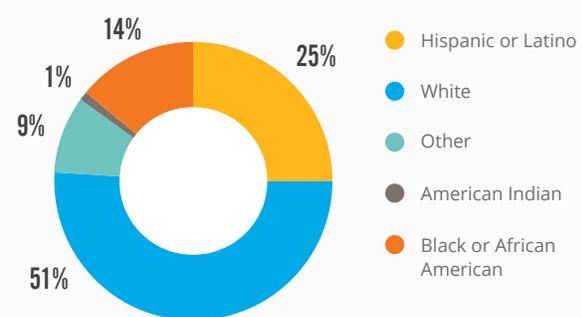
Figure 4

The pattern of ethnic backgrounds of young children in Arizona is different than that of young children in the U.S. as a whole.

Arizona



United States



Race/Ethnicity of Children Ages 0-5, 2010. United States Census Bureau (2010). 2010 Decennial Census, Summary File 1, Tables PCT12A-H.

than one percent of households speak these languages.<sup>6</sup> Language barriers can limit families' access to health care and social services, and can provide challenges to communication between parents and their child's teachers, which can impact the quality of education children are able to receive.<sup>7</sup> Assuring that early childhood resources and services are available in Spanish is important in many areas of Arizona, given that five percent of the households in the state are limited English speaking households (that is, a household where none of the members speak English very well).

6 US Census Bureau (2014). 2009-2013 American Community Survey 5 Year Estimates, Table B16002 and US Census Bureau (2014). 2009-2013 American Community Survey 5 Year Estimates, Table B16001.

7 Shields, M. & Behrman, R. (2004). Children of immigrant families: Analysis and Recommendations. The Future of Children. 14 (2).

# COUNTY HIGHLIGHTS

## Population Change

The majority of Arizona’s children (76%) live in Maricopa or Pima counties (See Figure 5). All but three counties in the state saw a growth in the population of young children between 2000 and 2010, and some had explosive growth (e.g., Pinal County saw an increase of 149% during those years). After a dip during the Great Recession, those increasing population trends are expected to resume for most counties into 2020 (See Figure 6). Statewide, the overall population of young children is projected to increase by 14 percent between 2015 and 2020. Six counties meet or exceed this projected growth between 2010 and 2020, with highs of 42 percent in Yuma County and 34 percent in Cochise County. Only two of Arizona’s 15 counties are projected to see decreases in the population of young children by 2020, with both Apache and Greenlee counties expected to see a decrease of 12 percent in the population of young children.

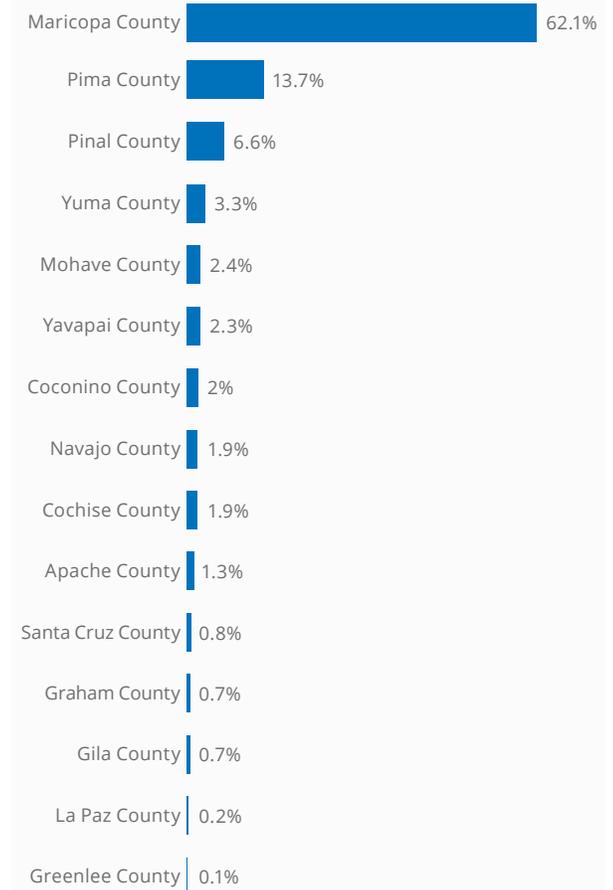
It is important to recognize that the very small population numbers in some of the counties (e.g. Greenlee, La Paz) make rates in those counties somewhat unstable. That is, a change affecting a relatively small number of children in those counties can have a large impact on a rate. Also some data, such as that from the American Community Survey, are estimates that may be less precise for smaller areas and for tribal areas.<sup>8</sup>

## Race and Ethnic Composition

The ethnic composition of the adult and young child populations differs dramatically by county, particularly with regard to the Latino population across the state. This is important information, particularly when planning services for children. Total or adult-only population statistics may not fully represent the needs of children in communities. For example, in some counties, Latino residents comprise the majority of the population, and in others there is a relatively low percentage of Latino residents. However, one thing that is consistent across the state: all counties have a higher relative percentage of Latino children than Latino adults. The largest difference is in La Paz County where less than a fifth (18%) of the adult population is Latino, yet half of all young children are Latino (See Figure 7). Other counties with a high young Latino population relative to their adult Latino population include Pima, Yuma, Maricopa, Yavapai and Cochise.

Figure 5

Share of young children birth to age 5 by county



Proportion of Arizona’s population ages 0–5, by county, 2010. US Census Bureau (2010). 2010 Decennial Census, Summary File 1, Tables P14.

<sup>8</sup> Inter Tribal Council of Arizona, Inc., ASU Office of the President on American Indian Initiatives, ASU Office of Public Affairs (2013). *The State of Indian Country Arizona. Volume 1.*

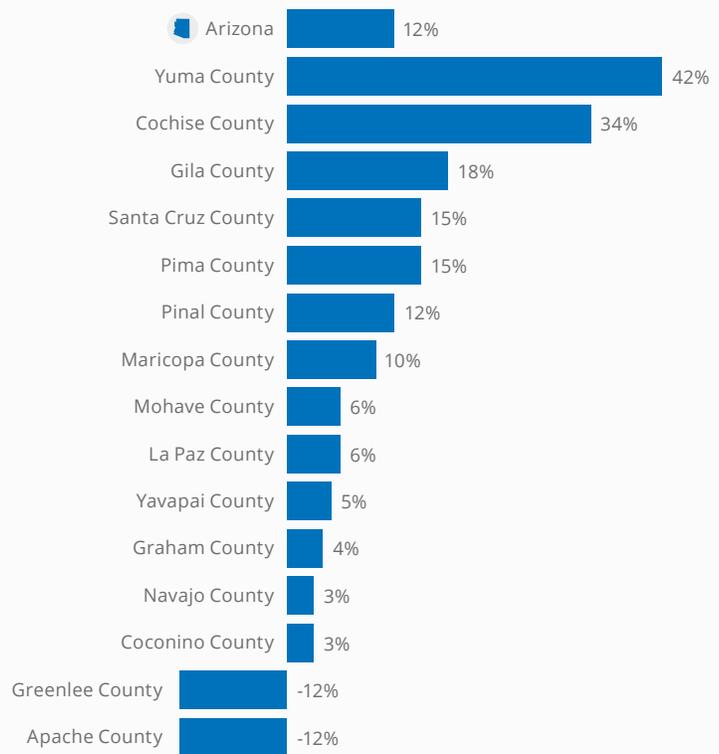
## Living Arrangements

Although the living arrangements of young children in Arizona and across U.S. are similar, there is a good deal of variation by county. In nine Arizona counties, young children are more likely to be living with a single parent than in other areas of the state. Of note, 56 percent of children birth to 5 years old in Apache County and 53 percent in La Paz County live with a single parent or step-parent. In addition, a relatively large percentage of young children in Greenlee County is living with unrelated persons (12%) (See Table 1). However, this may be an overestimate because of the small numbers in the county; the true percentage is likely to be larger than the percentage in the state (2%) as a whole.

Five counties, Apache (32%), Gila (28%), Navajo (27%), Graham (22%), and Santa Cruz (22%) had more than a fifth of children birth through 5 years old living with a grandparent in 2010 (See Figure 8). Several of these counties include a large proportion of tribal lands; Apache County has the most land designated as Native American reservation of any county in the United States. Therefore, the higher percentage of grandparent-led households may be in large part due to the fact that extended, multigenerational families and kinship care are common in Native communities.<sup>9,10,11</sup> Across all cultures, there are strengths associated with this type of family structure, with members often able to provide a network of support to each other. Challenges may arise, however, when grandparents become the main caregivers due to parents being unable to care for their children due to physical or mental illness, substance abuse or incarceration.<sup>12</sup> Identifying those grandparents in need of additional support and connecting them with available resources in their communities may be a priority in some of these counties. Grandparents caring for their grandchildren under 18 were most likely to be the sole care providers (i.e., the child's parents are absent from the household) in Cochise County (38% of households with grandchildren had grandparents as sole providers) and Mohave County (22%).<sup>13</sup>

Figure 6

Thirteen of 15 Arizona counties are projected to see increases in the population of young children into 2020.



Projected Population Change, Children Ages 0-5, from 2010-2020, according to Medium Series Population Projections. 2010-2020 Arizona Dept of Administration, Employment and Population Statistics, "2012-2050 State and county population projections" & 2010 US Census.

9 Hoffman, F. (Ed.). (1981). *The American Indian Family: Strengths and Stresses*. Isleta, NM: American Indian Social Research and Development Associates.

10 Harrison, A. O., Wilson, M. N., Pine, C. J., Chan, S. Q., & Buriel, R. (1990). Family ecologies of ethnic minority children. *Child Development*, 61(2), 347-362.

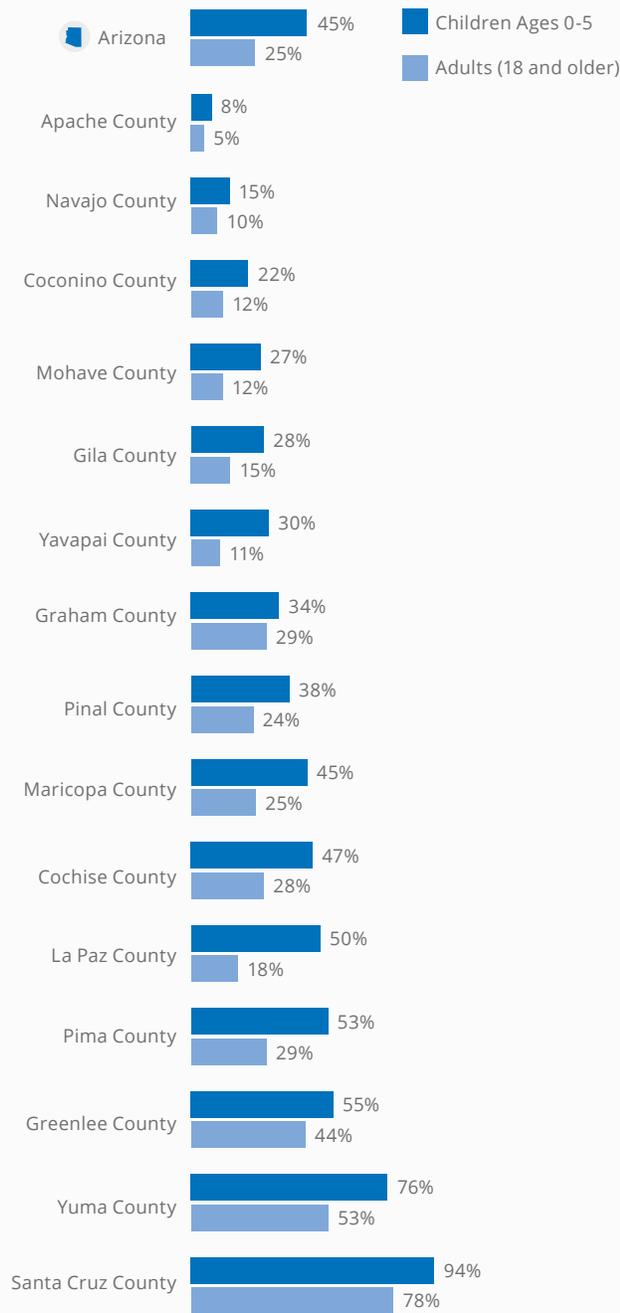
11 Red Horse, J. (1997). Traditional American Indian family systems. *Families, Systems, & Health*, 15(3), 243.

12 More US Children Raised by Grandparents. (2012). Population Reference Bureau.

13 US Census Bureau (2014). 2009-2013 American Community Survey 5 Year Estimates, Table B10002.

Figure 7

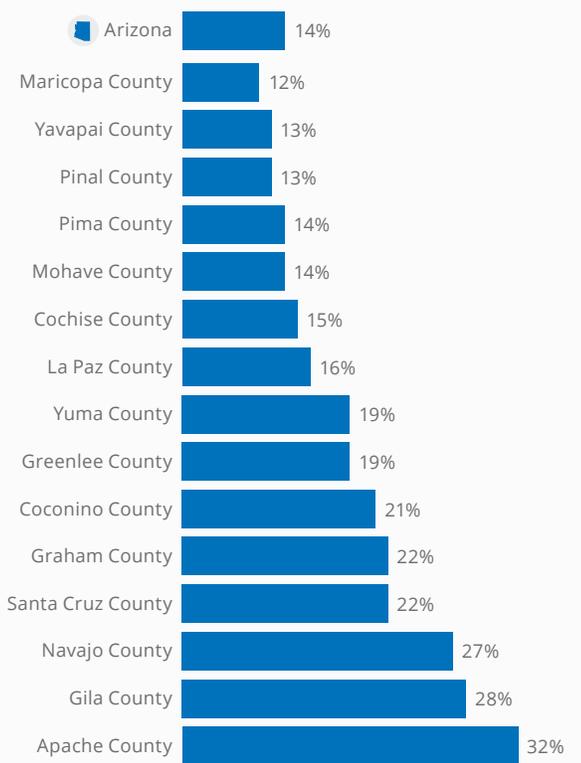
Latino population as a percentage of county population



Latino Population of Young Children Compared to Adults, 2010. US Census Bureau (2010). 2010 Decennial Census, Summary File 1, Tables PCT12A-H. US Census Bureau (2010). 2010 Decennial Census, Summary File 1, Table P11.

Figure 8

Percentage of children birth to age 5 living in a grandparent's household



Children ages 0-5 living in a Grandparent's Household, 2010. US Census Bureau (2010). 2010 Decennial Census, Summary File 1, Table P41.

Table 1

## Living arrangements for children birth to age 5 in Arizona

	Estimated population (ages 0-5)	Living with two married parents or step-parents	Living with one unmarried parent or step-parent	Living with relatives (but not with parents or step-parents)	Living with unrelated persons
Arizona	538,075	59%	37%	2%	2%
Apache County	7,224	37%	56%	6%	1%
Cochise County	9,914	61%	34%	4%	1%
Coconino County	10,343	49%	47%	3%	1%
Gila County	3,677	47%	48%	3%	2%
Graham County	3,724	59%	37%	3%	0%
Greenlee County	755	45%	42%	1%	12%
La Paz County	1,074	44%	53%	2%	1%
Maricopa County	335,951	61%	36%	2%	2%
Mohave County	13,071	57%	37%	3%	3%
Navajo County	10,050	41%	52%	4%	3%
Pima County	73,304	57%	40%	2%	2%
Pinal County	33,904	63%	33%	2%	2%
Santa Cruz County	4,677	48%	44%	5%	2%
Yavapai County	12,239	60%	33%	4%	3%
Yuma County	18,168	58%	40%	1%	2%
United States	24,141,634	62%	35%	2%	1%

Living arrangements for children birth to 5 in Arizona. US Census Bureau (2014). 2009-2013 American Community Survey 5-Year Estimates, Tables B05009, B09001, B17006.





## ECONOMIC CIRCUMSTANCES

### WHY IT MATTERS

The economic circumstances of a family depend on a number of factors, including parental education and income, job availability and status, and access to supportive resources when needed such as housing, child care and nutrition assistance.

Employment rates and income are indicators of the economic context in the state. According to the National Center for Children in Poverty, on average, families need an income of about twice the Federal Poverty Level to meet basic needs.<sup>14</sup> As a benchmark, the 2015 Federal Poverty Guideline for a family of four is \$24,250 per year. Research has documented numerous adverse effects of being born and growing up in poverty, including effects on brain development and later cognitive ability.<sup>15</sup> Children living in a rural area, which describes much of Arizona, are more likely to be impoverished.<sup>16</sup> Food insecurity – the lack of reliable access to affordable, nutritious food – and hunger are ways through which economic stress negatively affects the health and well-being of children, including putting them at risk of developmental delays.<sup>17</sup>

Another potential aspect of living in poverty is sub-standard and/or unstable housing. The conventional standard is that housing should consume no more than 30 percent of a household's income;<sup>18</sup> in places where housing requires a larger proportion of the budget, families may be forced to make other

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14 National Center for Children in Poverty. (2014.) *Arizona Demographics of Low-income Children*.

15 Noble, KG, Houston, SM, Brito, NH, Bartsch, H, Kan E, Kuperman, JM, Akshoomoff, N, Amaral, DG, Bloss CS, Libiger O, Schork NJ, Murray, SS, Casey BJ, Chang L, Ernst TM, Frazier JA, Gruen JR, Kennedy DN, Van Zijl P, Mostofsky S, Kaufmann WE, tenet T, Dale AM, Jernigan TL & Sowell ER. (2015). Family Income, parental education and brain structure in children and adolescents. *Nature Neuroscience*, 18, 773–778.

16 US Department of Agriculture Economic Research Service. (2015). *Understanding the Geography of Growth in Rural Child Poverty*.

17 Rose-Jacobs, R., Black, M. M., Casey, P. H., Cook, J. T., Cutts, D. B., Chilton, M., Heeren, T., Levenson, S. M., Meyers, A. F., & Frank, D. A. (2008) Household food insecurity: associations with at-risk infant and toddler development. *Pediatrics*, 121(1), 65–72.

18 Schwartz, M., Wilson, E. "Who can afford to live in a home?: A look at data from the 2006 American Community Survey."

trade-offs.<sup>19</sup> High housing costs, proportionate to income, can lead to many adverse circumstances for young children, including homelessness, overcrowding, and frequent moving, and can contribute to lack of supervision while parents are at work for longer hours, poor nutrition, and low cognitive achievement.<sup>20</sup>

Data providing insight into the economic context of communities, counties and regions can also inform policy and programs to help alleviate some of the impact of these economic circumstances for families. Public assistance programs are one way of combating the effects of poverty, and providing supports to families in need. The Supplemental Nutrition Assistance Program (SNAP, also referred to as Nutrition Assistance or “food stamps”) has been shown to help reduce hunger and improve access to healthier food.<sup>21</sup> SNAP benefits can serve as an important safety net that support working families whose incomes simply do not provide for all their needs. Nationwide, 90 percent of families receiving SNAP benefits were employed in the year before or after they received assistance.<sup>22</sup> For low-income working families, the availability of SNAP benefits means that families can use their limited resources to meet other needs like housing and utilities. For example, for a three-person family with one person whose wage is \$10 per hour, SNAP benefits boost take-home income by 10 to 20 percent.<sup>23</sup> The USDA Economic Research Service (ERS) reports that in addition to supporting families by helping to put food on the table, SNAP dollars support the economy as well. ERS models suggest that each dollar spent on SNAP generates up to \$1.80 in economic benefits.<sup>24</sup> This means that \$5 in SNAP benefits can produce up to \$9 in economic activity including spending in supermarkets, farmer’s markets and other food retailers, as well as employment opportunities for those who work there.<sup>25</sup> Because SNAP benefits also enable families to shift some of their income from food to other goods and services, the economic benefits of SNAP dollars extend beyond food retailers to other aspects of the economy.<sup>26</sup>

Other programs such as Temporary Assistance for Needy Families (TANF), Women, Infants, and Children (WIC, food and nutrition services), and housing supports can also help offset some of the economic conditions of families that can have a detrimental effect on young children. As part of welfare reform, TANF was designed to help particularly needy families achieve self-sufficiency by providing services and supports including income assistance, child care, education and job training, transportation, and other services.<sup>27,28</sup> In Arizona, TANF eligibility is capped at \$335 per month, or \$4,020 annually for a family of four.<sup>29</sup> TANF functions through block grants to states, meaning that states have some flexibility in how they use the funds. Since 2009, a steadily decreasing percentage of Arizona TANF funds have been spent on three of the key assistance categories: (1) cash assistance to meet the basic needs of financially struggling families, (2) helping connect parents to employment opportunities, and (3) child care. In 2013, Arizona ranked 51st, 47th, and 46th respectively in

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19 US Department of Housing and Human Development.

20 The Federal Interagency Forum on Child and Family Statistics. *America’s Children: Key National Indicators of Well-Being*, 2015.

21 Food Research and Action Center. (2013.) *SNAP and Public Health: The Role of the Supplemental Nutrition Assistance Program in Improving the Health and Well-Being of Americans*.

22 Executive Office of the President. (2013). *Supporting families, strengthening communities: The economic importance of nutrition assistance*.

23 Ibid

24 Hanson, Kenneth. (2010). *The Food Assistance National Income–Output Multiplier (FANIOM) Model and Stimulus Effects of SNAP*. USDA Economic Research Service Economic Research Report No. 103.

25 Executive Office of the President. (2013). *Supporting families, strengthening communities: The economic importance of nutrition assistance*.

26 Hanson, Kenneth. (2010). *The Food Assistance National Income–Output Multiplier (FANIOM) Model and Stimulus Effects of SNAP*. USDA Economic Research Service Economic Research Report No. 103.

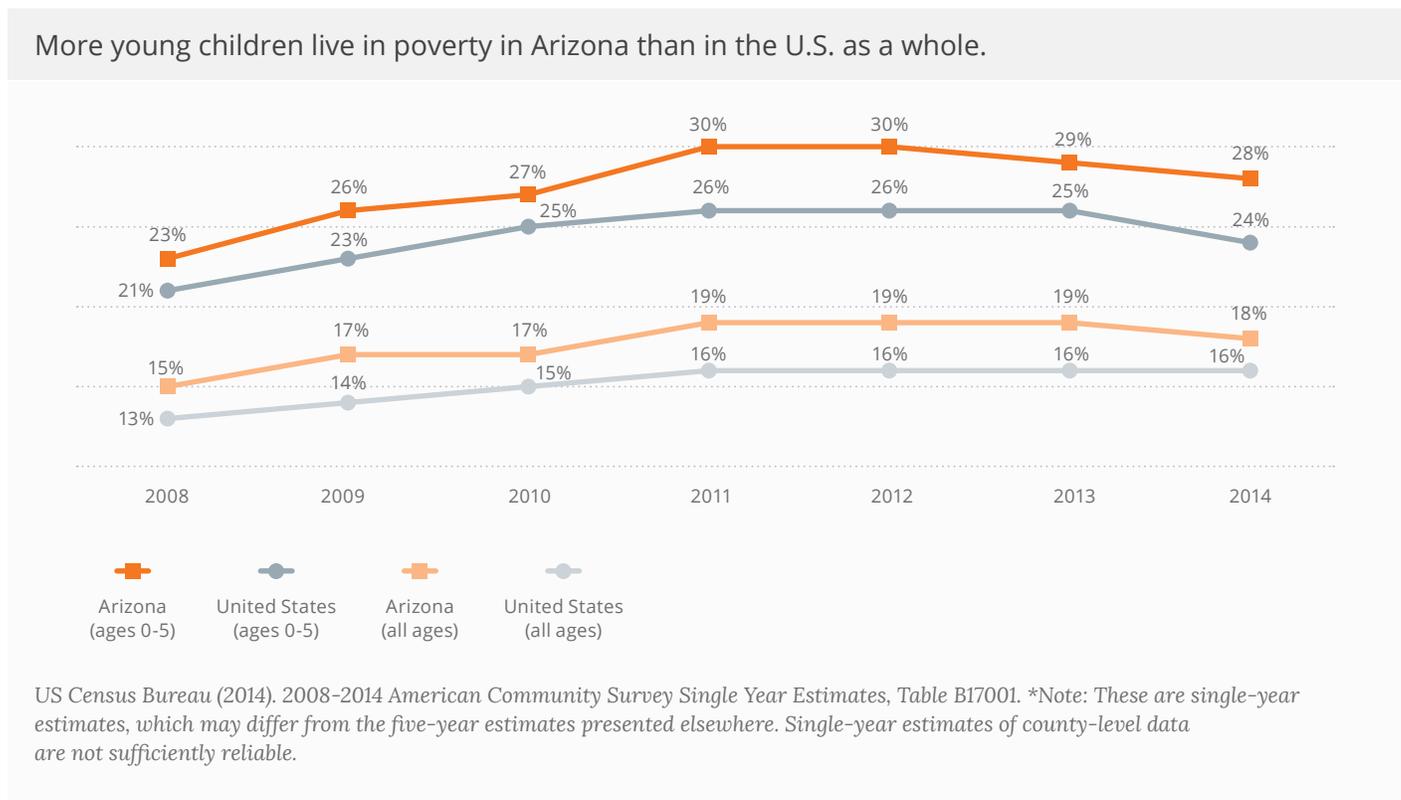
27 <http://www.tanf.us/>

28 <http://www.cbpp.org/research/policy-basics-an-introduction-to-tanf>

29 Arizona Department of Economic Security Cash Assistance AI Payment Standards.

proportional spending in those categories across all states and the District of Columbia.<sup>30</sup> Conversely, since 2009, an increasing percentage of Arizona TANF funds have been spent on other authorized activities not directly related to the welfare reform goals of providing basic assistance to very low income families, and to moving adults with children into the labor market. Nationwide, about one-fifth (19%) of funds were used to cover these other authorized activities in 2013.<sup>31</sup> In Arizona, 76 percent of TANF funds were used in this way, placing Arizona second highest in the nation in proportional spending in this category. The funds were used primarily in support of child welfare in Arizona, covering services such as child protection, foster care, and adoption.<sup>32</sup> Although it is crucial to provide the necessary support to abused and neglected children and their foster families, the shift to using TANF as the funding source for those services may have had the unintended consequence of fewer supports for Arizona’s low-income working families and their children.

Figure 9



30 Floyd, I., Pavetti, L., and Schott, L. (2015). How states use federal and state funds under the TANF block grant.

31 Ibid

32 Reilly, T., and Vitek, K. (2015). TANF cuts: Is Arizona shortsighted in its dwindling support for poor families?

# HOW ARIZONA'S YOUNG CHILDREN ARE FARING

## Poverty

Proportionally, more Arizona residents struggle with poverty than the nation as a whole. Whereas 18 percent of Arizona residents live below the federal poverty level (FPL), 16 percent fall beneath the threshold nationally (See Figure 9). Distressingly, childhood poverty rates are higher than overall population poverty rates in both the state and the nation. Though rates of poverty for young children have begun to drop from the levels seen at the height of the Great Recession, a greater proportion of young children in Arizona live in poverty (28%) than their peers across the country (24%).

## Unemployment Rates

Although unemployment rates have also been falling, the reduction in unemployment in Arizona between 2013 and 2014 (0.7%) was less than the reduction nationwide (1.2%) (See Figure 10). Most of this job growth has been in lower wage sectors.

## Cost of Housing

Housing costs also pose a higher burden to families in Arizona. Thirty-six percent of occupied housing units in the state exceed 30 percent of the residents' income compared to 31 percent nationally.<sup>33</sup>

## Arizona Supports

With the high number of families and young children living in poverty in Arizona, public supports can play an important role in addressing some economic stressors. In Arizona, more than half of the children birth to 5 years old are receiving SNAP or Nutrition Assistance benefits, although this number has decreased slightly from 2012 (54%) to 2014 (51%). It is unclear to what extent the decline is due to improving financial conditions for families, or to other factors. However, having more than half of Arizona's children receive Nutrition Assistance highlights what a vital resource it is for families. This investment is supporting the health and well-being of children and ultimately the economic growth of the state in important ways; research reports that children whose families were able to benefit from governmental nutrition support were healthier as newborns

Figure 10

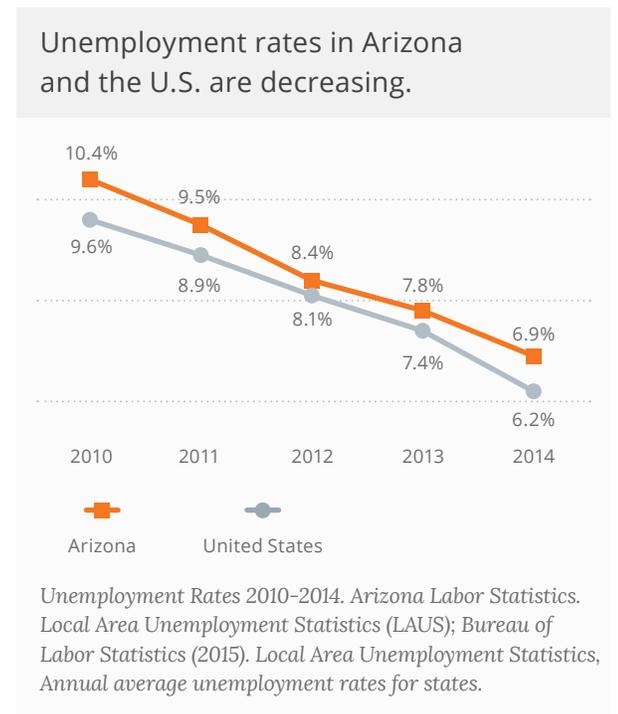
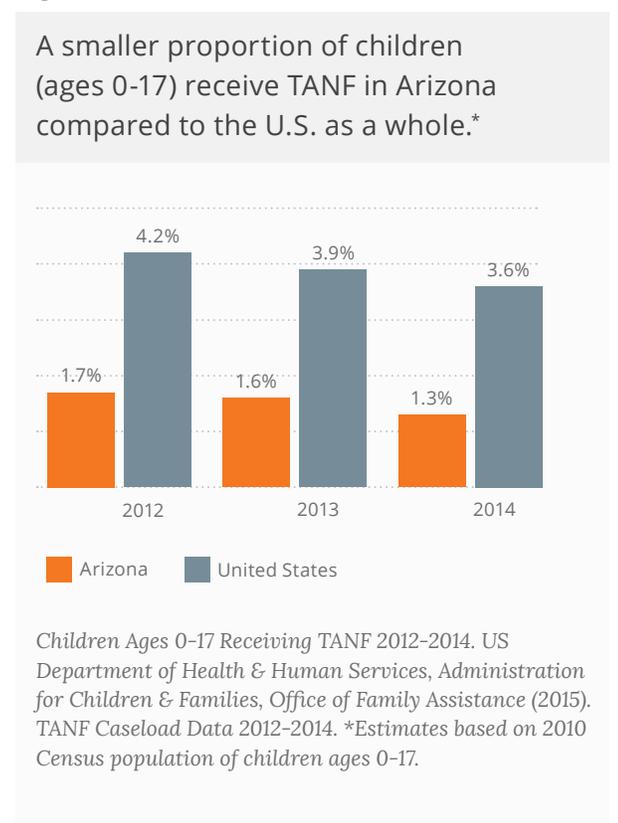


Figure 11



33 US Census Bureau (2014). 2009-2013 American Community Survey 5 Year Estimates, Table B25002, B25106.

and adults and more likely to complete high school than children whose families did not receive these benefits.<sup>34,35,36</sup>

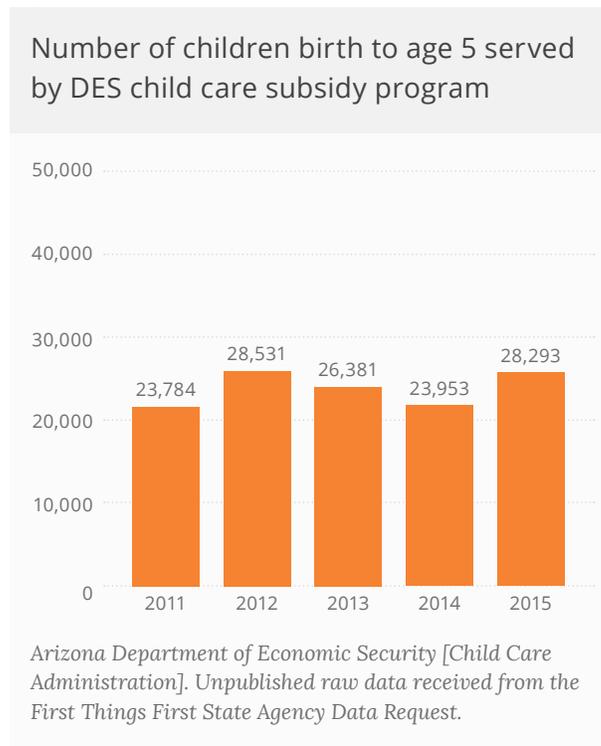
In spite of the higher rates of child poverty in the state, a far smaller proportion of children from birth to 17 receive Temporary Assistance for Needy Families (TANF) benefits in Arizona than they do nationwide, and the proportion has been decreasing (See Figure 11). The proportion of young Arizona children (birth to 5) receiving TANF has also decreased from five percent in 2012 to four percent in 2014.<sup>37</sup> Policy and eligibility changes likely contributed to this decrease. Federally, TANF benefits are capped at 60 months of receipt across one's lifetime. Arizona has made several reductions to this eligibility limit; a reduction to 36 months of eligibility was enacted in 2010 and in 2011, eligibility was further reduced to 24 months.

As of July 2015, Arizona became the first and only state to put regulations in place (which will become effective in 2016) limiting a person's lifetime benefit to 12 months. It is estimated that this change in policy will result in 5,000 Arizonans losing this support.<sup>38</sup> Families with young children may be particularly affected by these policy changes; according to Administration for Children and Families (ACF) data from FY2013, more than half (58%) of the 16,316 Arizona families served by TANF had at least one child under the age of 6.<sup>39</sup>

In Arizona, low-income working families may qualify for child care assistance through subsidies administered by the Department of Economic Security (DES). The subsidies can be used at licensed or certified child care homes or centers that have a contract with DES to accept children on subsidy. The subsidies are intended help with child care costs for low-income working families, families transitioning from welfare, teen parents in school and children involved in the child welfare system. Eligibility is limited to families earning at or below 165 percent of the Federal Poverty Level (with certain exceptions, like children involved in the child welfare system). The unduplicated number of young children served by the DES program has seen both increases and decreases over the past few years, due to instability in the amount of state funding allocated to the program (See Figure 12).

Federal Child Care and Development Funds (CCDF) provide the bulk of funding for child care subsidies. The CCDF grant requires that the state demonstrate maintenance of effort and provide matching funds. Specifically, Arizona cannot claim a \$37 million portion of the total CCDF grant unless the state expends

Figure 12



34 Almond, D., Hoynes, H., and Schanzenbach, Diane. (2011.) *Inside the War on Poverty: The Impact of Food Stamps on Birth Outcomes*. *Review of Economics and Statistics* 93 (2): 387-403.

35 Center on Budget and Policy Priorities. *Various Supports for Low-Income Families Reduce Poverty and Have Long-term Positive Effects on Families and Children*. July 30, 2013.

36 Hoynes, HW, Schanzenbach, DW, & Almond D. (2012). *Long run impacts of Childhood access to the safety net*. Working Paper 18535.

37 Arizona Department of Economic Security (2015). [TANF Dataset]. Unpublished data received through First Things First State Agency Data Request.

38 Reilly, T., and Vitek, K. (2015.) *TANF cuts: Is Arizona shortsighted in its dwindling support for poor families?*

39 Office of Family Assistance, Administration for Children & Families (2015). *Characteristics and Financial Circumstances of TANF Recipients, Fiscal Year 2013*. Table 9: TANF Families by Age of the Youngest Child Recipient: FY2013.

\$30 million in non-federal dollars on child care-related activities. The Legislature's elimination of General Fund appropriations to child care subsidies in 2012 resulted in the state's inability to meet the CCDF's matching requirements, thus threatening the loss of tens of millions of dollars for child care subsidies. At the same time, First Things First (FTF) began to make significant investments in child care quality-related initiatives. Thus, in order to continue to access Arizona's full allotment of CCDF dollars, FTF collaborated with DES in establishing a Memorandum of Understanding (MOU) to leverage FTF expenditures as the state match. Over the five years this MOU has been in place, DES has been able to draw down \$190 million in federal child care funds. Without this partnership, thousands of children from low-income working families may have lost access to child care.

During the past few years, Arizona has seen explosive growth in the number of children in out-of-home care due to abuse or neglect. Between the end of federal fiscal year (FFY) 2010 and the middle of FFY2015, the total number of children in out-of-home care grew by almost 70 percent. As a result, the percentage of children birth to 5 years old served by the child care subsidy program who are in the child welfare system continues to rise. In fiscal year 2011, more than 1 in 4 young children (28%) served by the program were in the child welfare system; by the end of fiscal year 2015, that number was more than 1 in 3 (41%).

# COUNTY HIGHLIGHTS

## Poverty and Unemployment Rates

Much like the nation and state as a whole, the percentage of young children living in poverty exceeds the percentage of adults living in poverty in all but one county (Greenlee). In all but two counties (Greenlee and Pinal), more than a quarter of children birth to 5 years old are living in poverty (See Figure 13). Compared to the national 5-year estimate rate of childhood poverty for this age range (25%), young children in 13 of Arizona’s 15 counties are poorer than their peers across the country. The counties with the highest percentages of young children living in poverty are Apache (51%), Navajo (49%), Gila (42%), Mohave (40%), La Paz (36%) and Santa Cruz (34%). Not surprisingly, the unemployment rate in each of these counties is also higher than the state unemployment rate (See Figure 14).

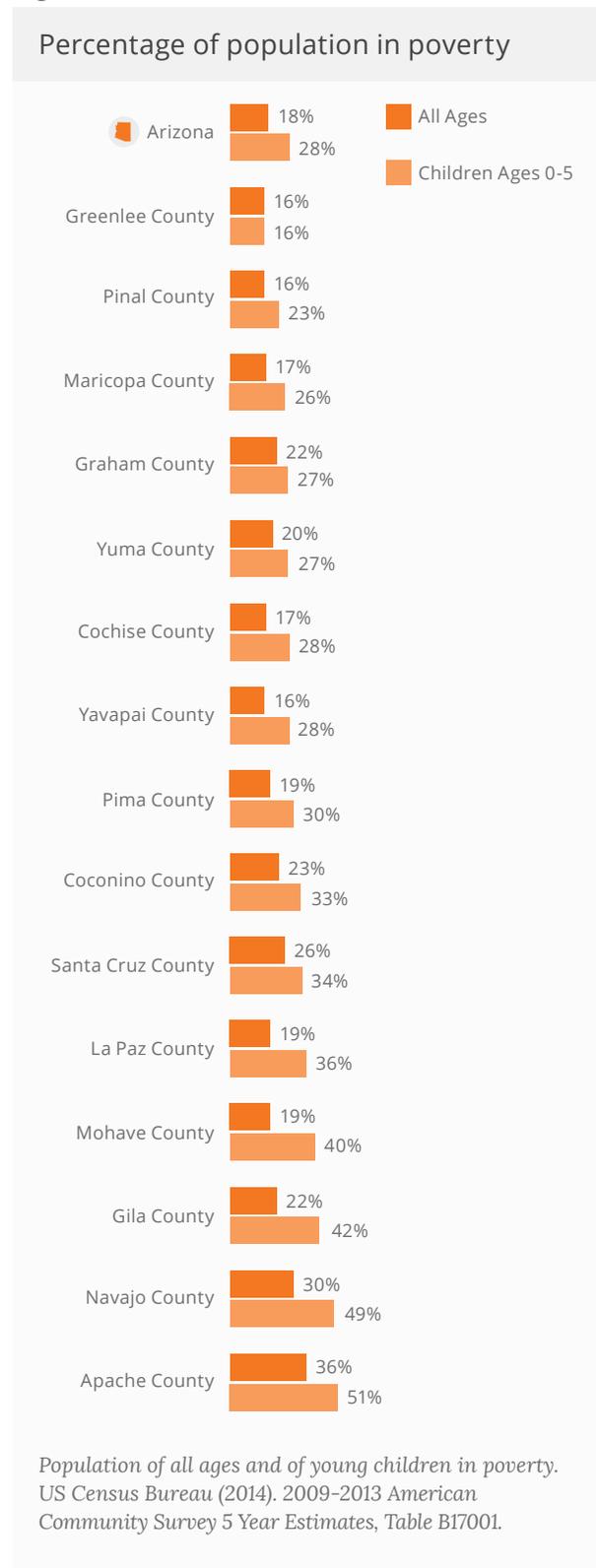
Single moms in Arizona are particularly vulnerable to economic hardship. The median income for single female headed households lags behind single male headed households in all but one county, Apache County. Women are more likely to be living in poverty than men for a number of reasons: 1) they are more likely to be out of the workforce, 2) they are more likely to be in low-paying jobs, and 3) they are more likely to be solely responsible for children.<sup>40</sup>

There is more parity between single female and single male headed households (<\$10,000/year difference) in La Paz, Mohave, Navajo, Santa Cruz and Yavapai counties.

## Cost of Housing

More than half the counties in the state have a higher proportion of housing cost burdened units (that is, housing costs are more than 30 percent of household income), than the national rate of 31 percent (See Figure 15). In Arizona, there is limited information when it comes to the number of young children who are homeless. One source of information is schools, which gather data on student homelessness, including preschoolers. Two percent of young students

Figure 13



<sup>40</sup> Castelazo, M. (2014). *Supporting Arizona Women’s Economic Self-Sufficiency. An Analysis of Funding for Programs that Assist Low-income Women in Arizona and Impact of those Programs.* Report Produced for the Women’s Foundation of Southern Arizona by the Grand Canyon Institute.

Figure 14

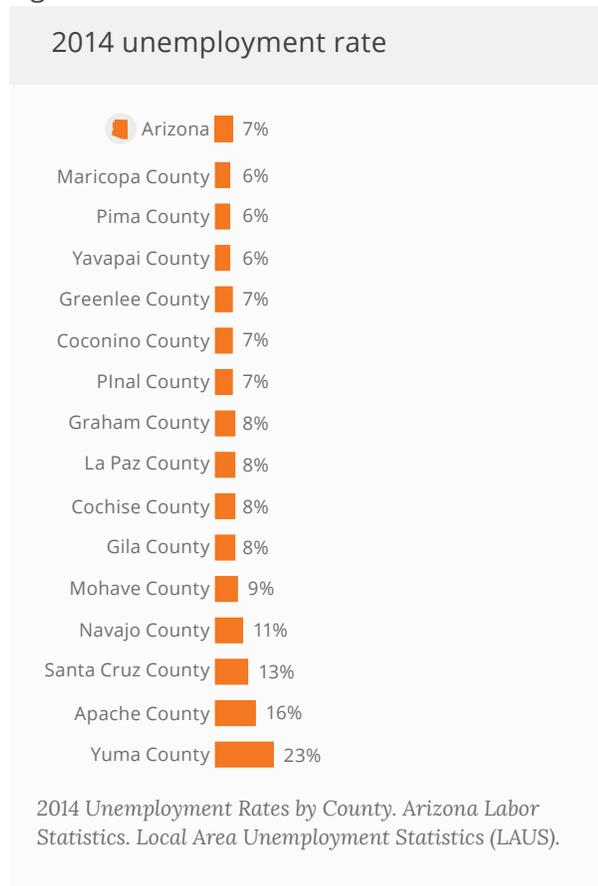
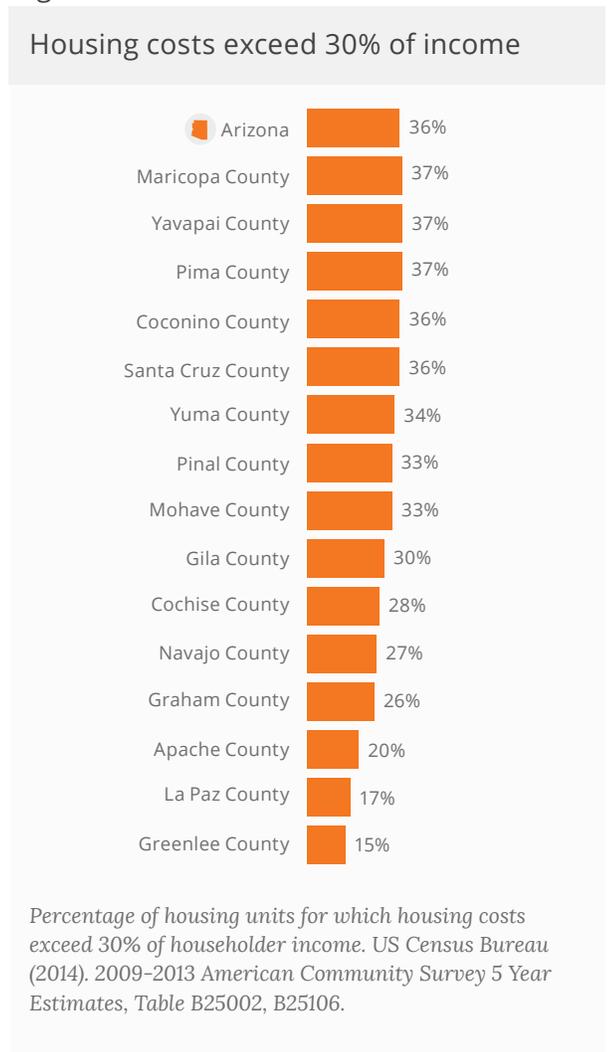


Figure 15



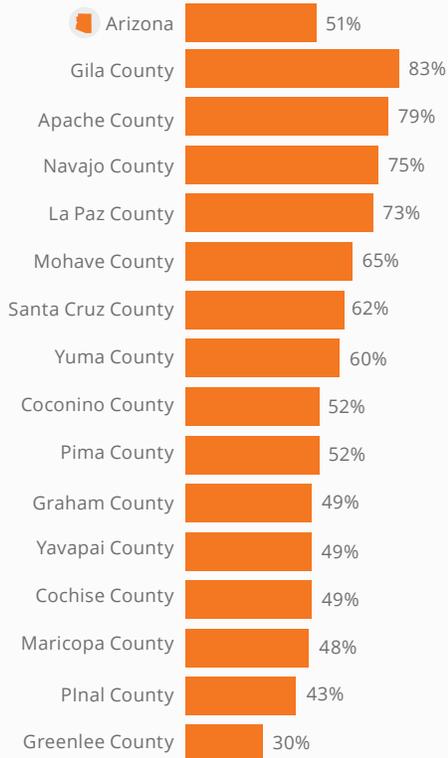
(pre-kindergarten to grade 3) in Arizona face the most extreme housing stress, homelessness. Although the number of homeless students across the state is generally relatively low, this number differs by county. Yavapai and Gila counties had the highest percentage of homeless children in 2014 (6% and 5%, respectively). However, in Gila County, the number of homeless students has actually decreased (-49%) since 2012 when more than one in every 10 students experienced homelessness. The number of homeless young students in Yavapai County has increased slightly since 2012 (+4%).

### Arizona Supports

Nutrition Assistance (SNAP) and TANF are critical components of Arizona’s safety net for low income children. The six counties with the highest child poverty rate also have the highest rates of young children receiving SNAP benefits, helping these families better meet the nutritional needs of their growing children (See Figure 16). Gila County had the highest percentage of young children receiving TANF (10%); while Coconino and Apache counties tied for the lowest percentage of young children receiving TANF supports (1%) (See Figure 17).

Figure 16

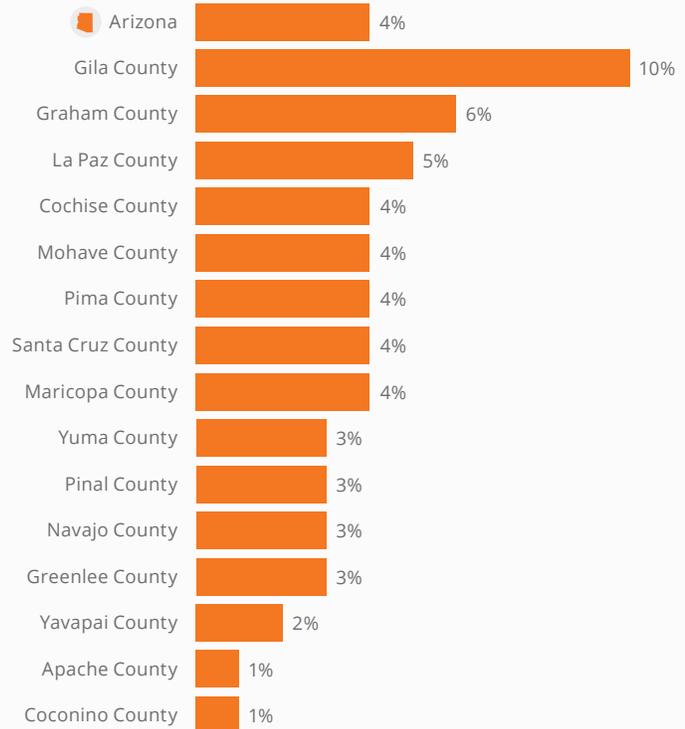
Percentage of children birth to age 5 receiving SNAP in 2014



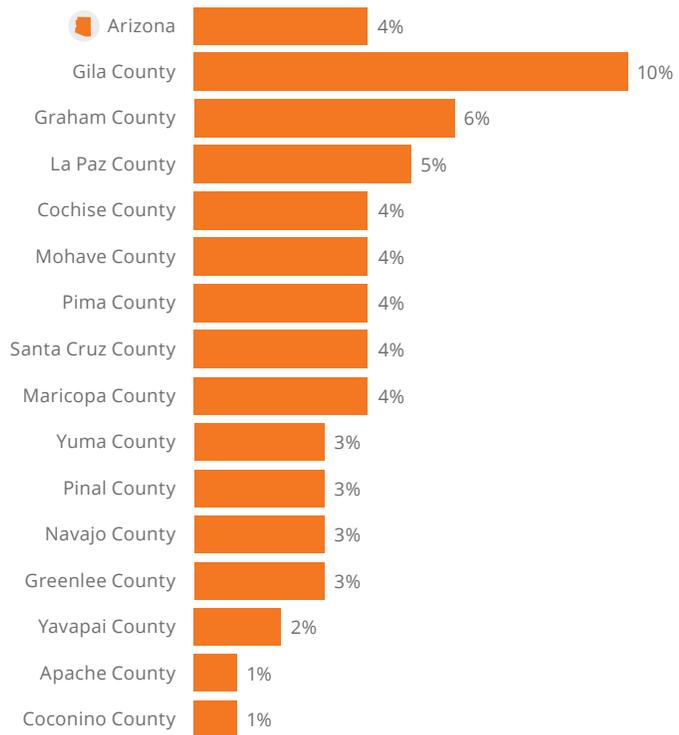
Estimated percentage of children enrolled in SNAP in 2014. Arizona Department of Economic Security. [SNAP Dataset]. Unpublished raw data received from First Things First State Agency Data Request.

Figure 17

Percentage of children birth to age 5 receiving TANF in 2014



Estimated percentage of children enrolled in TANF in 2014. Arizona Department of Economic Security. [TANF Dataset]. Unpublished raw data received from First Things First State Agency Data Request.





## EDUCATION

### WHY EARLY LEARNING MATTERS

Quality early learning promotes success in school and in life. The quality of a child's early experiences impact whether her brain will develop in ways that will promote optimal learning. Research has demonstrated that children with access to early learning environments are more prepared for kindergarten: they have increased vocabulary, better language, math and social skills, have more positive relationships with classmates, and score higher on school-readiness assessments.<sup>41,42</sup> They are less likely to need special education services or be held back a grade, and are more likely to graduate and go on to college.<sup>43,44</sup> As adults, they are healthier and earn more, and are less likely to be involved in the criminal justices or social welfare systems.<sup>40,45</sup>

Children access early learning in a variety of ways, including through family and center-based child care providers. Data on the capacity and cost of quality early care and learning opportunities for both typically-developing children and children with special needs can shed light on the needs of young children and their families across the state, and potentially inform service and policy decisions. For example, in understanding the landscape that families with young children are navigating, those in leadership roles may find it useful to know that the annual cost of full-time center-based care for a young child in Arizona is only slightly less than a year of tuition and fees at a public college.<sup>46</sup>

41 Karoly, L. A., & Levoux, H. P. (1998). *Investing in our children: What we know and don't know about the costs and benefits of early childhood interventions*. Rand Corporation.

42 National Institute of Child Health and Human Development (NICHD) (1999). "the children of the cost, quality and outcomes study go to school."

43 Masse, L. N., & Barnett, W. S. (2002). *A benefit-cost analysis of the Abecedarian early childhood intervention. Cost-Effectiveness and Educational Policy*, Larchmont, NY: Eye on Education, Inc, 157-173.

44 Reynolds, A. J. and Ou, S.R. (2011). "Paths of Effects From Preschool to Adult Well-Being: A Confirmatory Analysis of the Child-Parent Center Program." *Child Development*, 82, 555-582.

45 Schweinhart, L. J., Montie, J., Xiang, Z., Barnett, W. S., Belfield, C. R., & Nores, M. (2005). *Lifetime effects: the High/Scope Perry Preschool study through age 40*.

46 Child Care Aware® of America. *Parents and the High Cost of Child Care*. 2014 Report.

Child Care and Development Fund (CCDF) subsidies, funded through a combination of state and federal sources, help low-income families afford child care so that parents may work or prepare for employment. The subsidies may be provided in the form of either a slot in a child care center or a voucher that can be used to pay any provider that meets state requirements. In addition, programs such as Head Start and Early Head Start provide comprehensive early childhood education programs for families who meet income eligibility criteria. Other support services available to families include early intervention screening and service supports provided through the Arizona Early Intervention Program (AzEIP),<sup>47</sup> Division of Developmental Disabilities (DDD)<sup>48</sup> and the Arizona Department of Education's AZ CHILD FIND,<sup>49</sup> which helps identify and support families with young children who may need additional supports to meet their potential. Providing timely services to young children with, or at risk for, developmental delays can improve language, cognitive, and social/emotional development, and reduce educational costs by decreasing the need for special education.<sup>50,51,52</sup>

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47 For more information on AzEIP see <https://www.azdes.gov/azeip/>

48 For more information on DDD see [https://www.azdes.gov/developmental\\_disabilities/](https://www.azdes.gov/developmental_disabilities/)

49 For more information on AZ FIND see <http://www.azed.gov/special-education/az-find/>

50 The National Early Childhood Technical Assistance Center. *The Importance of Early Intervention for Infants and Toddlers with Disabilities and their Families*. July 2011.

51 Hebbeler, K, Spiker, D, Bailey, D, Scarborough, A, Mallik, S, Simeonsson, R, Singer, M & Nelson, L. 2007. *Early intervention for infants and toddlers with disabilities and their families: Participants, services and outcomes. Final Report of the National Early Intervention Longitudinal Study (NEILS)*.

52 NECTAC Clearinghouse on Early Intervention and Early Childhood Special Education. *The long term economic benefits of high quality early childhood intervention programs*. Revised December 2005.

# HOW ARIZONA'S YOUNG CHILDREN ARE FARING

## Preschool Participation

As discussed previously, research has overwhelmingly shown that young children exposed to quality early education have a better chance at succeeding academically in their early years and later in life.

Unfortunately, far fewer 3- and 4-year olds in Arizona are enrolled in early education (35%) than same-aged children across the country (48%) (See Figure 18). The cost of child care may very well be a factor in this low enrollment, with center-based early care and education for a single infant, a toddler, or a 3- to 5-year-old costing an Arizona family an estimated 17, 15 and 11 percent of their income respectively.<sup>53</sup> The U.S.

Department of Health and Human Services recommends that parents spend no more than 10 percent of their family income on early care and education.<sup>54</sup> The cost for early care and education at a licensed child

care center is considerably higher than in a family care setting, particularly for children under 3 years old. This may leave families who want an early learning program for their child with few affordable options.

## Arizona Supports

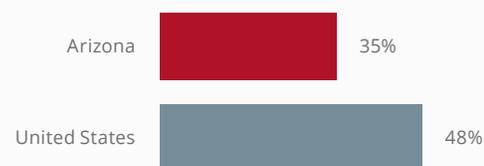
### Early Care and Education

Nationwide, the number of children receiving Child Care and Development Fund (CCDF) child care assistance in 2013 was the lowest since 1998.<sup>55</sup> In 2014, 26,685 children (0-5) received these subsidies in Arizona. The number of subsidies provided to young children represents about five percent of children birth to 5 years old in the state. 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 good news for Arizona, a portion of families wait-listed for child care subsidies since February 2011 began receiving subsidies in July 2014.<sup>56</sup> Nonetheless, the demand for this support continues to surpass the available supply, and Arizona is one of 18 states that are not able to provide support to all eligible families who apply for subsidies.<sup>57</sup> The most recent state budget eliminated \$4 million from the Child Care Subsidy Program, which will likely have a substantial impact on low-income working families in the coming years.<sup>58</sup>

Federal funds also are the primary funding source of Head Start and Early Head Start programs, which work to promote school readiness for children from low-income families. Head Start is primarily a program for preschoolers, while Early Head Start works with pregnant women, infants and toddlers through the transition to preschool. Head Start and Early Head Start services are offered in a variety of settings, including centers, schools, child care homes and, in some cases,

Figure 18

Fewer 3- and 4-year-olds attend preschool in Arizona than in the U.S. as a whole.\*



3- and 4- year olds enrolled in some form of early education. \*As a proportion of the population. US Census Bureau (2014), 2009-2013 American Community Survey 5 Year Estimates, Table B14003.

53 Note: The cost of center-based care as a percentage of income is based on the Arizona median annual family income of \$58,900 and costs from the 2014 DES Market Rate Survey.

54 US Department of Health and Human Services, Child Care Bureau (2008). *Child Care and Development Fund: Report of state and territory plans: FY 2008-2009. Section 3.5.5 – Affordable co-payments*, p. 89.

55 CLASP. (2014.) *Average Monthly Number of Children Served in CCDBG, By State*.

56 National Women's Law Center. *Turning the Corner: State Child Care Assistance Policies 2014*.

57 Ibid

58 Reilly, T., and Vitek, K. (2015.) *TANF cuts: Is Arizona shortsighted in its dwindling support for poor families?*

individual homes. Both programs incorporate early learning, health and family support services. Approximately 1 million children are served by these programs throughout the nation, including U.S. territories and tribal nations. Enrollment of children in foster care, children with disabilities, and children whose families are homeless is prioritized. About 80 percent of the children served by Head Start last year were 3 and 4 years old.<sup>59</sup> Over the past seven years, the number of Arizona children accessing Head Start or Early Head Start services has remained fairly stable (See Table 2).

Created by First Things First, Quality First is Arizona’s child care and preschool quality improvement and rating system. The system partners with early learning providers – including licensed child care and preschool centers and family child care homes – to improve the quality of their early care and education programs. By the end of fiscal year 2015, 929 licensed or certified child care providers were participating in this voluntary program, impacting more than 50,000 children. As part of an effort to increase access to quality early learning, many First Things First regional partnership councils fund scholarships for families earning at or below 200 percent of the Federal Poverty Level. With limited exceptions, the scholarships can only be used at Quality First participating providers who have achieved ratings in the quality levels. The number of children served by the program grew steadily between 2011 and 2014, decreasing slightly in 2015 (See Figure 19). The number of scholarships available in each area of the state depends on available funds and the early childhood priorities established by the local regional partnership

Figure 19

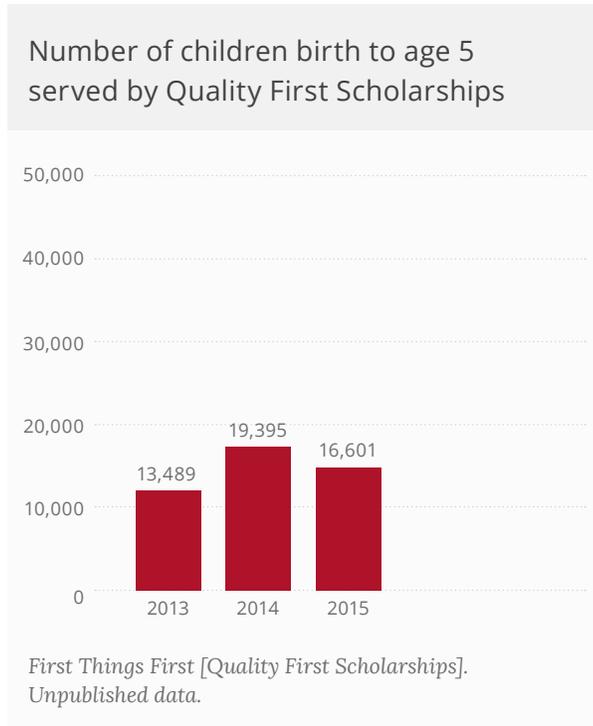


Table 2

Number of children enrolled for any period of the year in any of the Head Start programs, by age group

Age Group	2009	2010	2011	2012	2013	2014	2015
<3*	1,951	2,978	3,250	3,309	3,526	3,246	3,893
3	5,755	5,577	5,773	5,784	6,092	5,484	6,562
4	12,163	13,066	12,763	12,407	12,345	11,570	11,436
5 years and older	1,400	741	939	429	474	339	107
<b>Total Enrollment</b>	<b>21,269</b>	<b>22,362</b>	<b>22,725</b>	<b>21,929</b>	<b>22,437</b>	<b>20,639</b>	<b>21,998</b>

Office of Head Start- Program Information Reports (2009–2015). Enrollment Statistics Reports- State Level. \*Note: Pregnant women are included in the “0 to 2” age category.

<sup>59</sup> Office of Head Start- Program Information Reports (2009–2015). Enrollment Statistics Reports- State Level.

council. As a result of a 24 percent reduction in tobacco revenues over the past six years, FTF regional partnership councils had to adjust their scholarship allotment levels for fiscal year 2016 to meet their fiscal realities, resulting in fewer scholarship slots being available. Nonetheless, almost 29 percent of FTF’s allotted funds in fiscal year 2016 go toward providing infants, toddlers and preschoolers access to quality early learning settings.

In addition to the existing DES, Head Start and FTF programs, at the end of 2014, Arizona was awarded a federal Preschool Development Grant of up to \$20 million per year for up to four years from the U.S. Department of Education to improve the state’s preschool enrollment.<sup>60</sup> Arizona’s low percentage of children enrolled in preschool was one of the reasons it was one of five states awarded the federal grant. The grant funding supports increasing infrastructure to provide high-quality preschool programs, and expansion of high-quality preschool programs in high-need communities, which should help expand the availability of these valuable resources to thousands of young children across the state.<sup>61</sup>

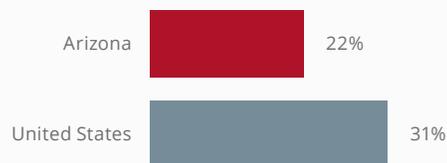
### Children with Special Needs

The availability of services for young children with special needs is an ongoing concern across the state, particularly in the numerous geographically remote communities. Developmental and sensory screenings, often one of the first steps in the process of receiving these services, are less common in Arizona during health care visits than they are across the country (See Figure 20). Various partners in Arizona’s early childhood system are working to expand developmental and sensory screening for infants and toddlers. For example, First Things First has several regional partnership councils that fund developmental and sensory screenings for children birth to 5 years old in their communities. In state fiscal year 2015, more than 31,000 screenings were completed to identify issues that, left unaddressed, could become learning problems later on. In addition, FTF and other early childhood system partners integrate developmental screening in to programs such as home visitation to further expand the availability of developmental screenings for young children.

In Arizona, the Department of Economic Security manages the Arizona Early Intervention Program (AzEIP) and the Division of Developmental Disabilities (DDD) which provide early intervention services

Figure 20

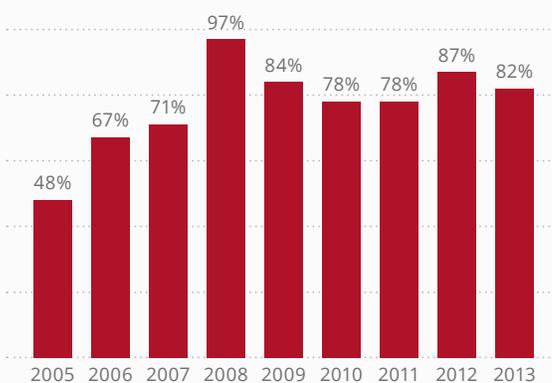
Fewer young children received standardized developmental screenings in Arizona than in the U.S. as a whole.



Children Ages 10 months–5 Years Who Received Developmental Screenings during a Health Care Visit, 2011/2012. National Survey of Children’s Health. NSCH 2011/12. Data query from the Child and Adolescent Health Measurement Initiative, Data Resource Center for Child and Adolescent Health website.

Figure 21

One in five toddlers and infants in Arizona are receiving delayed early intervention services.



AzEIP Timely Provision of Services, 2005–2013. Arizona Department of Economic Security (2015). FFY 2013 Part C State Performance Plan (SPP)/Annual Performance Report (APR).

60 Wilde., T. (2015.) Arizona getting \$20 million early childhood education grant. Public News Service.

61 Department of Education. Department of Health and Human Services.

for infants, toddlers and preschoolers with developmental delays and disabilities. The number of children from birth through 2 years old referred to AzEIP<sup>62</sup> increased from about 10,700 in 2013 to about 11,700 in 2014. The number of young children with an Individualized Family Service Plan (IFSP), the first step after a child is determined eligible for AzEIP, increased dramatically over that same period from about 2,600 to 5,250. The state target for providing timely services to families with an IFSP is 100 percent; in fiscal year 2013, one in five children did not receive services in a timely manner (See Figure 21).

The number of children referred for DDD services also increased between 2012 and 2014. Those referred from birth to 2 increased from about 1,450 to about 2,500 (a 72% change); those 3 through 5 years old increased from about 1,400 to about 1,800 (a 30% change). However, the number of children birth to 2 years old receiving services decreased by 12 percent (from about 2,650 to about 2,350), and the number of 3- to 5-year-olds being served has remained largely the same (decreasing from 2,563 to 2,533) during the same period.<sup>63</sup> It is unlikely this decrease is due to fewer young children needing services.

### System Collaboration Opportunities

As previously mentioned in this report, developmental and sensory screenings are a crucial first step to identify potential issues that – left unaddressed – could lead to learning problems later on. Improving the coordination of developmental and sensory screening and the rates of young children receiving timely and appropriate screenings has been identified by First Things First as the goal area for its 2014-2016 Early Childhood Comprehensive Systems Grant – a federal grant focused on systems development using a collective impact approach.<sup>64</sup> Current participants include state agency partners (including the Arizona departments of Education, Health Services, and Economic Security; the Arizona Health Care Cost Containment System; Arizona State University; and the University of Arizona), as well as the Ear Foundation, St. Luke’s Health Initiatives, the Virginia G. Piper Charitable Trust, Southwest Human Development, various United Ways, Head Start, Raising Special Kids, and several tribal entities. In addition to increasing rates at which children birth to 5 receive screenings, the grant has engaged a diverse array of community partners to work on increasing the rate at which children are connected to appropriate services and supports to address identified developmental and/or sensory concerns or delays. In addition, among the primary objectives of the collaboration are to connect children age zero to 3 who do not qualify for the Arizona Early Intervention Program to community resources and programs. Another objective is to provide professional development opportunities to those working with young children on standardized tools to screen children and working with parents whose children have been identified with concerns during screening on follow-ups for a more thorough assessment. Increased screening rates also will help system partners to have data that more fully describe the rate and type of potential developmental and sensory concerns among Arizona’s young children, which can inform decisions around Arizona early intervention policy.

Quality matters in early care and education. Quality child care and preschool programs build on basic health and safety to include: teachers who know how to work with infants, toddlers and preschoolers; learning environments that nurture the emotional, social, language and cognitive development of every child; and, positive, consistent relationships that give young children the individual attention they need. Arizona’s child care and preschool quality improvement and rating system is First Things First’s Quality First program. Quality First funds quality improvements that research proves help children thrive. And through the [qualityfirstaz.com](http://qualityfirstaz.com) website, the program offers families information about the importance of quality early care and education and what to look for in child care and preschool settings that

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62 See Arizona Department of Economic Security for more information: <https://www.azdes.gov/main.aspx?menu=98&id=2510>

63 Arizona Department of Economic Security (July 2015). [Special needs dataset]. Unpublished data.

64 Cramer, M. & Kania, J. (2015). *Collective impact*.

promote learning. Currently, resources exist to serve almost 1,000 providers (about 40 percent of the licensed and certified programs in the state). Over the next several years, additional programs will be added through public/public and public/private partnerships, like the federal Preschool Development Grant previously mentioned in this section. The federal grant works to expand the availability of quality preschool in identified high-need communities throughout the state. First Things First is working with a group of stakeholders to identify potential program changes and efficiencies – as well as future partnerships – with the goal of expanding Quality First participation.

In addition, work continues on other mechanisms for enhancing the quality of Arizona’s early care and education programs. The re-authorization of the federal Child Care Development Block Grant includes enhanced requirements for improving the quality of programs that accept child care subsidies for children from low-income families. BUILD Arizona – an alliance of 50 cross-sector partners statewide that support early childhood policy change – established a work group that has provided recommendations to DES to enhance the quality of participating programs, including a tiered reimbursement system for programs that implement quality measures and/or achieve quality ratings.

Language development and early literacy are crucial to success in school. Read On Arizona works with more than 500 collaborative partners throughout Arizona to lead statewide efforts in early literacy. The founding partners for Read On Arizona – which make up the organization’s Advisory Board – include the Arizona Department of Education, First Things First, the Head Start State Collaboration Office, the Virginia G. Piper Charitable Trust, the Helios Education Foundation and the Arizona Community Foundation. Through Read On Arizona, stakeholders working with children from birth to age 8 come together to build awareness of the importance of early literacy; expand literacy opportunities and interventions available in their area; and, ensure that families have access to information and resources to support early literacy and language development with their children. And, while each of the 25 Read On communities statewide is different, they all typically comprise representatives from early care and education providers, schools, cities and towns, libraries, philanthropy, business and child and education advocacy organizations. In fiscal year 2015, Read On Arizona and its statewide partners achieved the following outcomes: more than 253,000 low income children were reached with early literacy support; 150,000 copies of the Early Literacy Guide for Families were printed and distributed to families; more than 581,300 hours were read over the summer of 2014; and, 4,820 copies of Developing a Thriving Reader From the Early Years: A Continuum of Effective Literacy Practices were distributed to early educators to ensure a comprehensive approach to teaching early literacy skills from birth to 8 years old. In addition, in the summer of 2015, partners created MapLIT, an interactive mapping tool as a “one stop” resource to identify key data sets (census, school, health, family engagement) that impact early literacy outcomes in communities. Read On Arizona’s MapLIT provides communities with graphic views of select data for all Arizona public/charter elementary school and preschool site locations to assist community and statewide policy efforts impacting early literacy.

Read On Arizona is on track to achieve one of its primary goals – to establish 30 Read On communities statewide by the end of 2016. In addition, work is currently underway to update its strategic plan for the next several years.

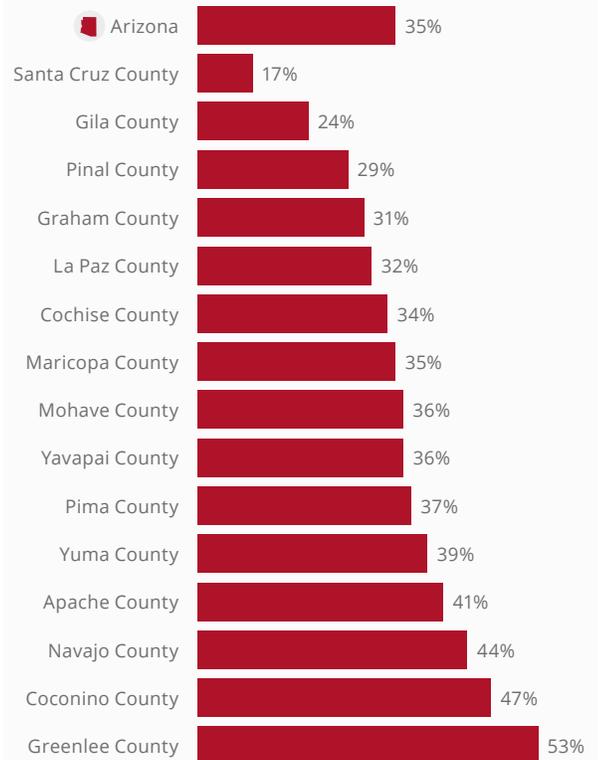
## COUNTY HIGHLIGHTS

The percentage of children enrolled in some form of early education varies greatly by county. Greenlee and Coconino counties had particularly high percentages of young children (ages 3 to 4 years old) enrolled in some form of early education in 2014 (53% and 47%, respectively), followed closely by Navajo (44%) and Apache (41%) counties. Conversely, Santa Cruz County had the lowest percentage (17%), which falls far below the state rate of 35 percent (See Figure 22).

As discussed previously, the cost of child care can be a barrier for families accessing quality early learning opportunities for their children. Generally speaking, care for infants is the most expensive because they require the highest staff-to-child ratio. These costs also vary by county, with Santa Cruz and Apache counties having the most costly child care as a percentage of median income across all age groups: infants; 1- to 2-year-olds; and 3- to 5-year-olds (See Figure 23). It is important to note that the percentages in Figure 23 reflect families with only one young child in need of full-time care. Families with more than one child under age 5 requiring child care would exceed the U.S. Department of Health and Human Services' recommendation (no more than 10 percent of income spent on child care) by a substantially higher percentage. Moreover, the percentages were calculated with the average median income for all families. Single parent homes, particularly those with a single female householder, typically have a substantially lower median income, resulting in a higher cost of child care by percent of median income. Single parent families may also be more likely to need full-time child care than married-couple families.

Figure 22

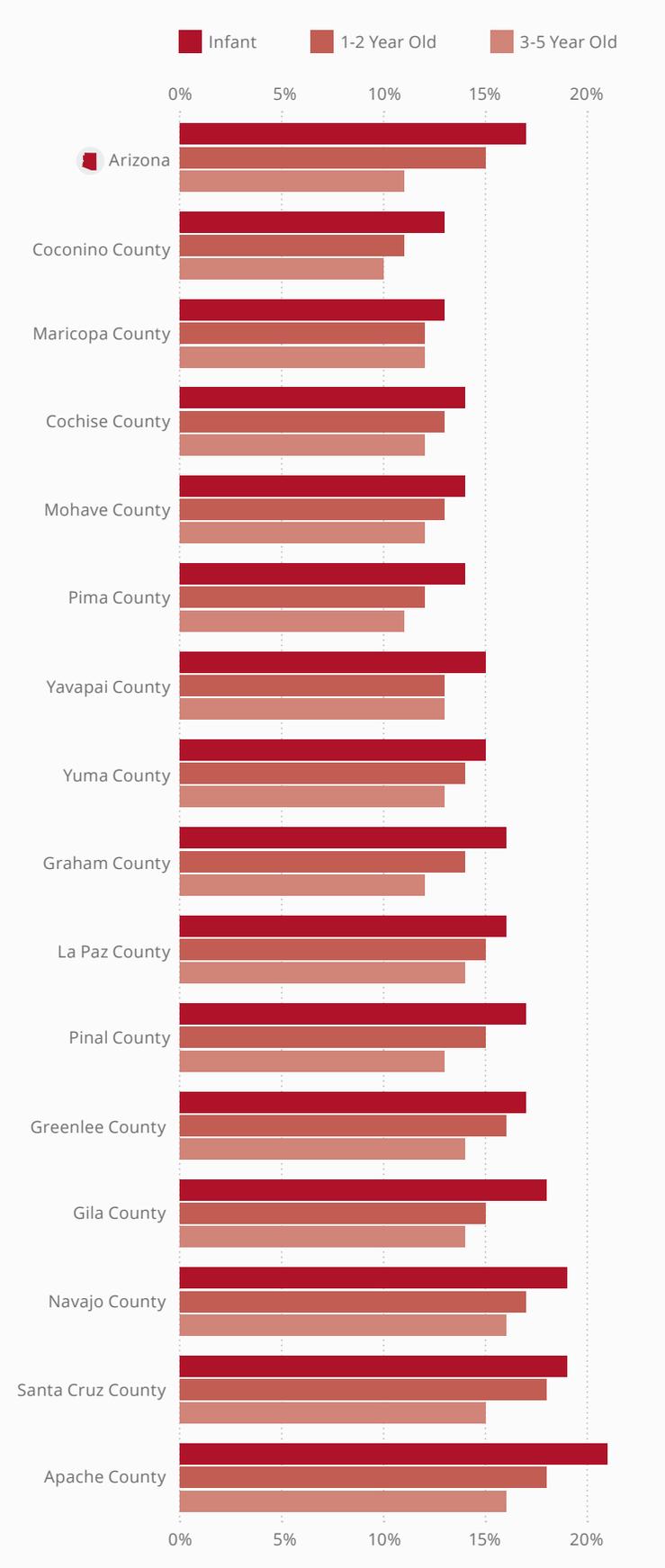
Percentage of 3- and 4-year-olds enrolled in some form of early education by county



3- and 4-year-olds enrolled in some form of early education. US Census Bureau (2014). 2009-2013 American Community Survey 5 Year Estimates, Table B14003.

Figure 23

Cost of child care in a center as a percentage of median income



Cost of center-based child care as a percentage of median family income by county. US Census Bureau (2014). 2009-2013 American Community Survey 5 Year Estimates, Table B19126. Arizona Department of Economic Security (2015). [Child care market rate survey data]. Unpublished raw data received from First Things First State Agency Data Request.

## WHY K-12 EDUCATION MATTERS

Education builds a foundation for the future, and strong educational systems are important for the development not only of children, but also for the state as a whole. As discussed in the previous section, children whose education begins with high-quality early learning opportunities tend to repeat grades less frequently, have higher standardized test scores and fewer behavior problems, as well as higher rates of high school graduation.<sup>65</sup> Adults who graduate from high school earn more and are less likely to rely on government-funded assistance programs than those without high school degrees, and higher levels of education are associated with better housing, neighborhood of residence, and working conditions, all of which are important for the health and well-being of children.<sup>66, 67</sup>

From 2000-2014, the primary academic performance of students in the public elementary schools in the state has been measured by Arizona's Instrument to Measure Standards (AIMS).<sup>68</sup> The AIMS has been used to track how well students are performing compared to state standards, and was considered a high-stakes exam because the results directly impacted students' future progress in school. Beginning in the 2013-2014 school year, AIMS scores were used to meet the requirement of A.R.S. §15-701 (also known as the Move on When Reading law), which states that a student shall not be promoted from the third grade if the student obtains a score on the statewide reading assessment "that demonstrates that the pupil's reading falls far below the third-grade level." Exceptions exist for students identified with or being evaluated for learning disabilities, English language learners, and those with reading impairments. Passing AIMS scores were also required for high school graduation.

However, a new summative assessment system which reflects Arizona's K-12 academic standards, Arizona's Measurement of Educational Readiness to Inform Teaching (AzMERIT), was implemented in the 2014-2015 school year.<sup>69</sup> This assessment replaced the reading and mathematics portions of the AIMS test. Although it is not a graduation requirement, it will still be used to determine promotion from the third grade in accordance with A.R.S. §15-701.<sup>70</sup> AIMS results are included in this report, but future reports will use AzMERIT scores as they become available.

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65 Annie E. Casey Foundation. (2013.) *The First Eight Years*.

66 *Ibid*

67 Lynch, J., & Kaplan, G. (2000). Socioeconomic position (pp. 13-35). In *Social Epidemiology*. Berkman, L. F. & Kawachi, I. (Eds.). New York:Oxford University Press.

68 For more information on the AIMS test, see <http://arizonaindicators.org/education/aims>

69 For more information on AzMERIT, see <http://www.azed.gov/assessment/azmerit/>

70 For more information on Move on When Reading, see <http://www.azed.gov/mowr/>

# HOW ARIZONA'S CHILDREN ARE FARING

## High School Completion

The 4-year graduation rate of public high school students in Arizona dropped slightly between 2010 and 2013 from 78 to 75 percent, and remains below the nationwide graduation rate (See Figure 24). Arizona's graduation rate is among the lowest in the nation; only six states, and Washington D.C., had lower graduation rates than Arizona in 2012-2013. However, the rates in those states have been improving since 2010-2011, whereas the rate in Arizona has worsened.<sup>71</sup> Given the lower rates of high school completion, it is not surprising that the percentage of adults (25 years and older) in Arizona with a high school diploma or GED (25%) is also lower than across the nation (28%).

## Arizona Achievement Scores

Achievement scores at earlier grades in Arizona lag behind the country as a whole in reading (See Figure 25). The National Assessment of Educational Progress (NAEP) is an assessment of mathematics, reading, writing, and science performance for America's children in fourth and eighth grades.<sup>72</sup> In 2013, the average reading score for Arizona's fourth graders (213) was below the national average, showed no statistical improvement from 2011 (212) and placed Arizona in the bottom ten of all states on the NAEP's basic reading assessment. Only 28 percent of fourth grade students in Arizona scored at or above proficient reading assessment level on the NAEP.<sup>73</sup> On the other hand, Arizona's mathematics scores showed an increase from 2011 (235) to 2013 (240), with 44 percent of Arizona fourth graders at or above proficiency in math. Unlike reading results, math results were similar to those achieved nationally.<sup>74</sup>

In AIMS testing, students are classified as either "falls far behind," "approaches," "meets," or "exceeds" the grade-level academic expectations set forth. The "passing" designation is applied to all students in the latter two categories. Between 2011 and 2014, the

71 US Department of Education, Institute of Education Sciences, National Center for Education Statistics (2015).

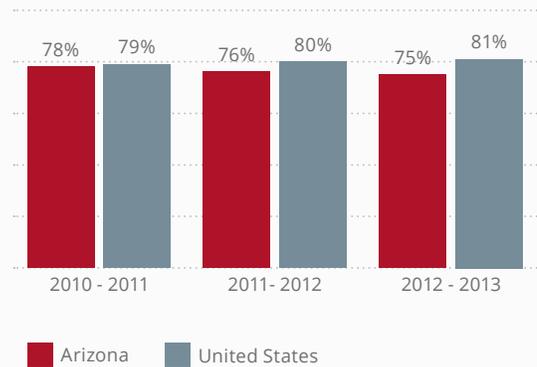
72 The NAEP test is a product of US Department of Education. National and State results can be found at <http://nces.ed.gov/nationsreportcard>

73 Arizona Grade 4 Public School Reading 2013 State Snapshot Report.

74 Ibid

Figure 24

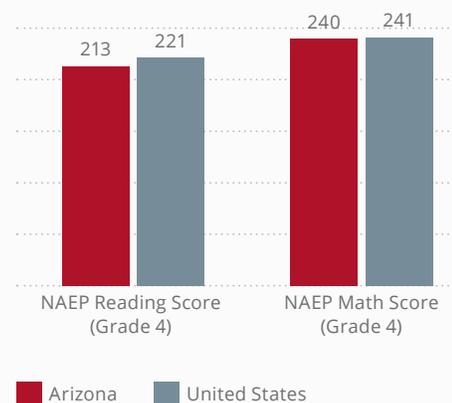
Public high school seniors in Arizona are graduating at a lower rate than in the U.S. as whole.



4-Year Public High School Graduation Rates AY2010-2012. National Center for Education Statistics (2015). Public high school 4-year adjusted cohort graduation rate (ACGR) for the United States, the 50 states and the District of Columbia: School years 2010-2011 to 2012-2013.

Figure 25

Arizona lags behind the U.S. as a whole in fourth grade reading.\*



NAEP Reading and Mathematics Scores, 2013. National Center for Education Statistics (2015). \*Scores reported are averages.

percentage of Arizona third graders passing the AIMS reading and math tests remained about the same, going from 76 to 78 percent in reading and 68 to 70 percent in math (See Figure 26). Overall, in 2014, three percent of Arizona children were classified as “falls far behind” in reading achievement, putting them at risk of third grade retention under the Move on When Reading law.

### Arizona Supports

The 2015 Kids Count Data Book ranked Arizona 44th of the 50 states in terms of children’s educational achievement.<sup>75</sup> As these children grow and mature, limited mathematical and literacy skills could not only impede future academic success, but also limit their access to jobs, their ability to navigate complex systems like health insurance, and generally have implications for their well-being and the well-being of their future families. Arizona’s investment in K-12 education lags behind the rest of the nation. The state spends \$7,208 per public school student, substantially less than the national average of \$10,700 per student (See Figure 27), placing it 49th among the 50 states and the District of Columbia.<sup>76</sup>

Figure 26

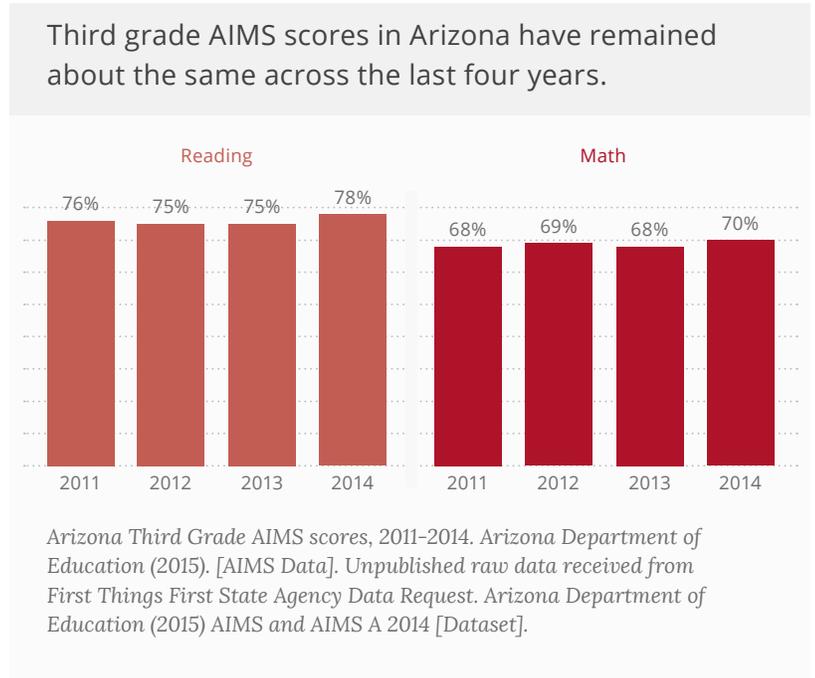
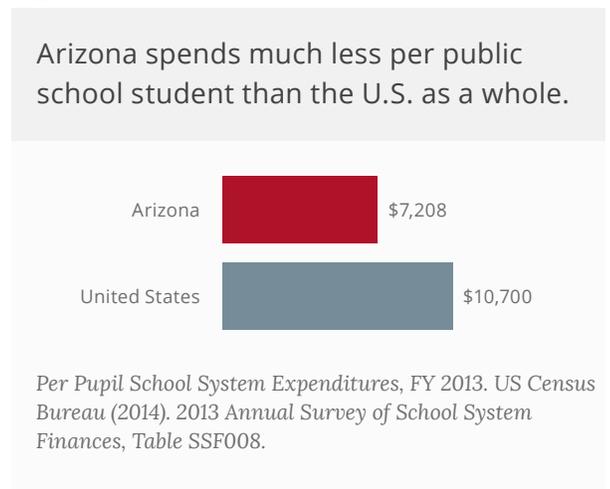


Figure 27



75 The Annie E Casey Foundation. 2015 Kids Count Data Book.

76 US Census Bureau. Per Pupil Amounts for Current Spending of Public Elementary-Secondary School Systems by State: Fiscal Year 2013 - United States - States.

# COUNTY HIGHLIGHTS

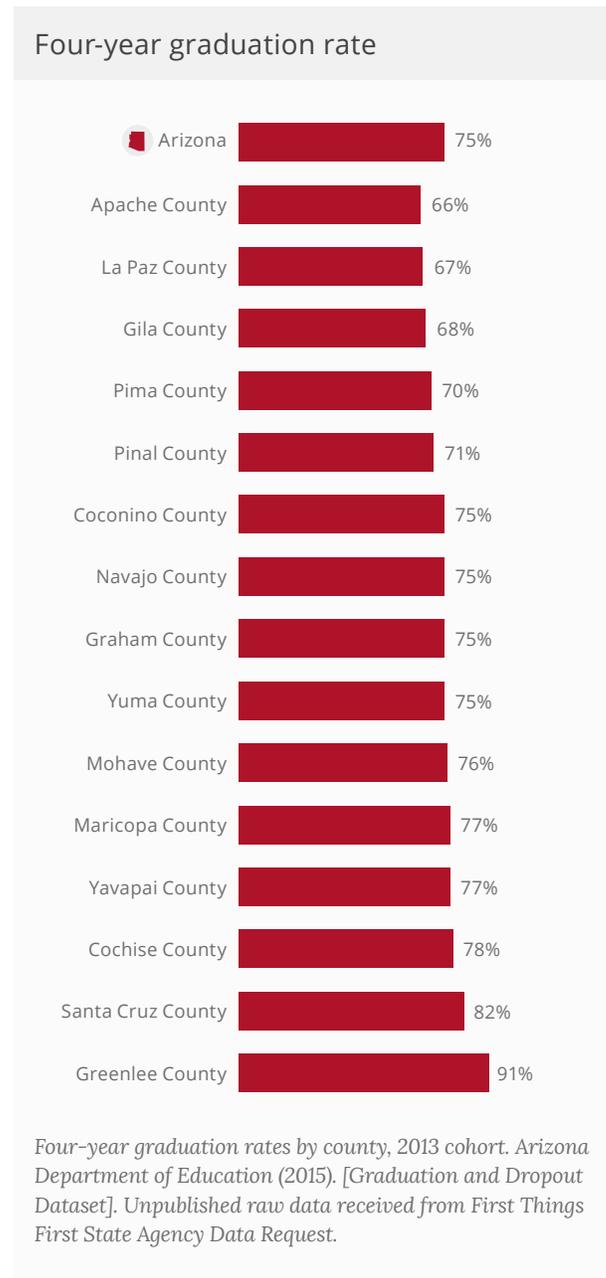
## High School Completion

There is variability in both high school graduation rates and attainment of high school diplomas across Arizona counties. La Paz and Apache Counties had the lowest 4-year graduation rates in the state (67% and 66% respectively) (See Figure 28), and at least a quarter of the adult population 25 and older in Apache, La Paz, Santa Cruz and Yuma counties had less than a high school education in 2014.<sup>77</sup>

## County Achievement Scores

In every county, and the state as a whole, students show higher reading achievement than math achievement (See Figure 29). In three counties, more than half of students fail to meet grade-level expectations for math. Between 2011 and 2014, students in Greenlee and Yavapai counties consistently performed better on the AIMS reading test than other Arizona students. In addition, the proportion of third graders passing the AIMS reading test increased 10 percent in Greenlee County between 2011 and 2014, representing the largest gains for any county. Given the close connections between educational achievement and poverty, it is not surprising that Apache County, which has the highest poverty rates for adults and young children, also struggles with K-12 achievement. Mohave County, however, defies expectations; despite having a high rate of child poverty, its students are the 4th highest achieving in the state.

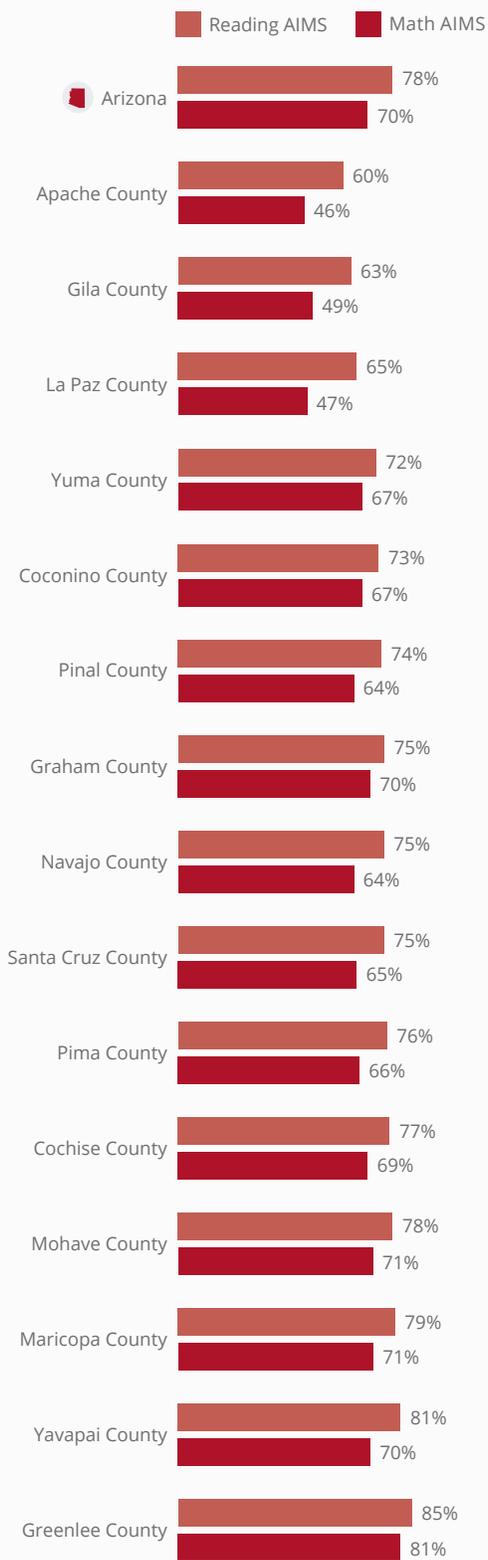
Figure 28



<sup>77</sup> US Census Bureau (2014). 2009–2013 American Community Survey 5 Year Estimates, Table B15002.

Figure 29

Percentage of third grade students passing 2014 AIMS



2014 AIMS Math and Reading Results, Percent Passing. Arizona Department of Education (2015). AIMS and AIMS A 2014.



## CHILD HEALTH AND WELL-BEING

### WHY IT MATTERS

Children's health encompasses not only their physical health, but also their mental, intellectual, social and emotional well-being, and can be influenced by their parents' health and the environment into which they are born and raised.<sup>78,79</sup> Factors such as a mother's prenatal care, access to health care and health insurance, and receipt of preventive care such as immunizations and oral health care all influence not only a child's current health, but also their long-term development and success. Healthy People is a science-based government initiative which provides 10-year national objectives for improving the health of Americans. Healthy People 2020 targets are developed with the use of current health data, baseline measures, and areas for specific improvement. Understanding where Arizona mothers and children fall in relation to these national benchmarks can help highlight areas of strength in relation to young children's health and those in need of improvement in the state.

The ability to obtain health care is critical for supporting the health of young children. There are many opportunities during the early years of a child's life for well-baby and well-child visits that can offer developmentally appropriate information and guidance to parents, and that can provide a chance for health professionals to assess the child's development and administer preventative care measures like vaccines and developmental screenings. Without health insurance, each visit can be prohibitively expensive and may be skipped.<sup>80</sup> Unfortunately, children in Arizona are particularly vulnerable when it comes to health insurance; 14,000 children lost their health insurance in the beginning of 2014 when the Arizona KidsCare and KidsCare II Children's Health Insurance Program (CHIP) programs were discontinued.<sup>81</sup> A portion of those children who lost insurance could be covered

<sup>78</sup> *The Future of Children*. (2015.) *Policies to Promote Child Health*, Vol 25, No. 1, Spring 2015.

<sup>79</sup> *Center on the Developing Child at Harvard University* (2010). *The Foundations of Lifelong Health Are Built in Early Childhood*.

<sup>80</sup> Yeung, LF, Coates, RJ, Seeff, L, Monroe, JA, Lu, MC, & Boyle, CA. *Conclusions and Future Directions for Periodic Reporting on the Use of Selected Clinical Preventive Services to Improve the Health of Infants, Children, and Adolescents – United States*. *MMWR* 2014;63(Suppl-2):[99-107].

<sup>81</sup> *Georgetown University Health Policy Institute, Center for Children and Families*. *Children's Health Coverage in Arizona: A Cautionary Tale for the Future of the Children's Health Insurance Program (CHIP)*.

through Medicaid expansion through the Affordable Care Act (ACA) although this was only extended to families earning less than 147 percent of the Federal Poverty Level (FPL) for families with children ages birth to 1 and 141 percent of the FPL for families with children 1 to 5 years old.<sup>82</sup> CHIP had covered children whose families earned up to 200 percent of the FPL, leaving a portion of those who lost insurance when KidsCare ended needing to buy insurance in the state's health care exchanges. Nationally, the CHIP Reauthorization Act of 2015 was signed into law in April 2015 which extended the national CHIP program for two years.<sup>83</sup> Currently, Arizona is the only state in the country without an active CHIP program.

Poor oral health can have a detrimental effect on children's quality of life, their performance at school, and their success in life. In fact, more than 51 million school hours are lost each year to dental-related illness.<sup>84</sup> An essential component of child well-being is good oral health and the absence of tooth decay. Untreated tooth decay is the most common chronic disease among children in the United States, causing pain and infections that may lead to other serious problems with eating, speaking, playing and learning.<sup>85</sup>

Tooth decay (dental caries) is five times more common than asthma and seven times more common than hay fever.<sup>86</sup> The American Academy of Pediatrics estimates that half of all children in the U.S. will develop caries, and some will experience severe dental disease.

Children begin to get their first teeth at around 6 months old, and by the time they are about 3, children will have the complete set of 20 primary teeth. Although not permanent, these teeth are an essential component of a child's well-being. Healthy first teeth are needed to bite and chew food, develop speech, develop the jaw bones and face muscles, and to hold space for and guide adult teeth into proper position.<sup>87</sup> In addition, a healthy smile supports growth of a child's self-esteem.<sup>88</sup> Undetected and untreated tooth decay can interrupt all of these needs, lead to pain, and negatively impact development of adult teeth leading to long-lasting effects, including bone loss and systemic infections.<sup>89,90</sup>

Injuries are the leading cause of death in children in the United States.<sup>91</sup> Nonfatal unintentional injuries substantially impact the well-being of children and are estimated to cost the U.S. more than \$347 billion annually in medical costs and lost quality of life.<sup>92</sup> Many of these injuries are preventable, leading 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

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82 Medicaid.gov. *Arizona Medicaid and CHIP Eligibility Levels*.

83 *National Conference of State Legislators*. (2015.) *Children's Health Insurance Program Overview*.

84 *National Institute of Dental and Craniofacial Research, US Department of Health and Human Services*. (2000). *Oral Health in America: A Report of the Surgeon General*. Rockville, Maryland.

85 *Centers for Disease Control and Prevention: Division of Oral Health, Children's Oral Health*.

86 *National Institute of Dental and Craniofacial Research, US Department of Health and Human Services*. (2000). *Oral Health in America: A Report of the Surgeon General*. Rockville, Maryland.

87 *Arizona Department of Health Services*. (2012) *Oral Health Findings, Arizona Preschool Children, Fact Sheet #1 (Publication 2-OH-069 REV. 3/12)*.

88 *National Maternal and Child Oral Health Resource Center, Georgetown University*. (2013). *Oral Health and Learning: When Children's Oral Health Suffers, So Does Their Ability to Learn*. Washington, DC.

89 *National Institute of Dental and Craniofacial Research, US Department of Health and Human Services*. (2000) *Oral Health in America: A Report of the Surgeon General*. Rockville, Maryland.

90 *Delta Dental Plans Association, Oral Health Library, Infants and Toddlers and Children*.

91 *Centers for Disease Control and Prevention, National Center for Injury Prevention and Control*, (2013). *10 Leading Causes of Death by Age Group, United States-2013*.

92 *Danescu, E.R., Miller, T.R., & Spicer, R. S.* (2000). *Incidence and costs of 1987-1994 childhood injuries: demographic breakdowns. Pediatrics* (105), pp. 4.

children safe.<sup>93</sup> The Arizona Department of Health Services has recognized the need to focus on reducing childhood injuries in Arizona, and identified that as one of their priorities in the 2011-2015 Bureau of Women's and Children's Health Strategic Plan.<sup>94</sup>

Just as positive experiences promote healthy brain development, negative experiences – such as maltreatment or other forms of toxic stress, such as family violence – can negatively affect brain development. Potential impact include changes to the structure and chemical activity of the brain (e.g., decreased size or connectivity in some parts of the brain), and in the child's emotional and behavioral functioning.<sup>95</sup>

Neglect can include both the failure to meet a child's physical needs for food, shelter, and safety, as well as failure to meet a child's cognitive, emotional, or social needs. For children to master developmental tasks in these areas, they need stable environments and nurturing interactions with their caregivers. If this stimulation is lacking during children's early years, brain development is impacted and the children may not achieve the usual developmental milestones.<sup>96</sup>

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93 Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. *National Action Plan for Child Injury Prevention*. Atlanta (GA): CDC, NCIPC; 2012.

94 ADHS Bureau of Women's and Children's Health Strategic Plan, 2011-2015.

95 Child Welfare Information Gateway. (2015). *Understanding the effects of maltreatment on brain development*. Washington, DC: US Department of Health and Human Services, Children's Bureau.

96 Ibid

## HOW ARIZONA'S YOUNG CHILDREN ARE FARING

In terms of prenatal health, Arizona does not yet meet federal targets for reported maternal smoking during pregnancy. Across Arizona, 4.4 percent of pregnant women reported smoking in 2013, well above the 2020 Healthy People target of 1.4 percent. Reported smoking during pregnancy varies considerably across counties (discussed in the County Highlights section), highlighting the need for targeted interventions to encourage pregnant women to quit.

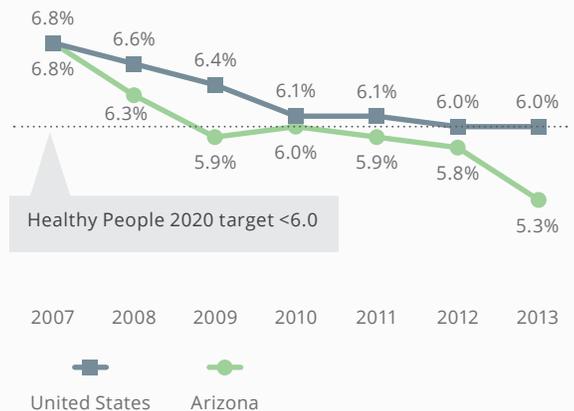
Despite the elevated rates of smoking during pregnancy, Arizona babies seem to be making gains in other areas. Between 2007 and 2013, the infant mortality rate dropped from 6.8 to 5.3 per 1,000 live births, and fell farther than the U.S. rate. This also means that Arizona meets the Healthy People 2020 target of 6.0 per 1,000 live births (See Figure 30). In addition, in 2013, fewer Arizona's babies were born at low birth weight (7% AZ vs. 8% U.S.), or prematurely (9% AZ vs. 11% U.S.) than those across the nation (See Figure 31). These indicators also represent success relative to the Healthy People 2020 target of less than 7.8 percent for low birth weight and less than 11.4 percent for premature births. The percentage of babies born in Arizona with high birth weight is similar to the nation (8% for both). While the concerns related to low birth rate are widely known, fetuses who are significantly larger than average, a condition known as macrosomia, are associated with health risks for both the mother and infant during birth. These children are also at increased risk for obesity and metabolic syndrome (which is linked to an increase risk of heart disease, stroke, and diabetes).<sup>97</sup>

The number of teens becoming parents in Arizona remains a concern. The percentage of births to teen mothers is higher in Arizona than across the nation for both mothers under the age 17 and under the age of 19 (See Figure 32). In 2013, there were 2,056 births to mothers 17 or younger in AZ, and 7,222 births to mothers 19 or younger.

As of May 2015, Arizona had the largest percentage of children enrolled in the health insurance marketplace nationally (23% compared to 8% for the U.S. as a

Figure 30

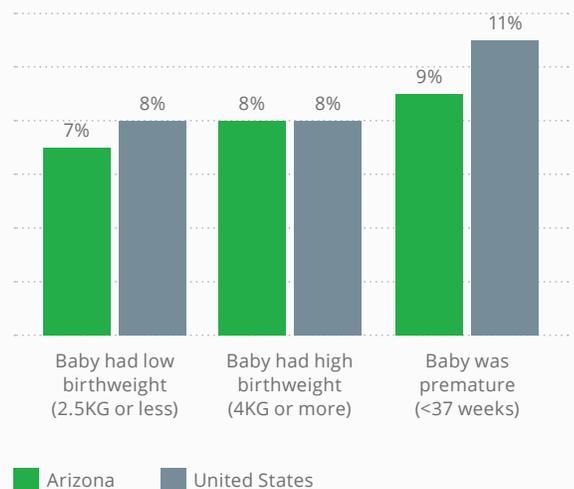
The infant mortality rate in Arizona is decreasing faster than in the U.S. as a whole.



Infant Mortality Rate, 2007-2013. Arizona Department of Health Services (2015). Arizona Health Status and Vital Statistics 2013 Annual Report, Table 5E-17; Center for Disease Control and Prevention (2013). Infant mortality statistics from the 2013 period linked birth/infant death data set.

Figure 31

Babies in Arizona have better health outcomes than the U.S. as a whole for several key indicators.



Infant Birthweight and Premature Birth Rate Arizona Department of Health Services (2015). [Maternal and infant health dataset]. Unpublished raw data received from First Things First State Agency Data Request.

<sup>97</sup> Mayo Clinic Staff. Fetal macrosomia.

whole).<sup>98</sup> This, together with continued Medicaid expansion, has resulted in a drop in the estimated number of young children in Arizona without health insurance (See Figure 33).

Compared to 5-year-olds in the general U.S. population, Arizona’s children (kindergarten) are more likely to have decay experience (See Figure 34). A recent survey shows that the prevalence of decay in Arizona kindergarteners has decreased in the past several years, going from 35 percent to 27 percent (See Figure 35). While the prevalence and severity of tooth decay has declined among school-aged children, it remains a significant problem in some sub-populations – particularly certain racial and ethnic groups and low income children.<sup>99</sup> National data indicate that 80 percent of tooth decay in children is concentrated in 25 percent of the child population, with low-income children and racial/ethnic minority groups having more untreated decay than the U.S. population as a whole.<sup>100</sup> This disparity is also seen in Arizona, with low-income and minority children having the highest level of untreated decay and decay experience.

Inpatient hospitalizations and emergency room visits for children from birth to 5 with non-fatal unintentional injuries have fallen between 2012 and 2014 (See Figure 36). Overall, hospitalizations have dropped by 31 percent, and emergency room visits have fallen by seven percent; the change in both are greater than would be accounted for by the decreasing birth to 5 population in the state in those years. Falls accounted for the highest proportion of injuries leading to both emergency room visits (46%) and hospitalizations (35%).

There were variations by ethnicity in

98 Cover Arizona. (May 2015). *Affordable Care Act Az – 2015 by the numbers.*

99 Vargas CM, Crall JJ, Schneider DA/ *Sociodemographic distribution of pediatric dental caries, NHANES III, 1988-1994. J Am Den Assoc 1998, 129: 1229-38.*

100 Kaste LS, Selwitz RH, Oldakowski RJ, Brunelle JA, Winn DM, Brown LJ. *Coronal caries in the primary and permanent dentition of children and adolescents 1-17 years of age: United States 1988-91. J Dent Research 1996, 75:631-41.*

Figure 32

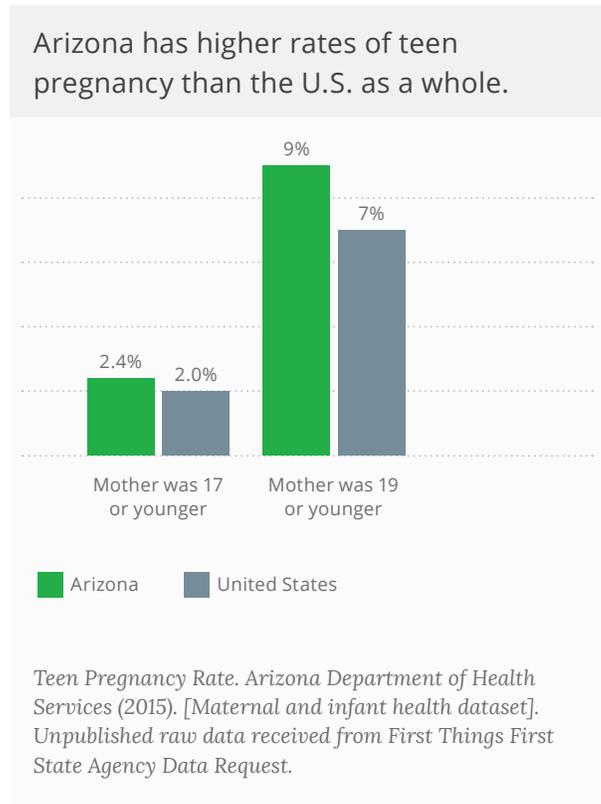
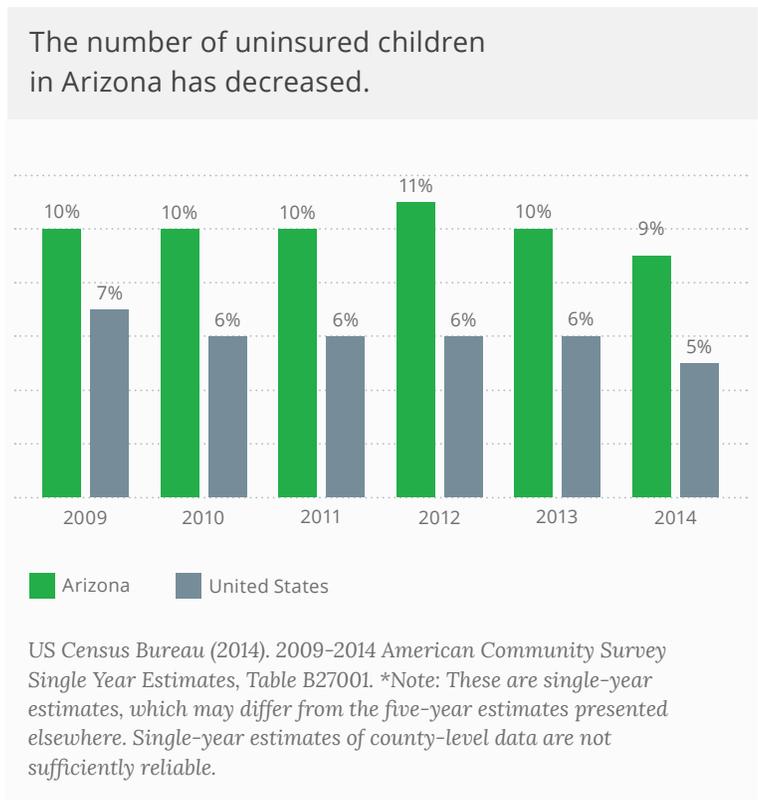


Figure 33



both emergency room (ER) visits and hospitalizations due to unintentional injuries. Young Latino children accounted for about 18,000 ER visits, or 40 percent of the total. This is fewer than would be expected, given that they make up about 45 percent of the population of young children. White young children were slightly over represented in ER visits, with 46 percent of visits compared to making up 40 percent of the population. Young Latino children are also under represented in hospitalizations, accounting for 36 percent. White, Black and American Indian young children are over-represented in hospitalizations for unintentional injuries.<sup>101</sup> White young children account for 43 percent of hospitalizations (compared to 40% in population); American Indian children accounted for 10 percent of hospitalizations (compared to 6% in the population); and African American children accounted for 8 percent (compared to 5% in the population).

Although the overall number of hospitalizations and emergency room visits in the state has decreased since 2012, it is important to ensure that effective policies are in place to continue to prevent child injury. The Centers for Disease Control and Prevention’s National Action Plan for Child Injury Prevention calls for a multi-step approach that includes: improvements in standardization of data and surveillance systems to help fill gaps in information; supporting a cross-discipline research agenda around proven prevention strategies and understanding new hazards; raising awareness about child injuries through improved communication (e.g. national campaigns) and education and training among parents, educators and health providers; improved health care access to facilities such as poison control centers, trauma systems and emergency medical services especially to rural residents and high-risk populations; and adoption and enforcement of policies such as child safety seat use, helmet use and pool fencing.<sup>102</sup>

Data provided from the Arizona Department of Child Safety indicate that children birth to 5 years old consistently represent 40 percent or more of the children removed from their homes due to suspected

101 Arizona Department of Health Services (June 2015). [Unintentional Injury report]. Unpublished data raw data received from First Things First State Agency Data Request.

102 Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2012). National Action Plan for Child Injury Prevention.

Figure 34

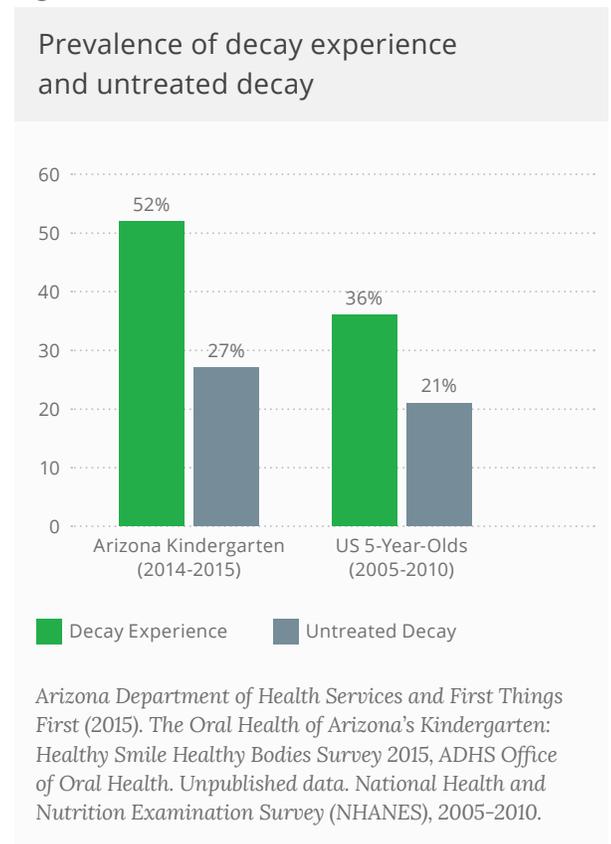
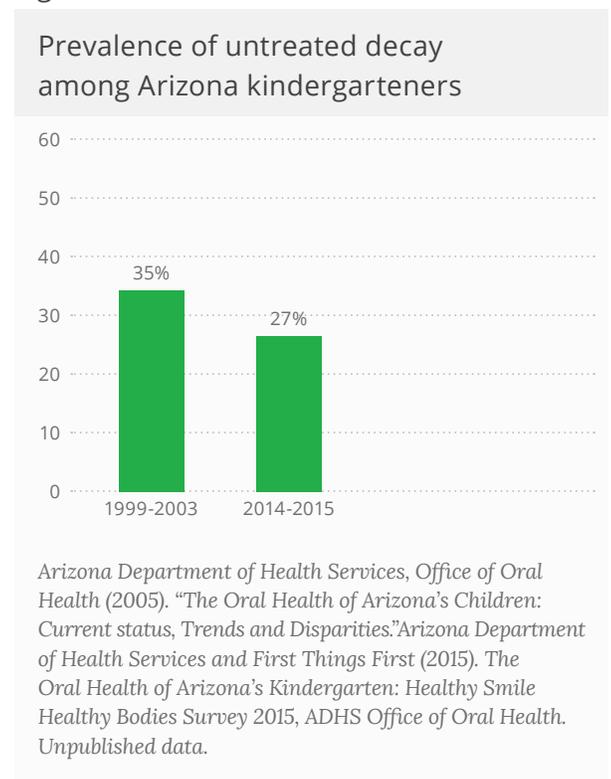


Figure 35



child abuse or neglect. Although the percentage remains fairly consistent, the actual number of babies, toddlers and preschoolers impacted has risen dramatically (See Figure 37). Court Team programs focus on improving how the courts, child welfare, and child serving organizations work together, share information and expedite services for infants and toddlers in the child welfare system so that research informed decisions combined with developmentally appropriate services are provided to this highest risk population of children. Court Teams are led by a judge who specializes in child welfare cases and is uniquely positioned to bring stakeholders – including families, child welfare officials and community providers – together to focus on protecting babies from further harm. Court Team goals are achieved by developing court-community teams to:

- Raise awareness of the developmental needs of maltreated infants and toddlers;
- Ensure that case plans support the developmental needs of the youngest children;
- Promote a permanency plan that results in stable placements for the youngest children with fosterfamilies, relatives, or other caretakers<sup>103</sup>; and,
- Ensures that there is a continuing focus on child well-being when young children are returned to parents, relatives or other caretakers.

Research on the outcomes for young children under the jurisdiction of juvenile courts that utilize Court Teams has shown:

- A significant increase in the services provided to eligible children and their parents, particularly in access to health care and early intervention services;
- Decrease in the number of foster home moves for infants and toddlers;
- An increase in parent-child visits; and,
- An increase in relative/kinship placements.<sup>104</sup>

103 Zero to Three (2009). *Securing a Bright Future: Infants and Toddlers in Foster Care*.

104 James Bell Associates (2009). *Evaluation of the Court Teams for Maltreated Infants and Toddlers: Final Report*.

Figure 36

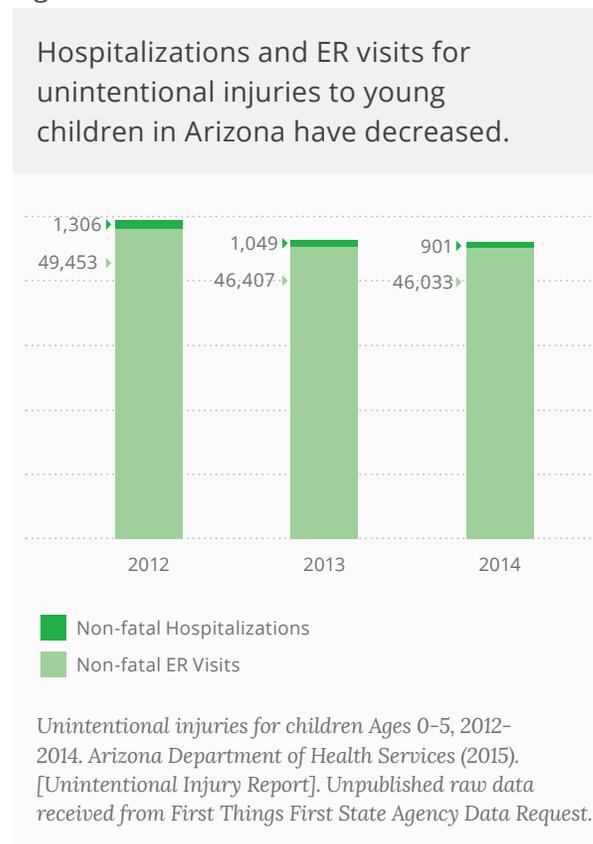
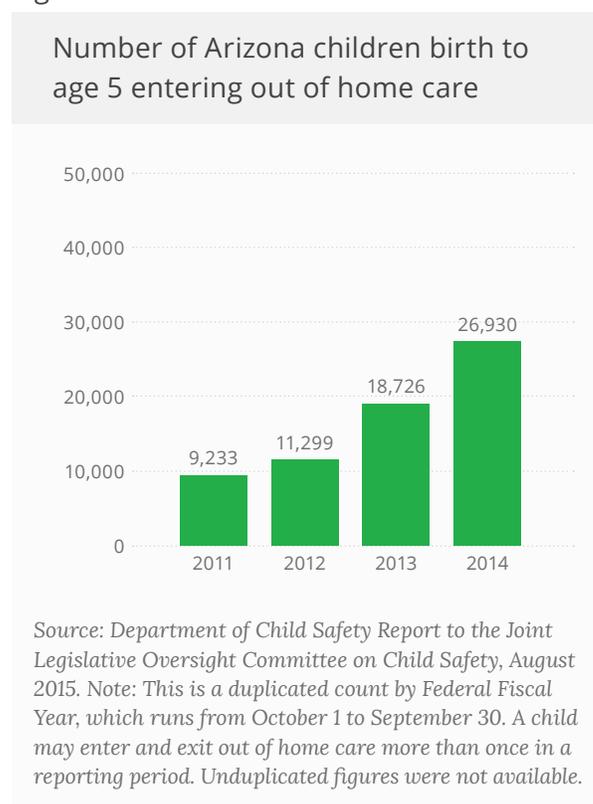


Figure 37



Currently, there are Court Teams in various stages of development and operation in every county of Arizona. The most robust court teams are the ones that meet regularly and are able to provide the ongoing training and support collaborating partners need in order to work together effectively. Support from First Things First has helped to enhance or expand the function of Court Teams in the La Paz/Mohave, Yavapai, South Phoenix, North Phoenix, Colorado River Indian Tribes, and Gila River Indian Community regions. In fiscal year 2015, the actions of these Court Teams impacted 10,174 infants, toddlers and preschoolers involved in the child welfare system. In addition, 165 trainings provided by these Court Teams impacted approximately 2,743 professionals including early childhood/early intervention system partners as well as Court Appointed Special Advocates and Baby Court Appointed Special Advocates. There are community discussions and planning underway to enhance Court Teams in the Pinal and Navajo/Apache regions of First Things First.

### System Collaboration Opportunities

The Early Learning section of this report identified significant collaboration under way to enhance the coordination of and the rates of developmental and sensory screenings, as well as increasing the rate at which children are connected to early intervention support services to address their developmental concerns or delays.

Early childhood oral health is another health issue that is benefitting from system collaboration. Several system partners, led by First Things First, have formed a Community of Practice in oral health that meets quarterly and also has a website where partners share information and resources. Participants include community grantees working to provide oral health screenings and apply preventive fluoride varnishes on children birth to 5 years old (as appropriate). Agency partners – like the Arizona Department of Health Services and Indian Health Service – as well as dental providers are also fully participating in the Community of Practice. The members are working to maximize the resources available for preventive oral health in young children, ensure that children are referred to a dental home after screening, and enhance parent education efforts provided as part of the screenings. They also work to identify system challenges for young children to access preventive oral health care. For example, members of the Community of Practice also participate in a coalition established to identify potential policy changes to promote better oral health for Arizona’s children. In the 2015 legislative session, their collective work led to the introduction and passage of a bi-partisan bill that expanded the availability of dental care services in rural communities by having AHCCCS cover tele-dentistry services and by expanding the scope of work for dental hygienists. Work has already begun to identify potential policy changes that could be considered in the 2016 session.

Children birth to 5 years old make up a large portion of the children in out-of-home care due to abuse or neglect. A June 2015 independent review of the Department of Child Safety conducted by Chapin Hall at the University of Chicago identified the reduction in state funding to services for vulnerable families as one of the primary reasons that child abuse and neglect reports and the number of children in out-of-home care have risen so dramatically in Arizona.<sup>105</sup> While the partners in Arizona’s early childhood system – including agencies, schools, service providers, non-profits, philanthropy and faith communities – cannot make up for these massive funding losses, there are efforts to coordinate existing services to ensure they reach the highest-need families. For example, through the work of several system partners, coordinated outreach and intake lines for evidence-based home visitation programs in Maricopa and Pima counties have been established. Studies have demonstrated that these evidence-based programs – like Healthy Families America and Nurse Family Partnership – prevent or reduce child abuse and promote

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<sup>105</sup> Chapin Hall. (2015). *Arizona Department of Child Safety Independent Review*.

school readiness.<sup>106</sup> The Strong Families Alliance – a collaboration among the various entities that use evidence-based home visitation as part of their efforts with families – works to maximize efficiency and effectiveness by providing professional development to providers and supporting providers who may need additional support. In addition, there are several efforts underway to enhance families’ understanding of existing services and supports. For example, through public/private partnerships, First Things First has established a network of 34 Family Resource Centers – typically in schools and community centers – to provide parenting education classes and resources for families with children birth to 5 years old in Maricopa County. The centers also offer information on community resources to address other challenges the family may face.

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<sup>106</sup> Healthy Families America. (2003–2015). *Research findings*.

Nurse-Family Partnership. (2011). *Evidenced-based policy: Using public dollars wisely to support programs that work*.

# COUNTY HIGHLIGHTS

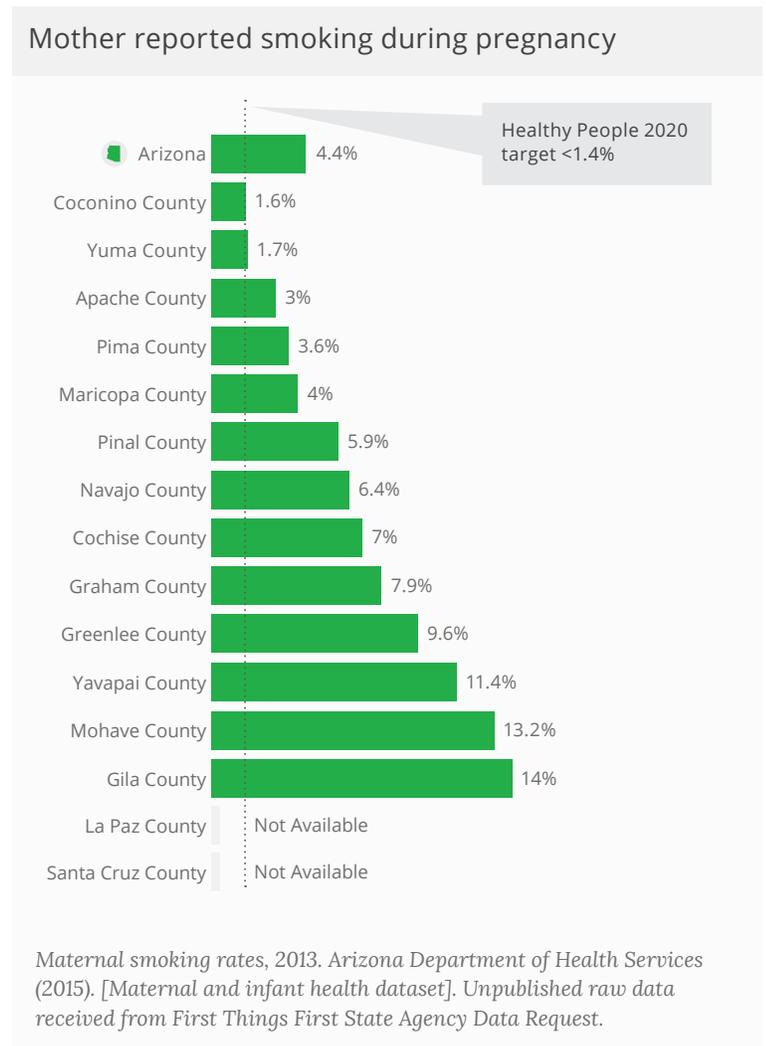
## Maternal and Birth Characteristics

Parental and caregiver substance use, including smoking, can have both short and long term consequences for young children affecting physical, intellectual and social development and health.<sup>107</sup> Reported smoking during pregnancy is drastically different depending on county of residence. Across the state, just over four percent of pregnant women report smoking, but eight counties have much higher rates (See Figure 38). In Mohave and Gila Counties, 13 and 14 percent (respectively) of pregnant women reported smoking during pregnancy. Coconino and Yuma Counties had the lowest percentage of women smoking during pregnancy, both under two percent. No county in Arizona meets the Healthy People 2020 target (1.4% or less). Apache County had the highest infant mortality rate of any county in the state, at 10.5 per 1,000 live births in 2013 (See Figure 39). Apache is also the county with the highest rate of young children living in poverty. Apache County's rankings on other birth metrics, such as the number of prenatal visits, or premature or low birthweight births are very similar to other counties across the state.

Despite clear statements from the Centers for Disease Control and Prevention, the American Academy of Pediatrics, and the Immunization Safety Review Committee of the Institute of Medicine that research does not support a link between vaccines and autism.<sup>108,109,110</sup> A survey of physicians in Arizona found that the most common reasons for vaccine hesitancy and refusal among caregivers were fears of autism or other health consequences for children.<sup>111</sup>

County vaccination and exemption rates vary across the state. Although children under 6 often show no symptoms of the disease, they can easily pass it to other children and adults, and as the child ages he or she will likely become symptomatic. Vaccination protects not only the child vaccinated, but

Figure 38



107 The Federal Interagency Forum on Child and Family Statistics. America's Children: Key National Indicators of Well-Being, 2015.

108 Centers for Disease Control and Prevention. Vaccines Do Not Cause Autism.

109 American Academy of Pediatrics (2008). Facts for Parents About Autism and Vaccine Safety.

110 Immunization Safety Review Committee. (2004). Immunization safety review: vaccines and autism. Washington, DC: Institute of Medicine.

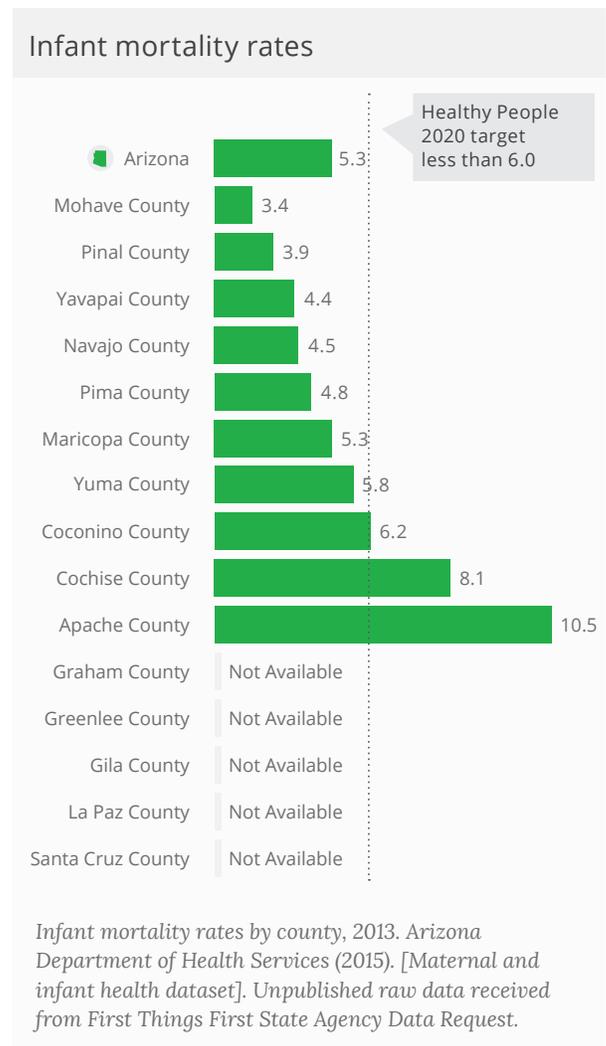
111 Ernst, KC, Haenchen S, Pineyard, H, & Jacobs, B. Report on Physician Attitudes and Practices Regarding Vaccine Exemptions.

others with whom the child is in contact.<sup>112</sup> Arizona residents everywhere are more likely to decline the Hepatitis A (Hep A) vaccine than other vaccines; only residents of Maricopa County are required to vaccinate their child against Hep A in order to enroll them in child care. While other required vaccines are administered to approximately 90 percent or more of children in child care and kindergarten across the counties of Arizona, Hep A coverage rates fall to lows of 57 percent in Greenlee County and 53 percent in Yavapai County. Hepatitis A is a serious liver disease caused by the Hepatitis A virus which is passed through a person’s stool. Yavapai County also has a particularly high rate of personal belief vaccination exemptions for both child care age (11%) and kindergarten age students (10%) compared to the rates of exemptions for child care and kindergarten in the state (4% and 5%, respectively) (See Figure 40). A survey of physicians in Arizona found that the most common reasons for vaccine hesitancy and refusal among caregivers were fears of autism or other health consequences for children.<sup>113</sup>

### Health Insurance

Children with health insurance are more likely than those without to have a regular and accessible source of health care.<sup>114</sup> The American Community Survey five-year estimates cover the years 2009-2013. In that time period, approximately 10 percent of children ages birth to 5 were estimated to be uninsured. The one-year estimates suggest that rate is falling, but one-year estimates cannot reliably be used for county comparisons (See Figure 41). In Greenlee (21%), Gila (19%), and Apache (19%) counties, nearly one in every five young children lacks insurance. Conversely, children in Navajo, Pima, and La Paz counties are all more likely to be insured than children in the rest of the state (9%, 9%, and 7% uninsured, respectively).<sup>115</sup>

Figure 39



112 Centers for Disease Control and Prevention. *Hepatitis A and the Vaccine (Shot) to Prevent It*.

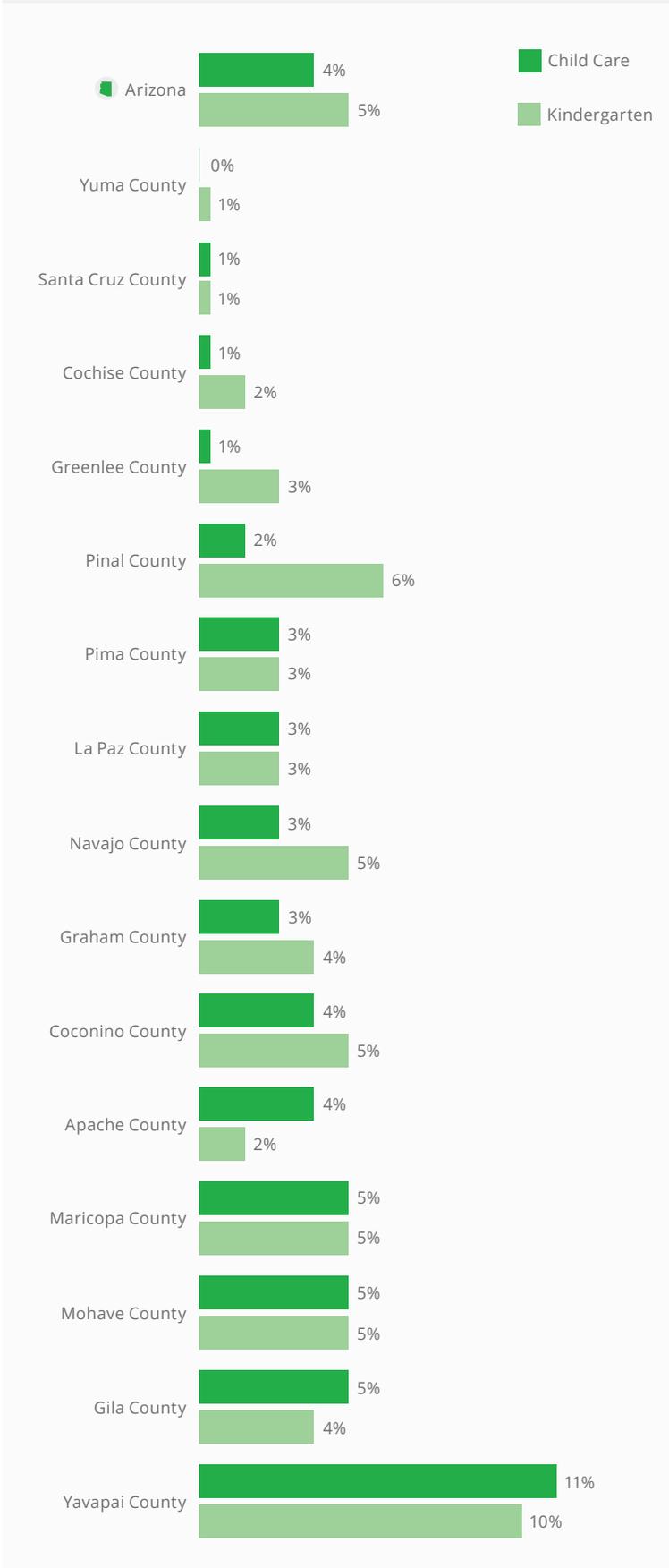
113 Ernst, KC, Haenchen S, Pineyard, H, & Jacobs, B. *Report on Physician Attitudes and Practices Regarding Vaccine Exemptions*. ADHS Contract: Deliverable 3.

114 *The Federal Interagency Forum on Child and Family Statistics. America’s Children: Key National Indicators of Well-Being, 2015*.

115 Because a number of Arizona counties have a large proportion of American Indian residents, it is important to note that having IHS coverage alone is counted as “uninsured” by the ACS. This is because receiving services through the Indian Health Service (IHS) does not meet the Affordable Care Act’s minimum essential coverage mandate. Members of federally-recognized tribes who are eligible for IHS-eligible services but do not have any additional insurance coverage are still required to either sign up for insurance (or AHCCSS, Arizona’s Medicaid) through the Marketplace or apply for an Tribal Membership Exemption of the Shared Responsibility payment requirement. Enrolling in Medicaid or private insurance plans offers both individual health benefits and benefits for entire tribal communities, as it allows for third-party billing in IHS and tribally-operated healthcare facilities. “The Affordable Care Act and the Indian Health Service.”

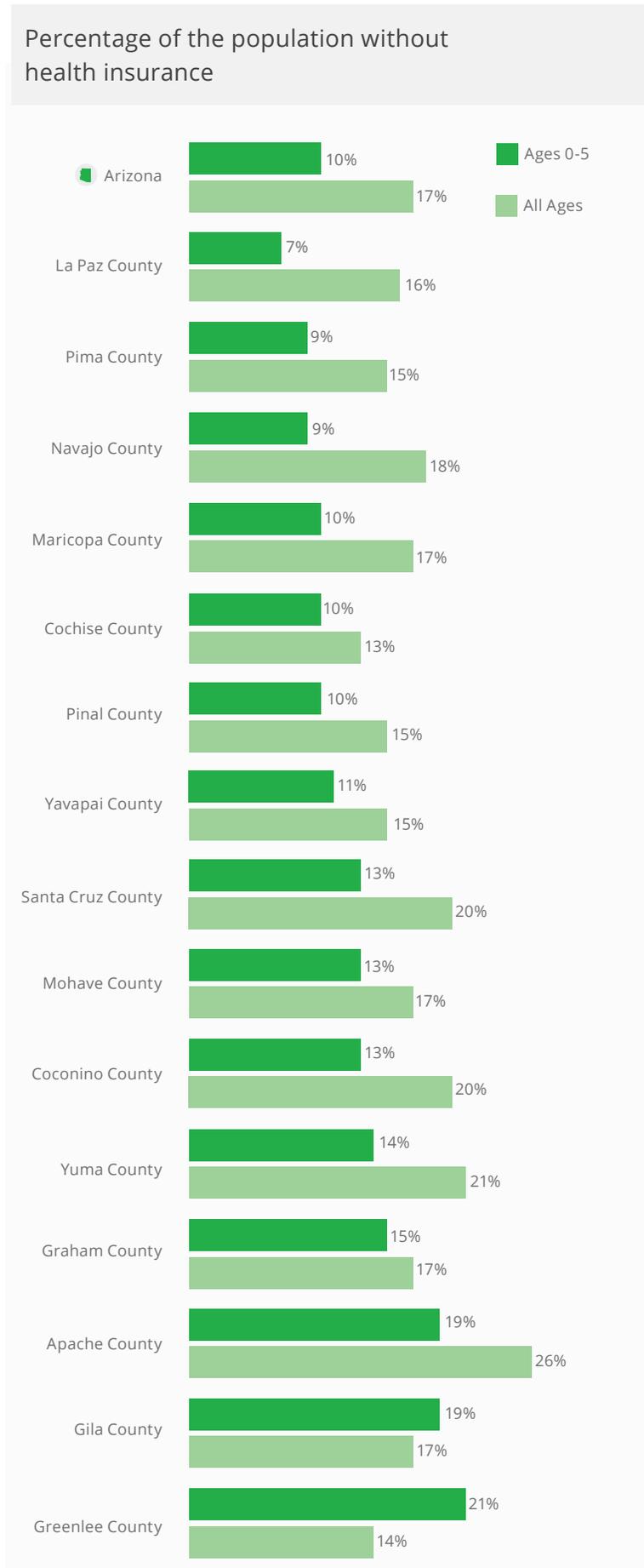
Figure 40

Percentage of students with personal belief vaccine exemptions



Students with personal belief exemptions to vaccination. Arizona Department of Health Services (2015). [Child care Immunization Coverage by County].

Figure 41



Percentage of the population without health insurance, 2013 ACS 5-Year Estimates. US Census Bureau (2014). 2009–2013 American Community Survey 5 Year Estimates, Table B27001.





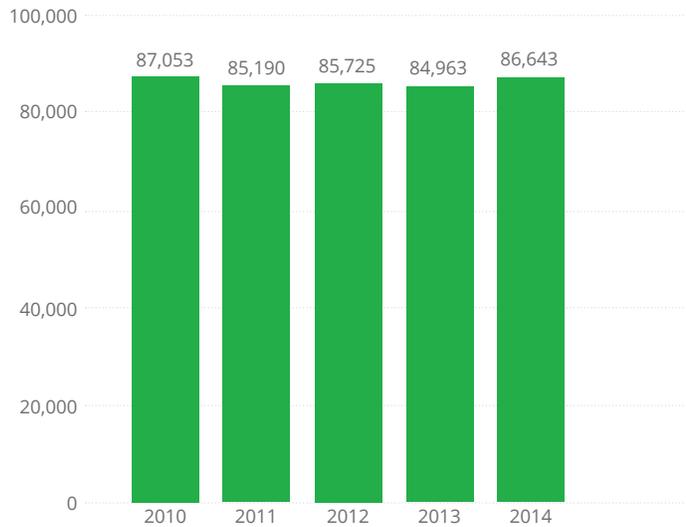
## STATEWIDE DATA SETS

For more information on the state of Arizona's children, visit [azftf.gov/state-county-data](https://azftf.gov/state-county-data).

This online tool provides access to statewide and county-level data, where available.

### BIRTHS

#### Births by year



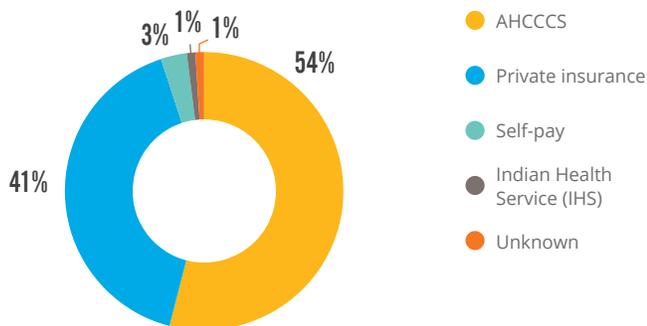
Source: ADHS Population Health and Vital Statistics, "Monthly Vital Statistics"  
 Note: Number of births for 2014 are subject to revision.

#### Characteristics of births and women giving birth, 2013

Baby had low birthweight (5.5 pounds or less)	7%
Baby had high birthweight (8.8 pounds or more)	8%
Mother had fewer than 9 prenatal visits	19%
Mother was 17 or younger	2%
Mother was 19 or younger	9%

Source: Arizona Department of Health Services (2015). [Maternal and infant health dataset]. Unpublished raw data received from First Things First State Agency Data Request.

#### Births by payor, 2013

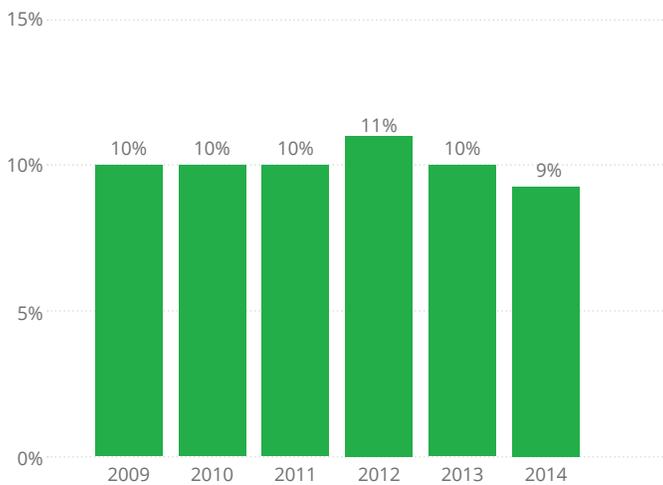


Source: Arizona Department of Health Services (2015). [Maternal and infant health dataset]. Unpublished raw data received from First Things First State Agency Data Request.

## CHILD HEALTH AND WELL-BEING

### PREVENTIVE HEALTH

Percentage of children birth to age 5 without health insurance



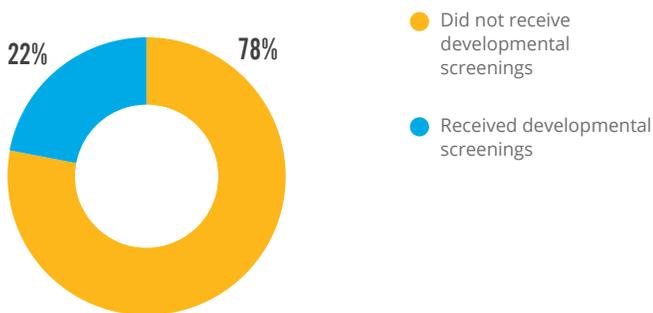
Source: US Census Bureau (2014). 2009-2014 American Community Survey Single Year Estimates, Table B27001.

Kindergarten immunization coverage, 2014-2015 school year

Number of children enrolled in kindergarten	<b>84,651</b>
DTaP	<b>94%</b>
Polio	<b>95%</b>
MMR	<b>94%</b>
Percentage with personal belief exemption	<b>5%</b>
Percentage with medical exemption	<b>0.3%</b>

Source: Arizona Department of Health Services (2015). "Child care Immunization Coverage by County" and "Kindergarten Immunization Coverage by County"

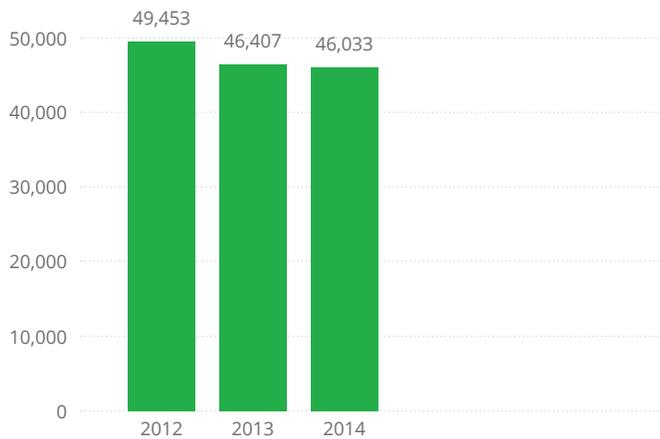
Percentage of children ages 10 months to 5 years who received developmental screenings during a health care visit, 2011-2012



Source: National Survey of Children's Health. NSCH 2011/12. Data query from the Child and Adolescent Health Measurement Initiative, Data Resource Center for Child and Adolescent Health website.

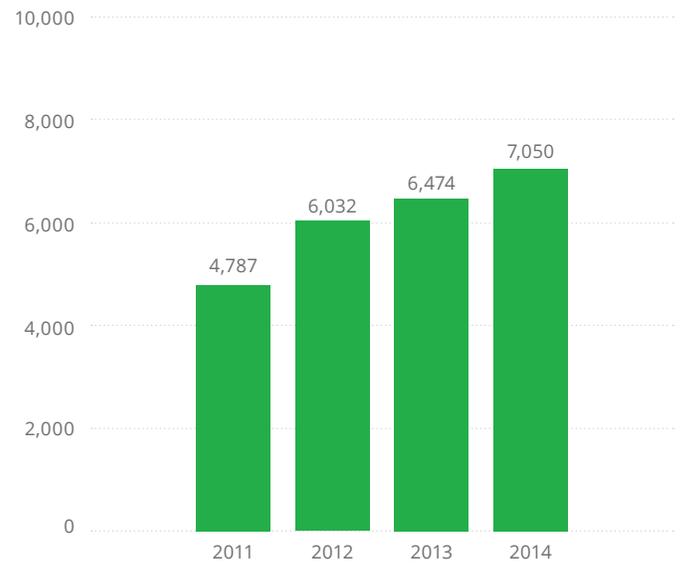
### SAFETY

Non-fatal emergency department visits for injuries in children birth to age 5



Source: Data provided to First Things First by Arizona Department of Health Services, “Unintentional Injuries in Children 0-5, Arizona” (July 2015).

Number of children birth to age 5 in out of home care

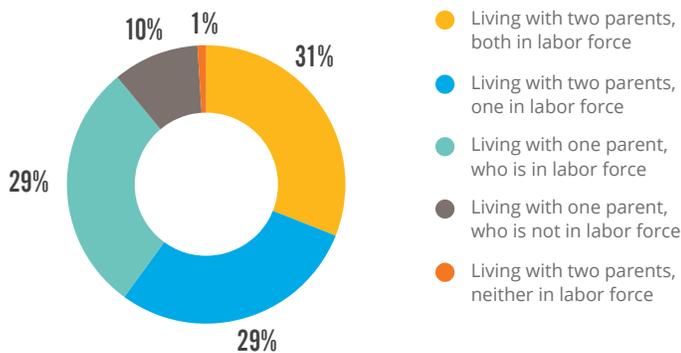


Source: Department of Child Safety Report to the Joint Legislative Oversight Committee on Child Safety, August 2015. This figure represents the number of young children in out of home care on the last day of the reporting period (September 30 of each year represented).

## ECONOMIC CIRCUMSTANCES

### EMPLOYMENT, INCOME AND POVERTY

Employment status of parents of children birth to age 5



Source: US Census Bureau (2014). 2009-2013 American Community Survey 5 Year Estimates, Table B23008.

Note: The US Census Bureau categorizes those who are unemployed but looking for work as “in the labor force.” Only children living with one or two parents whose labor-force status is known are included here.

Rates of unemployment, annual averages



Source: Arizona Labor Statistics. Local Area Unemployment Statistics (LAUS).

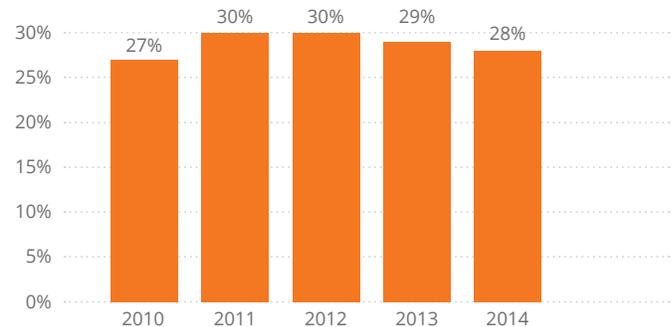
Median annual income for families with at least one child birth to age 17, by family type

Married-couple families	\$72,700
Families headed by a single male	\$36,700
Families headed by a single female	\$26,100

Source: US Census Bureau (2014). 2009-2013 American Community Survey 5 Year Estimates, Table B19126.

Note: Median income data are rounded to the nearest hundred.

Percentage of children birth to age 5 living in poverty



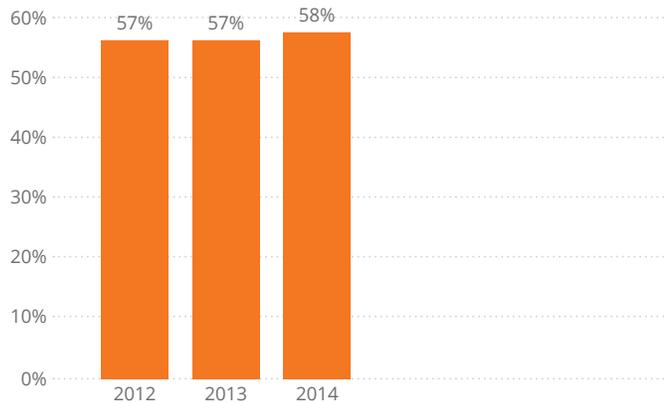
Source: US Census Bureau (2014). 2010-2014, American Community Survey Single Year Estimates, Table B17001.

Note: Population data in this figure exclude those whose poverty status could not be determined. Income data are reported for “the past 12 months”.

## ECONOMIC CIRCUMSTANCES

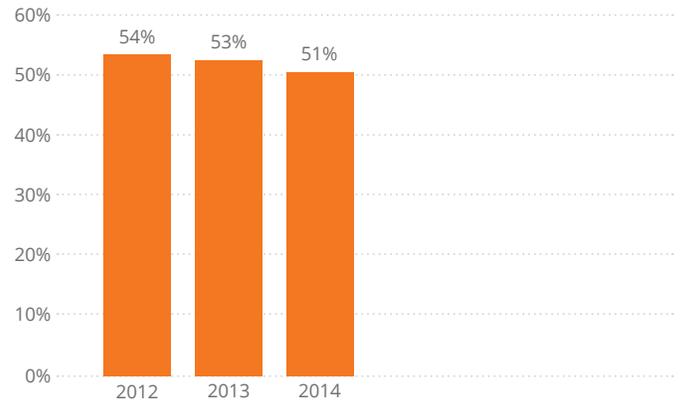
### BASIC NEEDS

Percentage of K-12 students receiving free and reduced lunch



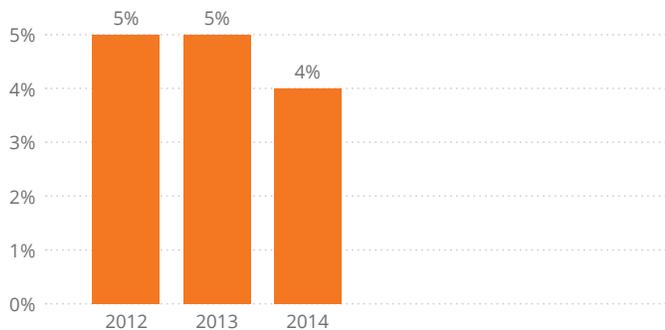
Source: Arizona Department of Education (2015). [Free and Reduced Lunch Dataset]. Unpublished raw data received from First Things First State Agency Data Request.

Percentage of children birth to age 5 receiving SNAP (Supplemental Nutrition Assistance Program)



Source: Arizona Department of Economic Security (2014). [SNAP Dataset]. Unpublished raw data received from the First Things First State Agency Data Request.

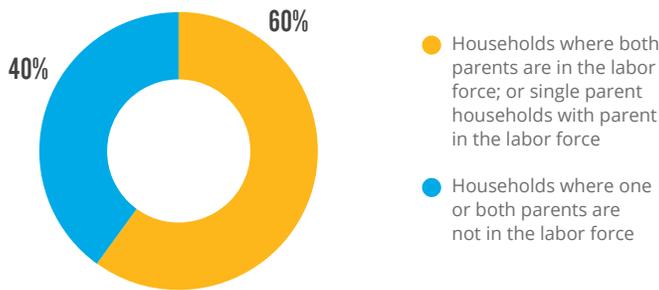
Percentage of children birth to age 5 receiving TANF (Temporary Assistance for Needy Families)



Source: The Arizona Department of Economic Security (July 2015). [SNAP/TANF Dataset]. Unpublished data.

### EARLY CARE AND LEARNING

#### Demand for child care and preschool



Source: American Community Survey, 5-year estimates (2009–2013), Table B05009, B09001, B17006

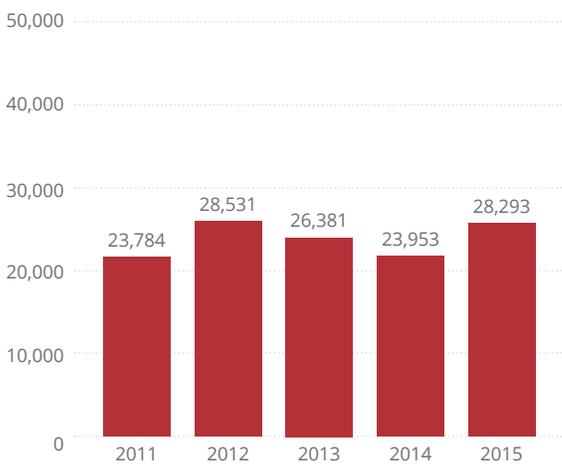
#### Estimated median annual charges by licensed child care providers

	Child Care Centers	Certified Group Homes	Approved Family Homes
Infants under 1 year old	\$10,080	\$6,480	\$5,280
Children ages 1 or 2	\$9,120	\$6,000	\$4,800
Children ages 3 to 5	\$6,480	\$6,000	\$4,800

Source: Arizona Department of Economic Security (2014), Child Care Market Rate Survey.

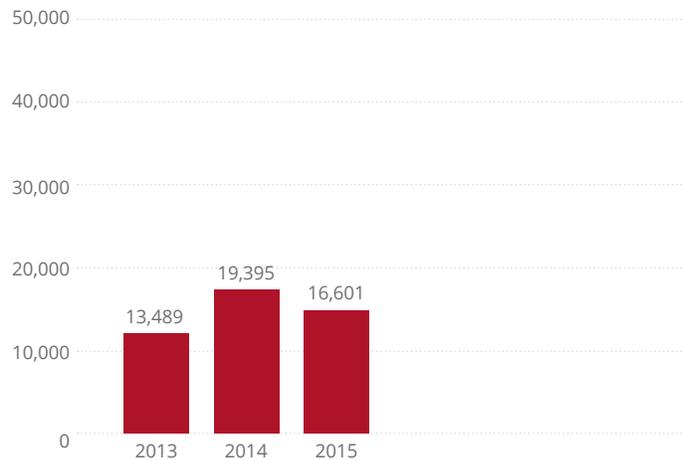
Note: Median daily child care charges are multiplied by 240 to estimate annual charges, assuming 20 child care days per month.

#### Number of children birth to age 5 served by DES child care subsidy program



Source: Arizona Department of Economic Security [Child Care Administration]. Unpublished raw data received from the First Things First State Agency Data Request.

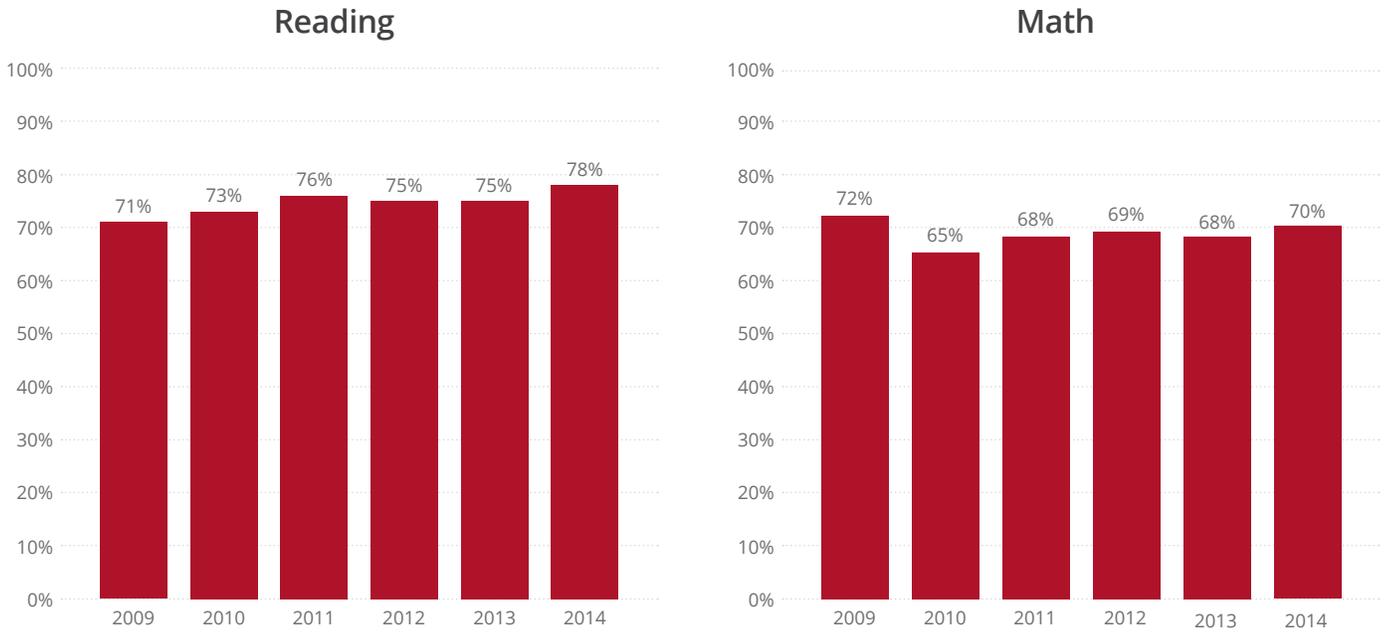
#### Number of children birth to age 5 served by Quality First Scholarships



First Things First [Quality First Scholarships]. Unpublished data.

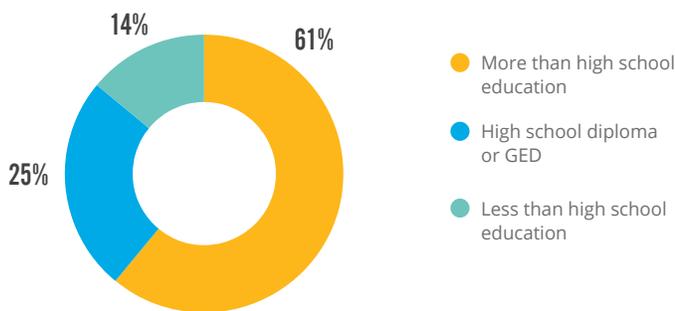
### EDUCATIONAL ATTAINMENT

Percentage of third-grade students passing AIMS (Arizona's Instrument to Measure Standards)



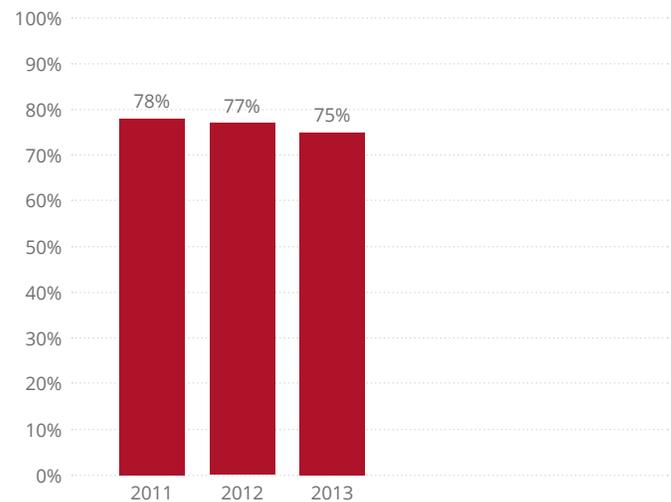
Source: Arizona Department of Education, Research and Evaluation (2014), [AIMS Assessment Results].

### Educational attainment of adults ages 25 and older



Source: US Census Bureau (2014). 2009-2013 American Community Survey 5 Year Estimates, Table B15002.

### Four-year high school graduation rate

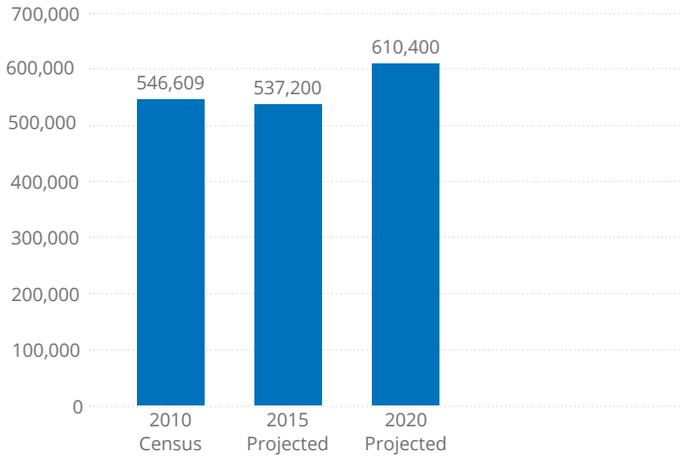


Source: Arizona Department of Education (2015), [High School Graduation Dataset]. Unpublished raw data received from First Things First Agency Data Request.

## FAMILY CHARACTERISTICS

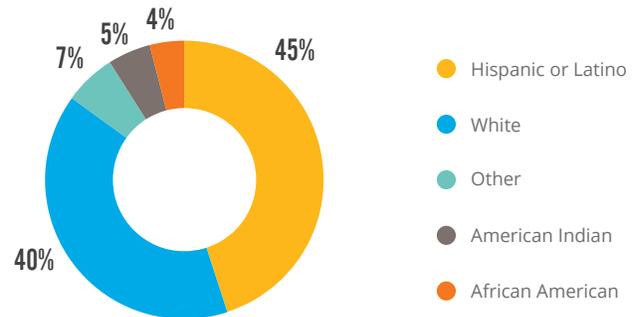
### POPULATION

Population of children birth to age 5



Sources: Arizona Dept of Administration, Employment and Population Statistics, "2012-2050 State and county population projections" & 2010 US Census.

Population of children birth to age 5, by ethnicity



Source: US Census Bureau (2010). 2010 Decennial Census, Summary File 1, Table P12A-H.

## FAMILY CHARACTERISTICS

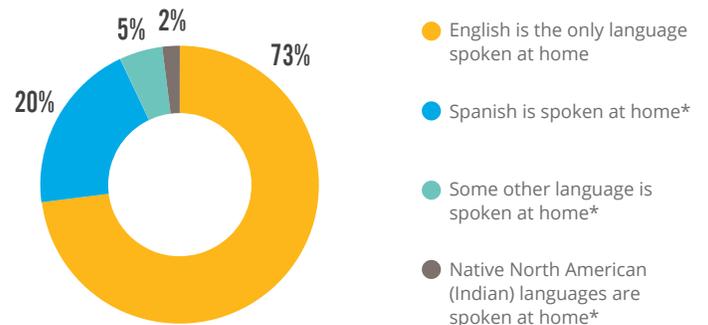
### LIVING ARRANGEMENTS

#### Households with children birth to age 5

Total number of households	<b>2,380,990</b>
Households with one or more children birth to age 5	<b>384,441</b>
Percentage of households with children birth to age 5	<b>16%</b>

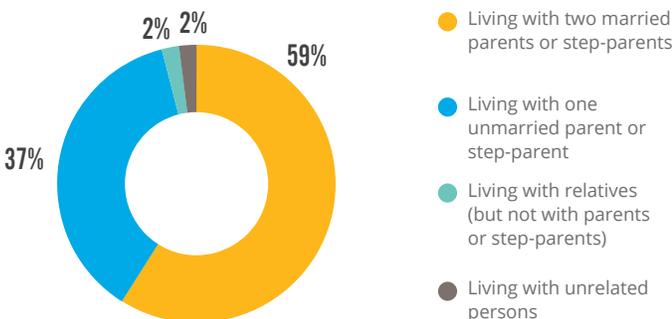
Source: US Census Bureau (2010). 2010 Decennial Census, Summary File 1, Tables P1, P14, P20.

#### Primary household language



Source: US Census Bureau (2014). 2009–2013 American Community Survey 5 Year Estimates, Table B16001.  
 \*Note: Other languages spoken at home are in addition to English (i.e. bilingual households). English is spoken at varying competency levels in Arizona households.

#### Living arrangements of children birth to age 5



Source: American Community Survey, 5-year estimates (2009–2013), Table B05009, B09001, B17006

#### Children birth to age 5 living in a grandparent's household

Number of children birth to age 5 living in a grandparent's household	<b>74,153</b>
Percentage of children birth to age 5 living in a grandparent's household	<b>14%</b>

Source: US Census Bureau (2010). 2010 Decennial Census, Summary File 1, Table P41.

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Building Bright Futures is produced and submitted in accordance with A.R.S. §8-1192 and is distributed in accordance with A.R.S. §41-4153.

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First Things First partners with parents and communities to strengthen families and give all Arizona children the opportunity to arrive at kindergarten healthy and ready to succeed.

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