

# # FIRST THINGS FIRST

Graham/Greenlee



## 2020 NEEDS AND ASSETS REPORT

# **Graham/Greenlee Regional Partnership Council**

## **2020**

### **Needs and Assets Report**

Prepared by

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Funded by

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## Introduction

Ninety percent of a child's brain growth occurs before kindergarten and the quality of a child's early experiences impacts whether their brain will develop in positive ways that promote learning. First Things First (FTF) was created by Arizonans to help ensure that Arizona children have the opportunity to arrive at kindergarten prepared to be successful. Understanding the critical role the early years play in a child's future success is crucial to our ability to foster each child's optimal development and, in turn, impact all aspects of wellbeing of our communities and our state.

This Needs and Assets Report for the FTF Graham/Greenlee Region helps community leaders and decision-makers understand the needs of young children in the region, the resources available to meet those needs and gaps that may exist in those resources. Data collection and analysis for the 2020 report were completed prior to the COVID-19 pandemic and, therefore, do not reflect the impact of COVID-19 on families with young children and the services that support them. FTF will continue to work with state agency partners, and, to the extent that data regarding this impact becomes available, it will be included in future Needs and Assets reports. The report is organized by topic areas pertinent to young children in the region, such as the population characteristics or educational indicators. Within each topic area are sections that set the context for why the data found in the topic areas are important (Why it Matters), followed by a section that includes available data on the topic (What the Data Tell Us).

The FTF Graham/Greenlee Regional Partnership Council recognizes the importance of investing in young children and ensuring that families and caregivers have options when it comes to supporting the healthy development of young children in their care. It is our sincere hope that this information also will help guide community conversations about how we can best support school readiness for all children in the Graham/Greenlee Region. To that end, this information may be useful to stakeholders in the area as they work to enhance the resources available to young children and their families and as they make decisions about how best to support children birth to 5 years old in communities throughout the region.

## **Acknowledgements**

The Graham/Greenlee Regional Council wants to thank the Arizona Department of Economic Security, the Arizona Department of Health Services, the Arizona Department of Education and the U.S. Census Bureau, for their contributions of data for this report and their ongoing support and partnership with FTF on behalf of young children.

To the current and past members of the Graham/Greenlee Regional Council, your vision, dedication and passion have been instrumental in improving outcomes for young children and families within the region. Our future efforts will build upon those successes with the ultimate goal of building a comprehensive early childhood system for the betterment of young children within the region and the entire state.

# LETTER FROM THE CHAIR

May 8, 2020

Message from the Chair:

Since the inception of First Things First, the Graham/Greenlee Regional Partnership Council has taken great pride in supporting evidence-based and evidence informed early childhood programs that are improving outcomes for young children. Through both funded and unfunded approaches, the early childhood programs and services supported by the regional council have strengthened families, improved the quality of early learning, and enhanced the health and well-being of children birth to 5 years old in our community.

This impact would not have been possible without data to guide our discussions and decisions. One of the primary sources of that data is our regional Needs and Assets report, which provides us with information about the status of families and young children in our community, identifies the needs of young children, and details the supports available to meet those needs. Along with feedback from families and early childhood stakeholders, the report helps us to prioritize the needs of young children in our area and determine how to leverage First Things First resources to improve outcomes for young children in our communities.

The Graham/Greenlee Regional Council would like to thank our Needs and Assets vendor, the University of Arizona Norton School, for their knowledge, expertise and analysis of the Graham/Greenlee region. Their partnership has been crucial to our development of this report and to our understanding of the extensive information contained within these pages.

As we move forward, the First Things First Graham/Greenlee Regional Partnership Council remains committed to helping more children in our community arrive at kindergarten prepared to be successful by funding high-quality early childhood services, collaborating with system partners to maximize resources, and continuing to build awareness across all sectors of the importance of the early years to the success of our children, our communities and our state.

Thanks to our dedicated staff, volunteers and community partners, First Things First has made significant progress toward our vision that all children in Arizona arrive at kindergarten healthy and ready to succeed.

Thank you for your continued support.

Sincerely,



Laurie Smith, Chair



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## Executive Summary

### ***Regional Description***

The First Things First Graham/Greenlee Region is defined as all of Graham and Greenlee counties, except for the portion of Graham County which is in the San Carlos Apache Indian Reservation.

### ***Population Characteristics***

According to the U.S. Census, the Graham/Greenlee Region had a population of 40,877 in 2010, of whom 3,903 (10%) were children ages birth to 5. Twenty percent of households in the region included a young child. This is a higher proportion of households than the state (16%).

Population projections for Graham and Greenlee Counties show that the population of young children (ages 0-5) is projected to be about 4,039 by 2020, a decrease from 2010 (4,624).

Projections show an increase in the count of young children over time until 2035 (4,240) and then a decline by 2050 (3,945).

A third (35%) of adults and 44 percent of young children (ages 0-4) in the Graham/Greenlee Region are Hispanic. These proportions are similar to the state overall (25% and 45%, respectively), but lower than Greenlee County, where 44 percent of adults and the majority of young children (55%) are Hispanic. The region also has a lower percentage of American Indian adults (2%) and young children (2%) than Graham County (12% and 20%, respectively) and the state (4% and 6%, respectively). The proportions of adults (2%) and young children (1%) who are Black or African American in the region are slightly lower than the state (4% and 5%, respectively) and notably lower than the United States overall (12% and 14%, respectively). The percentages of Asian or Pacific Islander adults (1%) and young children (1%) in the region are similar to the state (3% and 3%, respectively).

The race and ethnicity of mothers giving birth in the Graham/Greenlee Region differs slightly from the state overall. While the proportion of births to mothers who were Hispanic or Latina was similar between the region (38%) and state (41%) in 2017, there were smaller proportions of births to mothers who were Black or African-American (2%) and American Indian or Alaskan (3%) in the region compared to the state overall (6% and 6%, respectively). Greenlee County had a larger proportion of births to Hispanic or Latina mothers (47%) and Graham County had a larger proportion of births to American Indian or Alaskan mothers (21%) compared to the region (38% and 3%, respectively).

Three percent of children in the Graham/Greenlee Region live with one or two foreign-born parents; this is notably lower than the state (26%). Household language use also reflects these demographic patterns; a smaller proportion of individuals speak a language other than English at home in the Graham/Greenlee Region (20%) than in the state overall (27%), and there are a

smaller percentage of limited-English-speaking households in the region (2%) compared to the state (4%).

A majority of children living in the Graham/Greenlee Region live in two-parent households; 58 percent of young children in the region live with two parents or stepparents, similar to Arizona (59%). The proportion of households with young children in the region that are single-female households (22%) is also similar to the state overall (24%), though there is a notable difference compared to Graham County (28%) and Greenlee County (17%).

The percentage of young children living in a grandparent's household is slightly lower for the region (17%) compared to Graham County (22%) and Greenlee County (19%), though it is higher than the state overall (14%). In contrast, the percentage of children living with a grandparent who is responsible for them in the region (47%) is higher than in Graham and Greenlee Counties (46% and 42%, respectively) and lower than the state (51%).

### ***Economic Circumstances***

Nearly one of every six (16%) individuals in the Graham/Greenlee Region lives in poverty, a similar proportion to the state (17%). When it comes to young children, one in four (25%) lives in poverty in the region. While this proportion is higher than that of the total (all-age) population in the region living in poverty (16%), it is similar to the rates of young children living in poverty across the state (26%). In contrast, the proportions of all individuals and young children living in poverty in Graham County (21% and 33%, respectively) are notably higher than the region and state.

While overall median annual family income is lower in both Graham (\$58,732) and Greenlee (\$60,857) Counties than in Arizona (\$63,812), differences vary by household type. Median income for married-couple families with children in Graham County (\$74,269) is more than three times the median income for single female headed families (\$20,244). Median income for married-couple families with children in Greenlee County (\$78,523) is nearly three times the median income for single female headed families (\$27,202).

Eligibility for some public assistance programs is determined by different poverty thresholds. For example, family income at or below 141% of the federal poverty threshold is one criterion for eligibility for the Arizona Health Care Cost Containment System (AHCCCS)<sup>i</sup> for children ages 1 to 5, and at or below 147% of the poverty threshold for children under 1 year old.<sup>1</sup> In the Graham/Greenlee Region, the percentage of families with young children who may qualify for AHCCCS (those under 130% of the poverty threshold and between 130% and 149% of the poverty threshold) (38%) is comparable to the state overall (38%).

Between 2015 and 2018, the percentages of both families and young children receiving Temporary Assistance for Needy Families (TANF) declined over time and were low for the

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<sup>i</sup> AHCCCS is Arizona's Medicaid agency

region (3% for each) and state (3% for each). While participation in the Supplemental Nutrition Assistance Program (SNAP) by families and young children also declined between 2015 and 2018, over a third of families (37%) and young children (37%) participated in SNAP in the Graham/Greenlee Region in 2018, slightly lower proportions than the state (39% and 42%, respectively).

Since the 2015-2016 school year, the percentage of students eligible for free or reduced-price lunch in the Graham/Greenlee Region has declined, from 50 percent in 2015-2016 to 47 percent in 2018-2019.

Rates of adult employment in the Graham/Greenlee Region (46%) are notably lower than the state (55%) and U.S. as a whole (59%). Half of adults in the region (50%) are not in the labor force, compared to 40 percent statewide and 37 percent nationally. Since 2015, adult unemployment rates declined steadily in both Graham and Greenlee Counties to fall more closely in line with statewide unemployment rates. In 2018, Graham County had an unemployment rate of 5.1 percent and Greenlee County had an unemployment rate of 4.3 percent, compared to the statewide rate of 4.8 percent.

Almost half (46%) of young children in the region have all present parents in the labor force and 86 percent of young children have at least one present parent in the labor force. These proportions are lower than the statewide proportions of young children with all present parents in the labor force (60%) and at least one present parent in the labor force (89%). More than half (54%) of young children have a parent who is not in labor force.

One in five households in the Graham/Greenlee Region are spending 30 percent or more of their income on housing, a proportion comparable to Graham County (22%), higher than Greenlee County (11%), and lower than statewide (31%).

More than half (59%) of households in the region have both a smartphone and computer, lower than state (67%) and national (66%) numbers. The majority (81%) of residents in the region live in households with a computer and internet. This is comparable to state (82%) and national (83%) proportions. For children specifically, household access to a computer and internet in the region is even higher (87%). However, thirteen percent of children in the region do not have access to the internet in their homes. Of people living in households with a computer and internet in the region, thirteen percent rely solely on a cellular data plan.

### ***Educational Indicators***

In the Graham/Greenlee Region, many families with young children have at least one stay at home parent or family caregiver in the home, which means that many families may not enroll their children in out-of-home care. In the 2018-2019 school year, 288 children were enrolled in preschool in the Graham/Greenlee Region. Kindergarten through third grade enrollments for the region were all relatively similar, ranging from 635 children in 2<sup>nd</sup> grade to 693 children in 3<sup>rd</sup> grade.

Kindergarten through 3rd grade chronic absence rates fluctuated from 2015-2016 to 2018-2019 in the region, ranging from a 10 percent chronic absence rate in 2016-2017 to a 14 percent rate in 2015-2016. During the 2018-2019 school year, the Graham/Greenlee Region had a 12 percent chronic absence rate, with 373 kindergarten through 3rd grade students in the region chronically absent. While this was comparable to the state of Arizona (12%), it was notably lower than the chronic absence rate for Greenlee County (17%). By grade level, chronic absences ranged from 11 percent to 14 percent in the Graham/Greenlee Region during the 2018-2019 school year. In the region, Graham and Greenlee Counties, and the state, chronic absences were highest among kindergarteners (14%, 12%, 23%, and 13%, respectively). Graham County had a similar chronic absence rate for kindergarten and 1<sup>st</sup> graders (both 12%).

Fewer than half (40%) of 3rd grade students are meeting proficiency expectations for 3rd grade literacy. Slightly more than half (55%) are meeting proficiency expectations for math. Arizona's Measurement of Educational Readiness to Inform Teaching (AzMERIT) 3rd Grade English Language Arts passing rate for the Graham/Greenlee Region (40%) was slightly lower than the statewide passing rate in 2017-2018 (44%). AzMERIT 3rd Grade English Language Arts passing rates for the region declined slightly from the 2015-2016 school year (43%) to the 2017-2018 school year (40%). Greenlee County had a more marked decline in passing rates during the same period, from 53 percent to 42 percent.

AzMERIT 3rd Grade Math passing rate for the Graham/Greenlee Region (55%) were slightly higher than statewide passing rate in 2017-2018 (53%). Greenlee County had a notably higher passing rate (64%) compared to the region (55%) and Graham County (52%). AzMERIT 3rd Grade Math passing rates have improved over time at the region, county, and state level, with regional passing rates increasing from 46 percent in 2015-2016 to 55 percent in 2017-2018.

In 2017, the four-year graduation rate for the Graham/Greenlee Region was 87 percent and the five-year graduation rate was 89 percent, both higher than statewide rates (78% and 82%, respectively). Since 2015, both the four-year and five-year graduation rates have increased in the region. The 7th-12th grade dropout rate for the Graham/Greenlee Region remained at three percent from 2015-2016 to 2017-2018.

A smaller proportion of adults have more than a high-school education in the Graham/Greenlee Region (56%) than in Arizona (62%) and the United States overall (60%). Specifically considering the level of education of mothers giving birth, a slightly higher proportion of births in the Graham/Greenlee Region were to mothers with more than a high-school education (58%) compared to the state (56%), though the proportion of births to mothers with more than a high-school education was notably lower in Greenlee County (46%).

### ***Early Learning***

In the Graham/Greenlee Region, 28 percent of children (ages 3 and 4) are enrolled in nursery school, preschool, or kindergarten. While this is a comparable proportion to Graham County



(28%), it is lower than Greenlee County (54%), the state (38%), and the United States overall (48%). As previously mentioned, many families with young children in the region have at least one stay at home parent or family caregiver in the home, and therefore many families may not enroll their children in out-of-home care.

In the Graham/Greenlee Region, nearly all (95%) of licensed child care capacity is provided by child care centers, with a small proportion provided by family child care providers (5%). The Graham/Greenlee Region has a lower percentage of providers who are accredited (8%) than the state (10%), as well as a lower percentage of potential child care slots (provider capacity) with accredited providers (1%) than the state (12%).

While median monthly child care costs for approved family homes are similar between the region and state, median monthly child care costs for licensed centers are notably lower in the region compared to the state. Median costs for infants at licensed centers are \$361 less per child per month in the Graham/Greenlee Region compared to the state. Overall, licensed centers are the most expensive and approved family homes the least expensive for all ages at the region, county, and state levels.

Nearly all (96%) children who were eligible for Department of Economic Security (DES) child care subsidies in the Graham/Greenlee Region received them in 2018, a proportion slightly higher than the state overall, where 92 percent of eligible children received child care subsidies in 2018. For Department of Child Safety (DCS)-involved children specifically, the proportion of eligible children receiving subsidies in the region is lower than for non-DCS children and has declined over time, from 82 percent in 2015 to 67 percent in 2018. This decline in DCS-involved children receiving subsidies was also seen at the state level, with 82 percent of DCS-involved children receiving subsidies in Arizona in 2018 compared to 91 percent in 2015.

The proportion of eligible families not using DES child care subsidies decreased over time at the region level between 2015 and 2018, though the state saw an overall increase in subsidy use during this time. In 2018, five percent of eligible families in the Graham/Greenlee Region did not use their child care subsidies compared to eight percent statewide.

From 2017 to 2018, the number of children in quality environments<sup>ii</sup>, and particularly the number of DCS-involved children in quality environments, decreased in the Graham/Greenlee Region and in Graham County, though these numbers increased at the state level.

In 2019, a total of seven child care providers in the Graham/Greenlee Region participated in Quality First, six of which were quality-level settings (public 3-5 stars). A total of 378 children were enrolled at a Quality First provider site in the Graham/Greenlee Region, 93 percent of

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<sup>ii</sup> Providers are considered quality educational environments by the Arizona Department of Economic Security if they receive a Quality First three-star rating or higher or are accredited by a national organization, such as the Association for Early Learning Leaders or the National Association for the Education of Young Children (NAEYC).

whom were enrolled at a quality-level setting (public 3-5 stars). In this same year, 74 children received Quality First scholarships in the region.

In 2018, no early learning programs in Graham or Greenlee Counties reported any expulsions or prevented expulsions of young children receiving child care subsidies to the Department of Economic Security (DES).

The number of young children (ages 3-5) enrolled in special education increased from 2015-2016 (66) to 2018-2019 (107) in the Graham/Greenlee Region. The largest proportion of young children (ages 3-5) enrolled in special education in the region were diagnosed with a speech or language impairment (56%) or developmental delay (38%) in 2018-2019.

Thirteen percent of students (grades 1st-3rd) are enrolled in special education in the region, a proportion higher than Greenlee County (9%) and the state (12%) but lower than Graham County (15%). Special education enrollment for this age has increased over time in the Graham/Greenlee Region, from 11 percent in 2015-2016 to 13 percent in 2018-2019.

From 2016 to 2017, the percentage of children (ages 0-2) who were referred to the Arizona Early Intervention Program (AzEIP) and found eligible increased from 68 percent to 74 percent in the Graham/Greenlee Region. From 2017 to 2018, the number of active AzEIP cases in the Graham/Greenlee Region decreased by two percent.

The number of young children receiving services from the Division of Developmental Disabilities (DDD) decreased in the Graham/Greenlee Region and Graham County since 2015. In the region, the number of children ages 0-2 receiving DDD services decreased by 25 percent from 2015 to 2018, compared to a 27 percent increase in the number of children ages 0-2 receiving services from DDD at the state level.

### ***Child Health***

In the Graham/Greenlee Region, seven percent of people don't have health insurance coverage, a proportion that is lower than at the county (9%), state (12%), or national (10%) levels. For young children specifically, health insurance coverage is slightly better than the overall population in the region, with five percent of young children uninsured in the Graham/Greenlee Region compared to seven percent in Arizona and four percent nationally. While Graham County is comparable to the region, Greenlee County's percentage of young children who are uninsured is twice that of the region (10%).

Almost half of births (48%) in the Graham/Greenlee Region were covered by Arizona's Health Care Cost Containment System (AHCCCS)<sup>iii</sup> in 2017, a percentage slightly lower than the state (53%) and higher than Greenlee County (36%). The proportion of self-paid births were comparable across the region (5%), Graham County (5%), and the state (5%) in 2017.

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<sup>iii</sup> AHCCCS is Arizona's Medicaid agency

The Graham/Greenlee Region had somewhat better rates of prenatal care in 2017 compared to the state, with a smaller proportion of births to mothers who had no prenatal care at all (2% and no prenatal care in the first trimester (25.6%) compared to the state (3% and 26.4%, respectively). Rates of prenatal care were also notably lower in both Graham and Greenlee County compared to the region in 2017. Neither the region, counties, nor the state met the Healthy People 2020 target of at least 77.9 percent of births to mothers who received prenatal care in the first trimester.

The proportion of babies born at low birth weight is higher in the Graham/Greenlee Region (8.9%) than Graham County (7.7%) and the state (7.5%) but lower than Greenlee County (10.3%). The region did not meet the Healthy People 2020 target of below 7.8 percent of babies born at low birth weight. For rates of preterm birth, the Graham/Greenlee Region, along with Graham and Greenlee Counties, did not meet the Healthy People 2020 target of no more than 9.4 percent of births before 37 weeks gestation. The Graham/Greenlee Region also did not meet the Healthy People 2020 target for maternal use of tobacco during pregnancy (1.4%), with 11.9 percent of births to mothers using tobacco while pregnant, more than two and a half times the state rate (4.7%). In Greenlee County specifically, 16.7 percent of the 156 births in 2017 were to mothers who used tobacco while pregnant.

In 2017, both Graham and Greenlee Counties had fewer than six infant deaths within seven days of birth. Between 2016 and 2017, both Graham and Greenlee Counties also had fewer than six babies born with neonatal abstinence syndrome (NAS).

Between June 2017 and June 2018, there were 55 suspected opioid overdoses among people of all ages in Graham County and fewer than 10 in Greenlee County. In 2017, there were fewer than 10 deaths directly attributed to opioids in both Graham and Greenlee Counties.

In Graham and Greenlee Counties, overall rates of breastfeeding for infants in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) were lower than the state. In 2018, 69 percent of WIC infants in Graham County and 56 percent of WIC infants in Greenlee County were breastfed at some point in infancy, compared to 77 percent in the state. For all geographies, rates of breastfeeding declined with the baby's age. Although the American Academy of Pediatrics recommends exclusive breastfeeding until six months of age, at six months of age, only 31 percent of WIC infants in Graham County and 18 percent of WIC infants in Greenlee County were ever breastfed. Rates of exclusive breastfeeding at six months were minimal in Graham County (2%), Greenlee County (0%) and the state (3%). Even at three months old, exclusive breastfeeding for WIC infants in both Graham and Greenlee Counties was low (25% and 31%, respectively), though notably higher than the state (13%).

Between 2015 and 2018, Graham County had 62 cases of influenza and 17 cases of respiratory syncytial virus (RSV) in young children (ages 0-5). During this same period, Greenlee County had 28 cases of influenza in young children.

Across all required immunizations, children in child care in the Graham/Greenlee Region had higher vaccination rates than the state as a whole and met the Healthy People 2020 targets during the 2018-2019 school year. The region also exceeded statewide immunization rates for kindergarten immunizations during this time, but only met Healthy People 2020 targets for hepatitis B and varicella.

In terms of immunization exemptions among children in child care, between the 2016-2017 and 2018-2019 school years the region had lower rates of children receiving religious exemptions and exemptions from all required vaccines than the statewide averages. During the 2018-2019 school year, 1.7 percent of children in child care received a religious exemption in the Graham/Greenlee Region compared to 4.5 percent of children statewide, and 1.3 percent of children in child care received exemptions from all required vaccines in the region compared to 3 percent of children statewide.

The Graham/Greenlee Region also had lower rates of children in kindergarten receiving personal belief exemptions than statewide rates between the 2016-2017 and 2018-2019 school years. During the 2018-2019 school year, 4.9 percent of children in kindergarten received a personal belief exemption in the region compared to 5.9 percent of children statewide. Kindergarten exemptions from all required vaccines in the region exceeded state rates in the 2018-2019 school year, with 4.6 percent of children in kindergarten receiving exemptions from all required vaccines in the region compared to 3.8 percent statewide. Personal belief exemptions and exemptions from all required vaccines in 2018-2019 were notably higher in Graham County (5.8% and 5.4%, respectively) than in Greenlee County (1.3% and 1.3%, respectively) and the region (4.9% and 4.6%, respectively).

Between 2015 and 2018, there were 35 non-fatal inpatient hospitalizations of young children (ages 0-5) for unintentional injuries in the Graham/Greenlee Region. The most common reasons for non-fatal inpatient hospitalizations were falls (26%) and burns (23%). Statewide, the most common reasons for non-fatal inpatient hospitalizations were falls (33%) and poisoning (15%). During this same time period, there were 1,675 non-fatal emergency room visits for young children (ages 0-5) in the Graham/Greenlee Region. The most common reason for non-fatal emergency room visits, falls, was similar across the region (39%), Graham (38%) and Greenlee (41%) Counties, and state (46%). The second most common reason for non-fatal emergency room visits for the region was 'natural or environmental' (15%) (e.g., natural heat, natural cold, lightning strike, dog bites, and venomous creatures). Between 2015 and 2017, there were 93 emergency room visits and fewer than 6 inpatient hospitalizations for asthma for young children in the Graham/Greenlee Region.

Between 2015 and 2017, there were 15 deaths of children in the Graham/Greenlee Region, 67 percent of which were in young children (10 deaths). The proportion of child deaths that involved young children was lower in the Graham/Greenlee Region than in the state (71%).

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

In 2019, 22 families in the Graham/Greenlee Region received First Things First-funded home visitation services, including 5 families who successfully completed and graduated from home visitation programs.

Between January 2018 and June 2018, there were 11 substantiated maltreatment reports in Graham County and no substantiated maltreatment reports in Greenlee County. Of the substantiated reports in Graham County, the majority were related to neglect (91%), with a smaller proportion related to sexual abuse (9%). Statewide, thirteen percent of reports were related to physical abuse, while there were no reports of physical abuse in Graham County during this period.

The statewide number of child removals by the Department of Child Safety (DCS) declined from 2014 to 2017. Between January 2018 and June 2018, three percent of DCS reports resulted in a child removal in Graham County, with seven children removed. While the percentage of children removed was lower in the county than the state (16%), there was a higher percentage of children with a prior removal in the last 24 months in Graham County (14%) compared to the state (9%).

While the number of foster placements declined from 2015 to 2018, the statewide number of licensed foster homes steadily increased during this time.

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

In the Graham/Greenlee Region, coordination and collaboration efforts are driven by the need to support at risk families by increasing their access to, and awareness of, services available, as well as access to high quality early childhood education settings.

One effort involves collaborating with partners through the updating, printing, and distribution of the Graham/Greenlee Community Resource Guide. The purpose of the resource guide is to help build awareness of existing resources available to families with young children and to make them easily accessible. Additionally, the region's system-building strategies are building the network of family supports and services for young children and their families as the region partners with local philanthropic and business organizations to expand access to high quality early care and education in the region. The region has expanded access to child care and preschool opportunities by leveraging partnerships with local philanthropic organizations. Through these partnerships, the region has added additional child care scholarships available to the working poor as well as offering kinder camps in the school districts in the region with the highest free and reduced lunch rates and the lowest access to preschool opportunities.

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

First Things First regularly measures progress toward building support for children birth to 5 through statewide surveys targeting both the general population and parents of young children. Their most recent statewide survey conducted in September 2018 found that, compared to previous surveys in 2012 and 2016, there was increased agreement in the general public and parents of young children with key First Things First messaging, including: the state should ensure all children have access to early childhood services, a child who received early education and healthcare services before age 5 is more likely to succeed in school and beyond, and the state should put the same priority on early education as it does on K-12 education. While the survey also showed that awareness of First Things First has increased over time, there are still large portions of the general public (87%) and parents of young children (66%) who have never heard of First Things First.

In SFY 2019, First Things First secured 11 million advertising impressions through traditional media strategies, including television, radio, cinema, and billboard ads, and 76 million digital advertising impressions through digital media strategies, including online ads on desktop and smartphone devices. Particular success has been seen in the growth of Facebook Page Likes for FTF, which grew from just 3,000 in 2012 to 142,600 in 2019. Additional digital marketing content in 2019 included 40 original, high-quality digital marketing pieces and the creation of an online searchable database of early childhood programs, which logged over 24,187 visits in its first six months.

Because Arizona is so vast—with more than 500,000 children under age 6 and nearly 400,000 households with kids under age 6—engaging others in spreading the word about early childhood is critical to reaching across diverse geographic areas and expanding our reach. Supporters and Champions are trained in early childhood messaging and effective ways to share early childhood information, and the Graham/Greenlee Region had 145 Supporters and 25 Champions in 2019. These Supporters and Champions reported a total of 49 positive actions taken on behalf of young children throughout the region in 2019. These actions range from leading presentations in support of early childhood to sharing FTF’s early childhood resources with parents at community events.

First Things First has also led a concerted effort to build awareness among policymakers at all levels (federal, tribal, state, and municipal) of the importance of early childhood. In SFY19, FTF also launched ACT4KIDS, a text-based system that alerts participants to timely developments in early childhood policy and opportunities to engage with policymakers. In its first nine months of implementation, more than 700 Arizonans had signed up to participate in ACT4KIDS. In addition, FTF actively participates in the Arizona Early Childhood Alliance, comprised of more than 50 early childhood system leaders, which represents a united voice of the early childhood community in advocating for early childhood programs and services. For the past three years, the Alliance has also led an annual Early Childhood Day at the legislature, which draws

hundreds of Arizonans to the state Capitol to engage with policymakers and show their support for early childhood development and health.



## The Graham/Greenlee Region

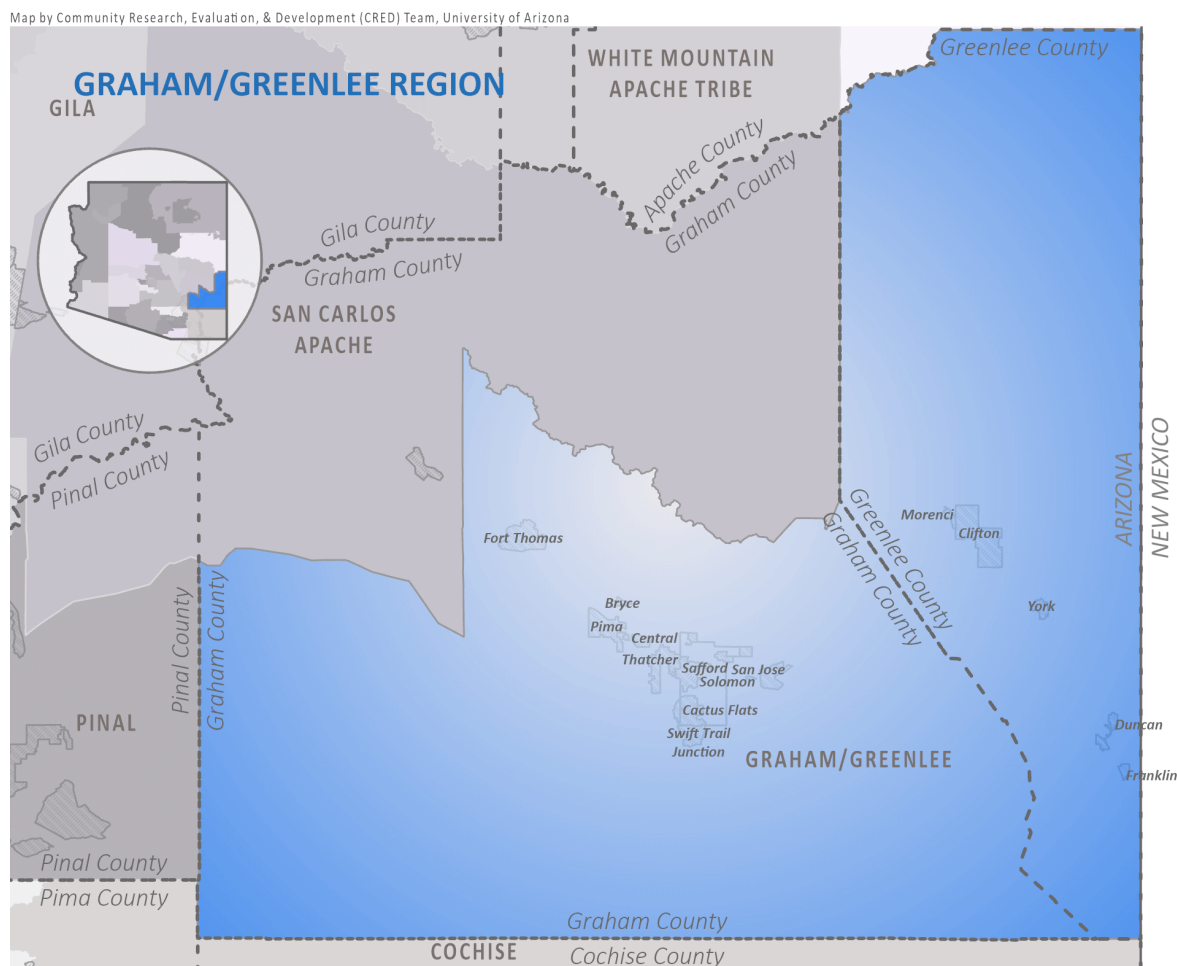
### Regional Boundaries

The First Things First regional boundaries were established to create regions that (a) reflect the view of families in terms of where they access services, (b) coincide with existing boundaries or service areas of organizations providing early childhood services, (c) maximize the ability to collaborate with service systems and local governments, (d) facilitate the ability to convene a Regional Partnership Council, and (e) allow for the collection of demographic and indicator data.

The First Things First Graham/Greenlee Region is defined as all of Graham and Greenlee counties, except for the portion of Graham County which is in the San Carlos Apache Indian Reservation.

Figure 1 below shows the geographical area covered by the Graham/Greenlee Region. Additional information available at the end of this report includes a map of the region by zip code in Appendix 1, a table listing zip codes for the region in Appendix 2, and a map of school districts in the region in Appendix 3.

Figure 1. The First Things First Graham/Greenlee Region



Source: Custom map by the Community Research, Evaluation, & Development (CRED) Team using shapefiles obtained from First Things First and the U.S. Census Bureau 2019 TIGER/Line Shapefiles (<https://www.census.gov/cgi-bin/geo/shapefiles/index.php>)

## Data Sources

The data contained in this report come from a variety of sources. Some data were provided to First Things First by state agencies, such as the Arizona Department of Economic Security (DES), the Arizona Department of Education (ADE), and the Arizona Department of Health Services (ADHS). Other data were obtained from publicly available sources, including the 2010 U.S. Census, the American Community Survey (ACS), the Arizona Department of Administration (ADOA), and the Department of Child Safety (DCS).

The U.S. Census<sup>2</sup> is an enumeration of the population of the United States. It is conducted every ten years, and includes information about housing, race, and ethnicity. The 2010 U.S. Census data are available by census block. There are about 115,000 inhabited blocks in Arizona, with an average population of 56 people each. The Census data for the Graham/Greenlee Region

presented in this report were calculated by identifying each block in the region and aggregating the data over all of those blocks.

The American Community Survey<sup>3</sup> is a survey conducted by the U.S. Census Bureau each month by mail, telephone, and face-to-face interviews. It covers many different topics, including income, language, education, employment, and housing. The ACS data are available by census tract. Arizona is divided into about 1,500 census tracts, with an average of about 4,200 people in each. The ACS data for the Graham/Greenlee Region were calculated by aggregating over the census tracts which are wholly or partially contained in the region. The data from partial census tracts were apportioned according to the percentage of the 2010 Census population in that tract living inside the Graham/Greenlee Region. The most recent and most reliable ACS data are averaged over the past five years; those are the data included in this report. They are based on surveys conducted from 2013 to 2017. In general, the reliability of ACS estimates is greater for more populated areas. Statewide estimates, for example, are more reliable than county-level estimates.

To protect the confidentiality of program participants, the First Things First Data Dissemination and Suppression Guidelines preclude our reporting social service and early education programming data if the count is less than ten and preclude our reporting data related to health or developmental delay if the count is less than six. In addition, some data received from state agencies may be suppressed according to their own guidelines. The Arizona Department of Health Services does not report counts less than six; the Arizona Department of Economic Security does not report counts between one and nine; and the Arizona Department of Education does not report counts less than eleven. Throughout this report, information which is not available because of suppression guidelines will be indicated by entries of “<6” or “<10” or “<11” for counts, or “DS” (data suppressed) for percentages. Data are sometimes not available for particular regions, either because a particular program did not operate in the region or because data are only available at the county level. Cases where data are not available will be indicated by an entry of “N/A.”

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

## Population Characteristics

### Why it Matters

To support the healthy development and learning of young children across Arizona, advocates and decision makers need to understand who those children and their families are.<sup>4</sup> Although parents are a child’s first and most important teachers, families of young children often use community resources to help them promote positive outcomes for their children.<sup>5</sup> The number and characteristics of young children and families in a region can inform the range of services needed in a community, helping to guide where to locate child care, health care, and social services so that they are accessible to those who need them.<sup>6,7</sup>

**Immigrant families.** Families in the U.S. are becoming more diverse. Knowing how local communities are changing can help ensure families have access to the services and supports they need to thrive.<sup>8</sup> Children of foreign-born parents represent one of the fastest growing groups of young children in the country.<sup>9</sup> Recent changes in national immigration policy have led some immigrant families to avoid using social services for which they legally qualify due to fear of deportation or jeopardizing their legal status in the country.<sup>10,11,12</sup> Policy changes at a national level, such as the “public charge rule”<sup>iv</sup> set to be enacted in October 2019, may deter families—particularly those with a recent history of immigration—from using available supports for which they legally qualify.<sup>13,14</sup> Children in these families may be at particular risk of reduced access to medical care and increased food insecurity.<sup>15,16,17</sup>

**Language use.** Households with multiple languages spoken pose a unique balance of benefits for child learning and barriers to parental engagement, which counties with high rates of other languages spoken should specifically consider. Acknowledging and valuing linguistic heritage (such as through language preservation efforts) and recognizing needs for resources and services in languages other than English should remain important considerations for organizations and agencies across Arizona.<sup>18,19,20,21</sup> Awareness of the levels of English proficiency and of other home languages spoken within a region provides information about a community’s assets and allows for identifying relevant supports. Young children can benefit from exposure to multiple languages; mastery of more than one language is an asset in school readiness and academic achievement and offers cognitive and social-emotional benefits in early school and throughout their lifetime.<sup>22,23,24,25</sup> Although dual language learning is an asset, limited English speaking households (that is, households where none of the adult members speak English well) can face challenges. These families may experience barriers to accessing health care and social service information, as well as barriers to engaging in important parent-teacher interactions, all of which can impede their child’s health and development.<sup>26,27</sup>

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<sup>iv</sup> U.S. Citizenship and Immigration Services defines “public charge” as an individual who is likely to become “primarily dependent on the government for subsistence, as demonstrated by either the receipt of public cash assistance for income maintenance, or institutionalization for long-term care at government expense.”

Providing information about resources and services in languages accessible to families in the region can help remove those barriers. Although Spanish is the most common second language spoken, Arizona is also home to a large number of Native communities, with Native languages spoken by families in those communities. Language preservation and revitalization are critical to strengthening culture in Native communities, addressing issues of educational equity, and to the promotion of social unity, community well-being, and Indigenous self-determination.<sup>28, 29</sup> Special consideration should be given to respecting and supporting the numerous Native American languages spoken, particularly in tribal communities around the state.

**Family and household composition.** In addition to growing racial, ethnic and social diversity, U.S. and Arizona families are becoming more diverse in terms of family structure.<sup>30,31,32,33</sup> Understanding the makeup of families in a region can help better prepare child care, school and agency staff to engage with families in ways that support positive interactions both within families and with staff to enhance each child’s early learning and development.<sup>34</sup>

Multi-generational households, particularly those where grandparents live in the home with the child and parents, are traditional in some communities and cultures and can provide financial and social benefits.<sup>35</sup> However, parents are not always in the picture in these homes. Care of children by someone other than their parents, such as relatives or close friends, is known as kinship care and is increasingly common.<sup>36</sup> Children living in kinship care can arrive in those situations for a variety of reasons, including a parent’s absence for work or military service, chronic illness, drug abuse, or incarceration, or due to abuse, neglect, or homelessness. Understanding who is caring for children can help in identifying and creating specific supports for these families. Children in kinship care often face special needs as a result of trauma, and therefore these families often require additional support and assistance to help children adjust and provide the best possible home environment.<sup>37</sup> A child’s risk of living in poverty is also higher for those living with grandparents, adding to the family stress.<sup>38</sup> These families are likely to require access to information on resources, support services, benefits, and policies available to aid in their caregiving role.<sup>39</sup>

## What the Data Tell Us

### Population, Race, and Ethnicity

- According to the U.S. Census, the Graham/Greenlee Region had a population of 40,877 in 2010, of whom 3,903 (10%) were children ages birth to 5. Twenty percent of households in the region included a young child. This is a higher proportion of households than the state (16%) (Table 1).
- Population projections for Graham and Greenlee Counties show that the population of young children (ages 0-5) is projected to be about 4,039 by 2020, a decrease from 2010 (4,624). Projections show an increase in the count of young children over time until 2035 (4,240) and then a decline by 2050 (3,945) (Figure 2).
- A third (35%) of adults and 44 percent of young children (ages 0-4) in the Graham/Greenlee Region are Hispanic. These proportions are similar to the state overall (25% and 45%, respectively), but lower than Greenlee County, where 44 percent of adults and the majority of young children (55%) are Hispanic. The region also has a lower percentage of American Indian adults (2%) and young children (2%) than Graham County (12% and 20%, respectively) and the state (4% and 6%, respectively). The proportions of adults (2%) and young children (1%) who are Black or African American in the region are slightly lower than the state (4% and 5%, respectively) and notably lower than the United States overall (12% and 14%, respectively). The percentages of Asian or Pacific Islander adults (1%) and young children (1%) in the region are similar to the state (3% and 3%, respectively) (Table 3 & Table 4).
- The race and ethnicity of mothers giving birth in the Graham/Greenlee Region differs slightly from the state overall. While the proportion of births to mothers who were Hispanic or Latina was similar between the region (38%) and state (41%) in 2017, there were smaller proportions of births to mothers who were Black or African-American (2%) and American Indian or Alaskan (3%) in the region compared to the state overall (6% and 6%, respectively). Greenlee County had a larger proportion of births to Hispanic or Latina mothers (47%) and Graham County had a larger proportion of births to American Indian or Alaskan mothers (21%) compared to the region (38% and 3%, respectively) (Table 5).

### Immigrant Families and Language Use

- Three percent of children in the Graham/Greenlee Region live with one or two foreign-born parents; this is notably lower than the state (26%) (Table 6).
- Household language use also reflects these demographic patterns; a smaller proportion of individuals speak a language other than English at home in the Graham/Greenlee Region (20%) than in the state overall (27%). However, there is only a slightly smaller percentage of limited-English-speaking households in the region (2%) compared to the state (4%) (Table 7 & Table 9).

### **Family and Household Composition**

- A majority of children living in the Graham/Greenlee Region live in two-parent households; 58 percent of young children in the region live with two parents (or stepparents), similar to Arizona (59%). The proportion of households with young children in the region that are single-female households (22%) is also similar to the state overall (24%), though there is a notable difference compared to Graham County (28%) and Greenlee County (17%) (Table 10 & Table 11).
- The percentage of young children living in a grandparent's household is slightly lower for the region (17%) compared to Graham County (22%) and Greenlee County (19%), though it is higher than the state overall (14%). In contrast, the percentage of children living with a grandparent who is responsible for them in the region (47%) is higher than in Graham and Greenlee Counties (46% and 42%, respectively) and lower than the state (51%) (Table 12 & Table 13).



## Population, Race, and Ethnicity

Table 1. Population and households, 2010

GEOGRAPHY	TOTAL POPULATION	POPULATION (AGES 0-5)	TOTAL NUMBER OF HOUSEHOLDS	HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5)	PERCENT OF HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5)
<b>Graham/Greenlee Region</b>	<b>40,877</b>	<b>3,903</b>	<b>13,249</b>	<b>2,600</b>	<b>20%</b>
Graham County	37,220	3,830	11,120	2,448	22%
Greenlee County	8,437	794	3,188	566	18%
Arizona	6,392,017	546,609	2,380,990	384,441	16%
United States	308,745,538	24,258,220	116,716,292	17,613,638	15%

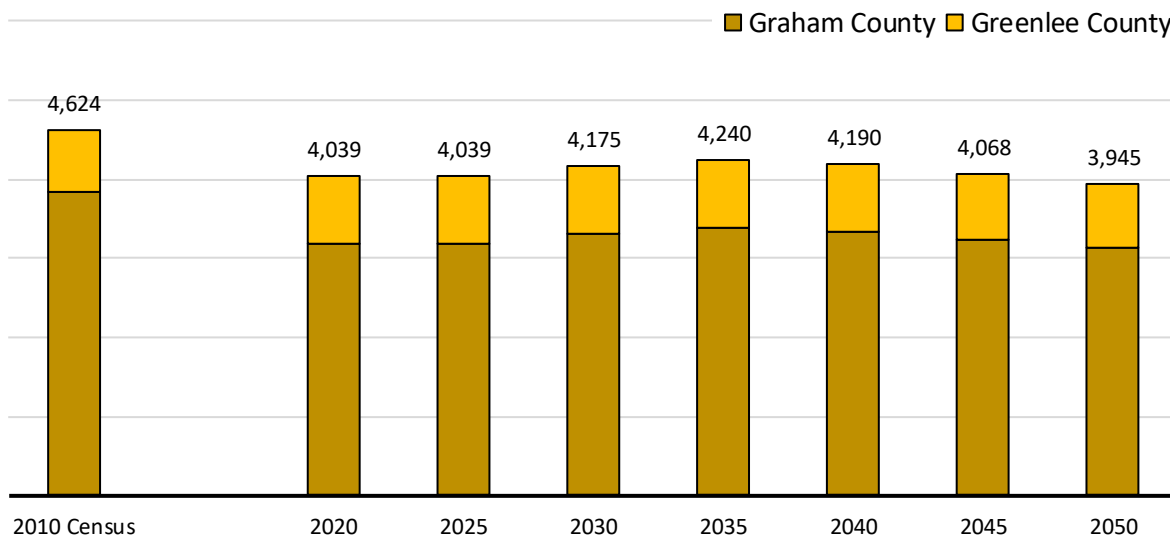
Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Tables P1, P4, & P20

Table 2. Population of children by single year of age, 2010

GEOGRAPHY	POPULATION (AGES 0-5)	AGE 0	AGE 1	AGE 2	AGE 3	AGE 4	AGE 5
<b>Graham/Greenlee Region</b>	<b>3,903</b>	<b>614</b>	<b>669</b>	<b>677</b>	<b>663</b>	<b>641</b>	<b>639</b>
Graham County	3,830	619	680	664	624	628	615
Greenlee County	794	117	131	144	140	123	139
Arizona	546,609	87,557	89,746	93,216	93,880	91,316	90,894
United States	24,258,220	3,944,153	3,978,070	4,096,929	4,119,040	4,063,170	4,056,858

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

Figure 2. Population projections for young children (ages 0-5) in Graham and Greenlee counties, 2020 to 2050



Source: Arizona Office of Economic Opportunity. (2018). Arizona Population Projections: 2018 to 2055, Medium Series

Table 3. Race and ethnicity of the adult population (ages 18 and older), 2010

GEOGRAPHY	POPULATION 18 YEARS AND OVER	HISPANIC	WHITE, NOT HISPANIC	BLACK OR AFRICAN- AMERICAN, NOT HISPANIC	AMERICAN INDIAN, NOT HISPANIC	ASIAN OR PACIFIC ISLANDER, NOT HISPANIC	OTHER, NOT HISPANIC
<b>Graham/ Greenlee Region</b>	<b>29,728</b>	<b>35%</b>	<b>60%</b>	<b>2%</b>	<b>2%</b>	<b>1%</b>	<b>1%</b>
Graham County	26,645	29%	55%	2%	12%	1%	1%
Greenlee County	5,974	44%	52%	1%	2%	1%	1%
Arizona	4,763,003	25%	63%	4%	4%	3%	1%
United States	234,564,071	14%	67%	12%	1%	5%	1%

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

Table 4. Race and ethnicity of the population of young children (ages 0-4), 2010

GEOGRAPHY	POPULATION (AGES 0-4)	HISPANIC	WHITE, NOT HISPANIC	BLACK OR AFRICAN- AMERICAN	AMERICAN INDIAN	ASIAN OR PACIFIC ISLANDER
<b>Graham/Greenlee Region</b>	<b>3,264</b>	<b>44%</b>	<b>52%</b>	<b>1%</b>	<b>2%</b>	<b>1%</b>
Graham County	3,215	34%	45%	1%	20%	<1%
Greenlee County	655	55%	40%	1%	3%	1%
Arizona	455,715	45%	40%	5%	6%	3%
United States	20,201,362	25%	51%	14%	1%	5%

Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Tables P12B-H

Table 5. Race and ethnicity of mothers giving birth in calendar year 2017

GEOGRAPHY	TOTAL NUMBER OF BIRTHS IN 2017	MOTHER WAS HISPANIC OR LATINA	MOTHER WAS WHITE, NOT HISPANIC	MOTHER WAS BLACK OR AFRICAN- AMERICAN	MOTHER WAS AMERICAN INDIAN OR ALASKAN	MOTHER WAS ASIAN OR PACIFIC ISLANDER
<b>Graham/Greenlee Region</b>	<b>586</b>	<b>38%</b>	<b>57%</b>	<b>2%</b>	<b>3%</b>	<b>DS</b>
Graham County	530	28%	50%	DS	21%	DS
Greenlee County	156	47%	44%	4%	DS	DS
Arizona	81,664	41%	44%	6%	6%	4%

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

## Immigrant Families and Language Use

Table 6. Children (ages 0-5) living with parents who are foreign-born

GEOGRAPHY	YOUNG CHILDREN (AGES 0-5) LIVING IN FAMILIES OR SUBFAMILIES	YOUNG CHILDREN (AGES 0-5) LIVING IN FAMILIES OR SUBFAMILIES WITH ONE OR TWO FOREIGN-BORN PARENTS	PERCENT OF YOUNG CHILDREN (AGES 0-5) LIVING IN FAMILIES OR SUBFAMILIES WITH ONE OR TWO FOREIGN-BORN PARENTS
<b>Graham/Greenlee Region</b>	<b>3,437</b>	<b>115</b>	<b>3%</b>
Graham County	3,292	46	1%
Greenlee County	812	69	8%
Arizona	498,102	130,705	26%
United States	22,939,897	5,730,869	25%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B05009

Note: Children living in subfamilies are children who live together with one or two of their parents in a relative's household (such as a grandparent or aunt or uncle).

Table 7. Language spoken at home by persons ages 5 and older

GEOGRAPHY	POPULATION (AGES 5 AND OLDER)	POPULATION (AGES 5+) WHO SPEAK ONLY ENGLISH AT HOME	POPULATION (AGES 5+) WHO SPEAK SPANISH AT HOME	POPULATION (AGES 5+) WHO SPEAK OTHER LANGUAGES AT HOME
<b>Graham/Greenlee Region</b>	<b>39,493</b>	<b>80%</b>	<b>18%</b>	<b>2%</b>
Graham County	34,864	79%	16%	6%
Greenlee County	8,679	77%	21%	2%
Arizona	6,375,189	73%	21%	6%
United States	301,150,892	79%	13%	8%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table C16001

Note: The most recent estimates from the American Community Survey (ACS) no longer specify the proportion of the population who speak a Native North American language for geographies smaller than the state.

Table 8. English-language proficiency for persons ages 5 and older

GEOGRAPHY	POPULATION (AGES 5 AND OLDER)	POPULATION (AGES 5+) WHO SPEAK ONLY ENGLISH AT HOME	POPULATION (AGES 5+) WHO SPEAK ANOTHER LANGUAGE AT HOME, AND SPEAK ENGLISH "VERY WELL"	POPULATION (AGES 5+) WHO SPEAK ANOTHER LANGUAGE AT HOME, BUT DO NOT SPEAK ENGLISH "VERY WELL"
<b>Graham/Greenlee Region</b>	<b>39,493</b>	<b>80%</b>	<b>15%</b>	<b>5%</b>
Graham County	34,864	79%	16%	5%
Greenlee County	8,679	77%	18%	5%
Arizona	6,375,189	73%	18%	9%
United States	301,150,892	79%	13%	9%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B16005

Table 9. Limited-English-speaking households

GEOGRAPHY	TOTAL NUMBER OF HOUSEHOLDS	NUMBER OF "LIMITED ENGLISH SPEAKING" HOUSEHOLDS	PERCENT OF HOUSEHOLDS WHICH ARE "LIMITED ENGLISH SPEAKING"
<b>Graham/Greenlee Region</b>	<b>13,443</b>	<b>249</b>	<b>2%</b>
Graham County	10,976	206	2%
Greenlee County	3,364	79	2%
Arizona	2,482,311	108,133	4%
United States	118,825,921	5,305,440	4%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B16002

## Family and Household Composition

Table 10. Living arrangements for children (ages 0-5)

GEOGRAPHY	CHILDREN (0-5) LIVING IN HOUSEHOLDS	CHILDREN (0-5) LIVING WITH TWO PARENTS OR STEPPARENTS	CHILDREN (0-5) LIVING WITH ONE PARENT OR STEPPARENT	CHILDREN (0-5) LIVING WITH RELATIVES (NOT PARENTS)	CHILDREN (0-5) LIVING WITH NON- RELATIVES
<b>Graham/Greenlee Region</b>	<b>3,642</b>	<b>58%</b>	<b>36%</b>	<b>3%</b>	<b>3%</b>
Graham County	3,483	53%	41%	3%	3%
Greenlee County	884	55%	37%	6%	2%
Arizona	520,556	59%	37%	2%	2%
United States	23,817,787	62%	34%	2%	2%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Tables B05009, B09001, & B17006

Table 11. Heads of households in which children (ages 0-5) live, 2010

GEOGRAPHY	HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5)	MARRIED FAMILY HOUSEHOLDS	SINGLE-MALE HOUSEHOLDS	SINGLE-FEMALE HOUSEHOLDS
<b>Graham/Greenlee Region</b>	<b>2,600</b>	<b>65%</b>	<b>13%</b>	<b>22%</b>
Graham County	2,448	61%	11%	28%
Greenlee County	566	63%	20%	17%
Arizona	384,441	65%	11%	24%
United States	17,613,638	67%	9%	24%

Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Tables P20 & P32

Table 12. Children (ages 0-5) living in the household of a grandparent, 2010

GEOGRAPHY	POPULATION (AGES 0-5)	CHILDREN (0-5) LIVING IN A GRANDPARENT'S HOUSEHOLD	PERCENT OF CHILDREN (0-5) WHO LIVE IN A GRANDPARENT'S HOUSEHOLD
<b>Graham/Greenlee Region</b>	<b>3,903</b>	<b>683</b>	<b>17%</b>
Graham County	3,830	831	22%
Greenlee County	794	151	19%
Arizona	546,609	74,153	14%
United States	24,258,220	2,867,165	12%

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

Table 13. Grandparents responsible for grandchildren (ages 0-17) living with them

GEOGRAPHY	GRANDCHILDREN UNDER 18 LIVING WITH GRANDPARENT HOUSEHOLDER	PERCENT OF GRANDCHILDREN UNDER 18 LIVING WITH A GRANDPARENT HOUSEHOLDER WHO IS RESPONSIBLE FOR THEM
<b>Graham/Greenlee Region</b>	<b>1,204</b>	<b>47%</b>
Graham County	1,629	46%
Greenlee County	280	42%
Arizona	147,707	51%
United States	5,781,786	49%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B10002

Note: This table includes both (a) grandchildren living with grandparents with no parent present and (b) grandchildren who live in multigenerational homes where the grandparent has assumed responsibility for the child, despite the presence of a parent.



## Economic Circumstances

### Why it Matters

A family's economic stability is a powerful predictor of child well-being and is one of the key social determinants of health.<sup>40</sup> Factors contributing to economic stability—or lack thereof—include **poverty, food insecurity, employment, and housing instability.**<sup>41</sup>

**Poverty.** Childhood poverty can negatively affect the way children's bodies grow and develop, including fundamental changes to the architecture of the brain.<sup>42</sup> Children raised in poverty are at a greater risk of a host of negative outcomes including low birth weight, lower school achievement, and poor health.<sup>43,44,45,46,47</sup> They are also more likely to remain poor later in life.<sup>48,49</sup> As a benchmark, the 2019 Federal Poverty Guideline—the criterion used for establishing eligibility for some safety net programs—for a family of four was \$25,750.<sup>50</sup> However, the federal poverty guideline definition of poverty was developed in the 1950s, and estimates only what a family would need to earn to afford basic nutrition, without taking into account other costs of living; it is widely considered to be well below what a family actually needs to earn to make ends meet. The “self-sufficiency standard” attempts to estimate how much families need to earn to fully support themselves, accounting for local costs of housing, transportation, and child care, and other budget items.<sup>51</sup> The 2018 self-sufficiency standard for an Arizona family with two adults, one preschooler, and one school-age child was \$56,143—over twice the poverty threshold.<sup>52</sup>

Public assistance programs are one way of counteracting the effects of poverty and providing supports to children and families in need. The Temporary Assistance for Needy Families (TANF) Cash Assistance program provides temporary cash benefits and support services to children and families. Eligibility is based on citizenship or qualified resident status, Arizona residency, and limits on resources and monthly income.

**Food insecurity.** A limited or uncertain availability of food is negatively associated with many markers of health and well-being for children, including heightened risks for developmental delays<sup>53</sup> and being overweight or obese.<sup>54</sup> To help reduce food insecurity, there are a variety of federally-funded programs including the Supplemental Nutrition Assistance Program (SNAP),<sup>55</sup> the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC),<sup>56</sup> the National School Lunch Program,<sup>57</sup> the School Breakfast Program,<sup>58</sup> the Summer Food Service Program,<sup>59</sup> and the Child and Adult Care Food Program (CACFP).<sup>60</sup> However, only about 58 percent of food insecure households nationwide report participating in federally-funded nutrition assistance programs.<sup>61</sup>

*SNAP.* Administered by the Arizona Department of Economic Security and also referred to as “Nutrition Assistance” and “food stamps,” SNAP has been shown to help reduce hunger and improve access to healthier food.<sup>62</sup> SNAP benefits support working families whose incomes simply do not provide for all their needs. For low-income working families, the additional funds

available to access food from SNAP can help make a meaningful difference. For example, for a three-person family with one person who earns a minimum wage, SNAP benefits can boost take-home income by 10-20 percent.<sup>63</sup>

*WIC.* Administered by the Arizona Department of Health Services, this federally-funded program serves pregnant, postpartum, and breastfeeding women, as well as infants and young children (under the age of five) who are economically disadvantaged (i.e., family incomes at or below 185 percent of the federal poverty level). The program offers funds for nutritious food, breastfeeding and nutrition education, and referrals to health and social services.<sup>64</sup>

Participation in WIC has been shown to be associated with healthier births, lower infant mortality, improved nutrition, decreased food insecurity, improved access to health care, and improved cognitive development and academic achievement for children.<sup>65</sup>

*National School Lunch Program.* Administered by the Arizona Department of Education, the National School Lunch Program provides free and reduced-price meals at school for students whose family incomes are at or less than 130 percent of the federal poverty level for free lunch, and 185 percent of the federal poverty level for reduced-price lunch.

**Employment.** Unemployment and underemployment can affect a family's ability to meet the expenses of daily living, as well as their access to resources needed to support their children's well-being and healthy development. A parent's job loss can affect children's school performance, leading to poorer attendance, lower test scores, and higher risk of grade repetition, suspension, or expulsion.<sup>66</sup> Unemployment can also put families at greater risk for stress, family conflict, and homelessness.<sup>67</sup> Note that this does not include persons who have dropped out of the labor force entirely, including those who wanted to but could not find suitable work and so have stopped looking for employment.<sup>68</sup>

**Housing instability.** Examining indicators related to housing quality, costs, and availability can reveal additional factors affecting the health and well-being of young children and their families in a region. Housing challenges such as issues paying rent or mortgage, overcrowded living conditions, unstable housing arrangements, and homelessness can have harmful effects on the physical, social-emotional, and cognitive development of young children.<sup>69</sup> Traditionally, housing has been deemed affordable for a family if it costs less than 30 percent of their annual income.<sup>70</sup> High housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health, and homelessness.<sup>71,72</sup>

One increasingly critical need for modern homes is a reliable means of internet access. Families often rely on communication and information technologies to access information, connect socially, pursue an education, and apply for employment opportunities. Parents are also more likely to turn to online resources, rather than in-person resources, for information about obtaining health care and sensitive parenting topics including bonding, separation anxiety, and managing parenting challenges.<sup>73</sup> The term "digital divide" refers to disparities in

communication and information technologies,<sup>74</sup> and the lack of sustained access to information and communication technologies in low-income communities is associated with economic and social inequality.<sup>75</sup> Low-income households may experience regular disruptions to this increasingly important service when they can't pay bills, repair or update equipment, or access public locations that may offer connectivity (e.g., computers at local libraries).<sup>76</sup> Nationally, Americans are increasingly reliant on smartphones as their sole source of internet access. Particularly for individuals who are younger, lower-income, and non-white, broadband service at home is less common and smartphone-only internet use is more common.<sup>77</sup> Households in rural areas typically experience more limited coverage from mobile networks and slower-speed internet services, as well as limited internet provider options which can result in higher monthly costs.<sup>78,79,80</sup>

## What the Data Tell Us

### Poverty

- Nearly one of every six (16%) individuals in the Graham/Greenlee Region lives in poverty, a similar proportion to the state (17%). When it comes to young children, one in four (25%) lives in poverty in the region. While this proportion is higher than that of the total (all-age) population in the region living in poverty (16%), it is similar to the rates of young children living in poverty across the state (26%). In contrast, the proportions of all individuals and young children living in poverty in Graham County (21% and 33%, respectively) are notably higher than the region and state (Figure 3).
- While overall median annual family income is lower in both Graham (\$58,732) and Greenlee (\$60,857) Counties than in Arizona (\$63,812), differences vary by household type. Median income for married-couple families with children in Graham County (\$74,269) is more than three times the median income for single female headed families (\$20,244). Median income for married-couple families with children in Greenlee County (\$78,523) is nearly three times the median income for single female headed families (\$27,202) (Table 14).
- Eligibility for some public assistance programs is determined by different poverty thresholds. For example, family income at or below 141% of the federal poverty threshold is one criterion for eligibility for the Arizona Health Care Cost Containment System (AHCCCS)<sup>v</sup> for children ages 1 to 5, and at or below 147% of the FPL for children under 1 year old.<sup>81</sup> In the Graham/Greenlee Region, the percentage of families with young children who may qualify for AHCCCS (those under 130% of the poverty threshold and between 130% and 149% of the poverty threshold) (38%) is comparable to the state overall (38%) (Table 15 & Figure 4).
- Between 2015 and 2018, the percentages of both families and young children receiving Temporary Assistance for Needy Families (TANF) declined over time and were low for the region (3% for each) and state (3% for each) (Table 16 & Table 17).

### Food Insecurity

- While participation in the Supplemental Nutrition Assistance Program (SNAP) by families and young children also declined between 2015 and 2018, over a third of families (37%) and young children (37%) participated in SNAP in the Graham/Greenlee Region in 2018, slightly lower proportions than the state (39% and 42%, respectively) (Table 18 & Table 19).
- Since the 2015-2016 school year, the percentage of students eligible for free or reduced-price lunch in the Graham/Greenlee Region has declined, from 50 percent in 2015-2016 to 47 percent in 2018-2019 (Table 20).

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<sup>v</sup> AHCCCS is Arizona's Medicaid agency

## Employment

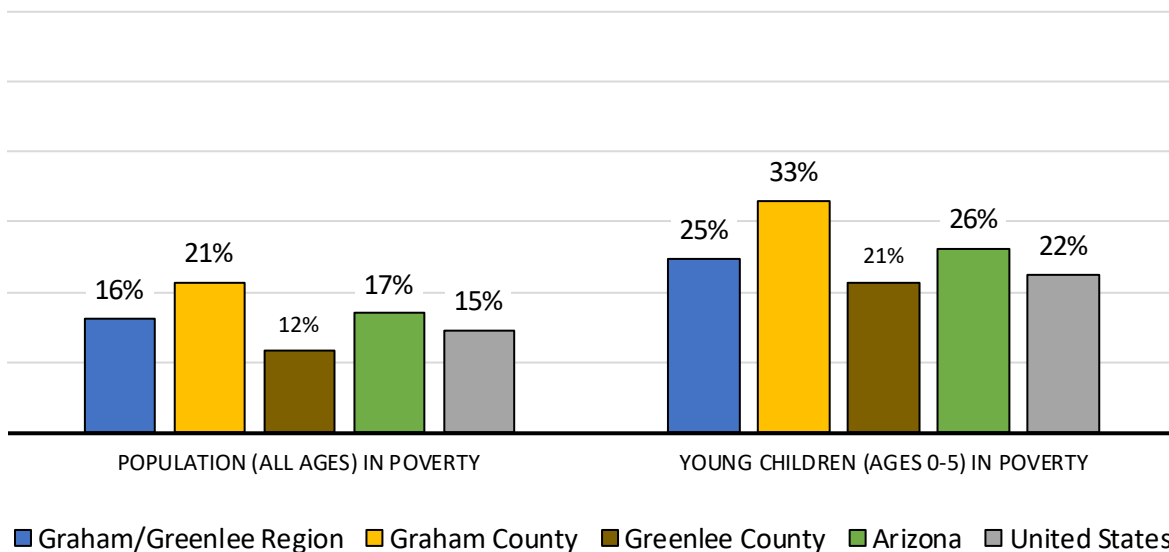
- Rates of adult employment in the Graham/Greenlee Region (46%) are notably lower than the state (55%) and U.S. as a whole (59%). Half of adults in the region (50%) are not in the labor force, compared to 40 percent statewide and 37 percent nationally (Table 21).
- Since 2015, adult unemployment rates declined steadily in both Graham and Greenlee Counties to fall more closely in line with statewide unemployment rates. In 2018, Graham County had an unemployment rate of 5.1 percent and Greenlee County had an unemployment rate of 4.3 percent, compared to the statewide rate of 4.8 percent (Table 21 & Figure 5).
- Almost half (46%) of households with young children in the region have all present parents in the labor force and 86 percent of young children have at least one present parent in the labor force. These proportions are lower than the statewide proportions of young children with all present parents in the labor force (60%) and at least one present parent in the labor force (89%). More than half (54%) of young children have a parent who is not in labor force (Table 22).

## Housing Instability

- One in five households (20%) in the Graham/Greenlee Region are spending 30 percent or more of their income on housing, a proportion comparable to Graham County (22%), higher than Greenlee County (11%), and lower than statewide (31%) (Table 23).
- More than half (59%) of households in the region have both a smartphone and computer, lower than state (67%) and national (66%) numbers (Table 24).
- The majority (81%) of residents in the region live in households with a computer and internet. This is comparable to state (82%) and national (83%) proportions (Table 25).
- For children specifically, household access to a computer and internet in the region is even higher (87%). However, thirteen percent of children in the region do not have access to the internet in their homes (Table 26).
- Of people living in households with a computer and internet in the region, thirteen percent rely solely on a cellular data plan (Table 27).

## Poverty

Figure 3. Percent of population (all ages) and young children (ages 0-5) living in poverty



Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B17001

Table 14. Median annual family income

GEOGRAPHY	MEDIAN INCOME FOR ALL FAMILIES	MEDIAN INCOME FOR MARRIED-COUPLE FAMILIES WITH CHILDREN (0-17)	MEDIAN INCOME FOR FAMILIES WITH CHILDREN (0-17), SINGLE MALE HEAD	MEDIAN INCOME FOR FAMILIES WITH CHILDREN (0-17), SINGLE FEMALE HEAD
Graham County	\$58,732	\$74,269	\$48,621	\$20,244
Greenlee County	\$60,857	\$78,523	\$60,036	\$27,202
Arizona	\$63,812	\$80,533	\$38,650	\$26,907
United States	\$70,850	\$91,621	\$41,054	\$26,141

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B19126

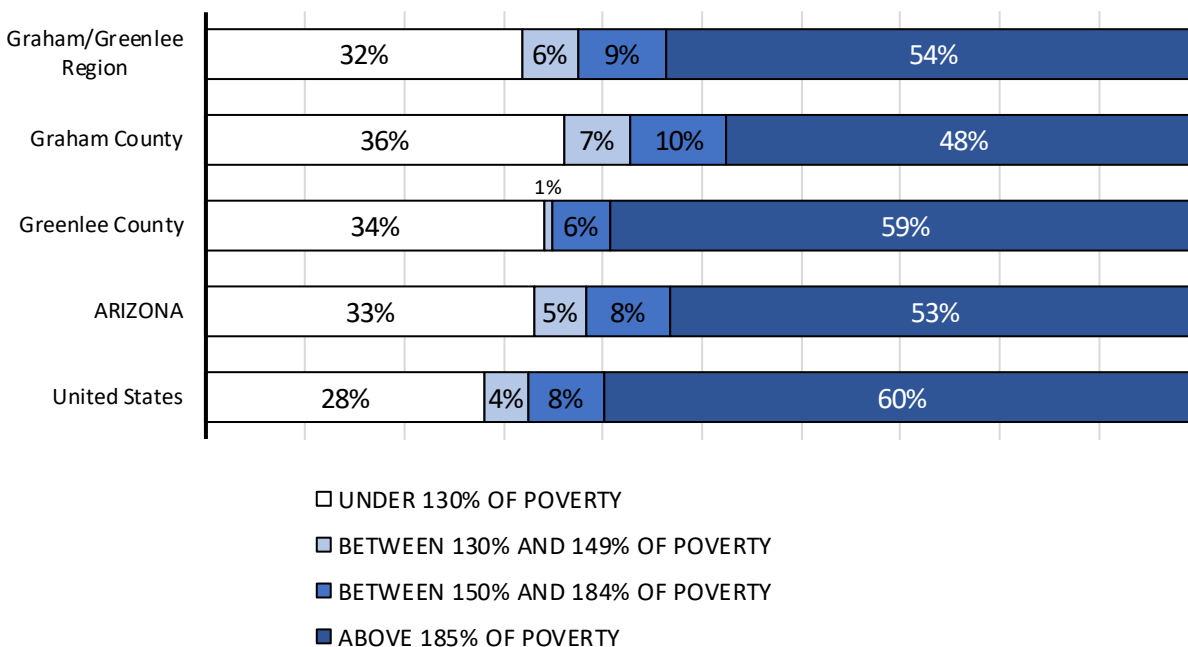
Table 15. Families with young children (ages 0-5) living at various poverty thresholds

GEOGRAPHY	TOTAL NUMBER OF FAMILIES WITH YOUNG CHILDREN (AGES 0-5)	PERCENT UNDER 130% OF POVERTY	PERCENT BETWEEN 130% AND 149% OF POVERTY	PERCENT BETWEEN 150% AND 184% OF POVERTY	PERCENT ABOVE 185% OF POVERTY
<b>Graham/Greenlee Region</b>	<b>1,921</b>	<b>32%</b>	<b>6%</b>	<b>9%</b>	<b>54%</b>
Graham County	1,643	36%	7%	10%	48%
Greenlee County	513	34%	1%	6%	59%
Arizona	295,926	33%	5%	8%	53%
United States	13,951,604	28%	4%	8%	60%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Tables B17001 & B17022

Note: Poverty refers to the poverty threshold used by the U.S. Census Bureau to determine whether or not a family lives in poverty based on their income. In 2017, the most recent year of ACS data used in this report, the poverty threshold for a family of four was \$24,848. For more information about poverty thresholds, see <https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>

Figure 4. Families with young children (ages 0-5) living at various poverty thresholds



Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Tables B17001 & B17022

Note: Poverty refers to the poverty threshold used by the U.S. Census Bureau to determine whether or not a family lives in poverty based on their income. In 2017, the most recent year of ACS data used in this report, the poverty threshold for a family of four was \$24,848. For more information about poverty thresholds, see <https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>

Table 16. Families participating in the TANF program, Fiscal Years 2015 to 2018

GEOGRAPHY	HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5)	NUMBER OF FAMILIES PARTICIPATING IN TANF				PERCENT OF HOUSEHOLDS WITH YOUNG CHILDREN (0-5) PARTICIPATING IN TANF IN 2018
		FY 2015	FY 2016	FY 2017	FY 2018	
<b>Graham/Greenlee Region</b>	<b>2,600</b>	<b>117</b>	<b>91</b>	<b>92</b>	<b>84</b>	<b>3%</b>
Graham County	2,448	194	146	83	75	3%
Greenlee County	566	14 to 22	2 to 18	2 to 18	2 to 18	DS
Arizona	384,441	18,165	16,399	14,188	12,042	3%

Sources: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P20 & Arizona Department of Economic Security, Division of Benefits and Medical Eligibility. (2019). Unpublished data received by request

Note: Due to changes in intergovernmental agreements, families participating in the Nnee Bich'o Nii program, the San Carlos Apache Tribal TANF program, do not appear in county numbers provided by DES in FY2017 or FY2018

Table 17. Children participating in the TANF program, Fiscal Years 2015 to 2018

GEOGRAPHY	NUMBER OF YOUNG CHILDREN (AGES 0-5) IN THE POPULATION	NUMBER OF CHILDREN PARTICIPATING IN TANF				PERCENT OF YOUNG CHILDREN (0-5) PARTICIPATING IN TANF IN 2018
		FY 2015	FY 2016	FY 2017	FY 2018	
<b>Graham/Greenlee Region</b>	<b>3,903</b>	<b>176</b>	<b>119</b>	<b>130</b>	<b>113</b>	<b>3%</b>
Graham County	3,830	269	186	118	101	3%
Greenlee County	794	18 to 26	13 to 21	2 to 18	2 to 18	DS
Arizona	546,609	23,862	22,326	19,614	16,634	3%

Sources: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P20 & Arizona Department of Economic Security, Division of Benefits and Medical Eligibility. (2019). Unpublished data received by request

Note: Due to changes in intergovernmental agreements, children participating in the Nnee Bich'o Nii program, the San Carlos Apache Tribal TANF program, do not appear in county numbers provided by DES in FY2017 or FY2018



## Food Insecurity

Table 18. Families participating in the SNAP program, Fiscal Years 2015 to 2018

GEOGRAPHY	HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5)	NUMBER OF FAMILIES PARTICIPATING IN SNAP				PERCENT OF HOUSEHOLDS WITH YOUNG CHILDREN (0-5) PARTICIPATING IN SNAP IN 2018
		FY 2015	FY 2016	FY 2017	FY 2018	
<b>Graham/Greenlee Region</b>	<b>2,600</b>	<b>1,091</b>	<b>1,049</b>	<b>1,043</b>	<b>972</b>	<b>37%</b>
Graham County	2,448	1,178	1,151	1,118	1,022	42%
Greenlee County	566	155	131	142	142	25%
Arizona	384,441	179,988	172,014	164,092	151,819	39%

Sources: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P20 & Arizona Department of Economic Security, Division of Benefits and Medical Eligibility. (2019). Unpublished data received by request

Table 19. Children participating in the SNAP program, Fiscal Years 2015 to 2018

GEOGRAPHY	NUMBER OF YOUNG CHILDREN (AGES 0-5) IN THE POPULATION	NUMBER OF CHILDREN PARTICIPATING IN SNAP				PERCENT OF YOUNG CHILDREN (0-5) PARTICIPATING IN SNAP IN 2018
		FY 2015	FY 2016	FY 2017	FY 2018	
<b>Graham/Greenlee Region</b>	<b>3,903</b>	<b>1,551</b>	<b>1,594</b>	<b>1,567</b>	<b>1,452</b>	<b>37%</b>
Graham County	3,830	1,689	1,787	1,733	1,566	41%
Greenlee County	794	224	197	205	205	26%
Arizona	546,609	249,707	258,556	247,418	229,291	42%

Sources: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P20 & Arizona Department of Economic Security, Division of Benefits and Medical Eligibility. (2019). Unpublished data received by request

Table 20. Percent of students (all grades) eligible for free or reduced-price lunch, 2015-16 to 2018-19

GEOGRAPHY	STUDENTS ELIGIBLE FOR FREE OR REDUCED-PRICE LUNCH (2015-16)	STUDENTS ELIGIBLE FOR FREE OR REDUCED-PRICE LUNCH (2016-17)	STUDENTS ELIGIBLE FOR FREE OR REDUCED-PRICE LUNCH (2017-18)	STUDENTS ELIGIBLE FOR FREE OR REDUCED-PRICE LUNCH (2018-19)
<b>Graham/Greenlee Region</b>	<b>50%</b>	<b>51%</b>	<b>48%</b>	<b>47%</b>
Graham County	53%	53%	51%	49%
Greenlee County	41%	44%	42%	45%
Arizona	58%	57%	57%	56%

Source: Arizona Department of Education. (2019). 2015-16 to 2018-19 Free & Reduced-Price Lunch Data. Custom tabulation of eligibility data

## Employment

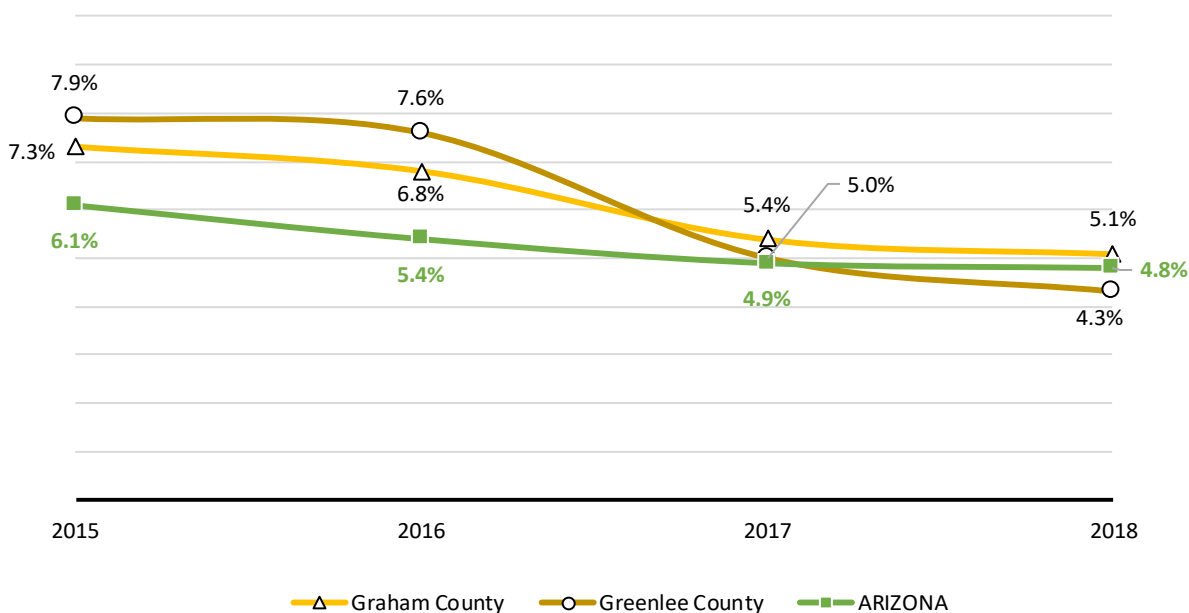
Table 21. Adult population (ages 16 and older) who are employed, unemployed, or not in the labor force

GEOGRAPHY	TOTAL POPULATION (AGES 16 AND OLDER)	PERCENT WHICH IS EMPLOYED	PERCENT WHICH IS UNEMPLOYED	PERCENT WHICH IS NOT IN THE LABOR FORCE
<b>Graham/Greenlee Region</b>	<b>32,472</b>	<b>46%</b>	<b>4%</b>	<b>50%</b>
Graham County	28,550	43%	6%	50%
Greenlee County	7,011	52%	4%	43%
Arizona	5,371,341	55%	4%	40%
United States	255,797,692	59%	4%	37%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B23025

Note: The labor force includes all persons who are currently employed, including those on leave, furlough, or temporarily laid off. Persons who are unemployed but actively looking for work are also considered to be in the labor force. Persons who are not working or looking for work (e.g., retired persons, stay-at-home parents, students) are considered to be "not in the labor force" in the American Community Survey.

Figure 5. Annual unemployment rates, not seasonally adjusted, 2015 to 2018



Source: Arizona Labor Statistics. (2019). Local Area Unemployment Statistics (LAUS). Retrieved from <https://laborstats.az.gov/local-area-unemployment-statistics>

Table 22. Parents of young children (ages 0-5) who are or are not in the labor force

GEOGRAPHY	TOTAL NUMBER OF CHILDREN (AGES 0-5) LIVING IN FAMILIES OR SUBFAMILIES	WITH TWO PARENTS, BOTH IN LABOR FORCE	WITH TWO PARENTS, ONE IN LABOR FORCE AND ONE NOT	WITH TWO PARENTS, NEITHER IN LABOR FORCE	WITH ONE PARENT, IN LABOR FORCE	WITH ONE PARENT, NOT IN LABOR FORCE
<b>Graham/Greenlee Region</b>	<b>3,437</b>	<b>21%</b>	<b>40%</b>	<b>&lt;1%</b>	<b>25%</b>	<b>14%</b>
Graham County	3,292	23%	34%	0%	30%	14%
Greenlee County	812	12%	46%	2%	20%	20%
Arizona	498,102	31%	29%	1%	29%	10%
United States	22,939,897	38%	26%	1%	27%	8%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B23008

Note: The labor force includes all persons who are currently employed, including those on leave, furlough, or temporarily laid off. Persons who are unemployed but actively looking for work are also considered to be in the labor force. Persons who are not working or looking for work (e.g., retired persons, stay-at-home parents, students) are considered to be "not in the labor force" in the American Community Survey.

## Housing Instability

Table 23. Households who are paying thirty percent or more of their income for housing

GEOGRAPHY	TOTAL NUMBER OF OCCUPIED HOUSING UNITS	PERCENT OF HOUSING UNITS FOR WHICH HOUSING COSTS 30% OF INCOME OR MORE
<b>Graham/Greenlee Region</b>	<b>13,443</b>	<b>20%</b>
Graham County	10,976	22%
Greenlee County	3,364	11%
Arizona	2,482,311	31%
United States	118,825,921	32%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B25106

Table 24. Households with and without computers and smartphones

GEOGRAPHY	TOTAL NUMBER OF HOUSEHOLDS	PERCENT WITH COMPUTER (BUT NO SMARTPHONE)	PERCENT WITH SMARTPHONE (BUT NO COMPUTER)	PERCENT WITH BOTH SMARTPHONE AND COMPUTER	PERCENT WITH NEITHER SMARTPHONE NOR COMPUTER
<b>Graham/Greenlee Region</b>	<b>13,443</b>	<b>12%</b>	<b>16%</b>	<b>59%</b>	<b>14%</b>
Graham County	10,976	12%	16%	56%	16%
Greenlee County	3,364	10%	18%	60%	12%
Arizona	2,482,311	12%	9%	67%	12%
United States	118,825,921	12%	9%	66%	13%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B28010

Note: In this table, "computer" includes both desktops and laptops.

Table 25. Persons (all ages) in households with and without computers and internet connectivity

GEOGRAPHY	NUMBER OF PERSONS (ALL AGES) LIVING IN HOUSEHOLDS	PERCENT IN HOUSEHOLDS WITH COMPUTER AND INTERNET	PERCENT IN HOUSEHOLDS WITH COMPUTER BUT NO INTERNET	PERCENT IN HOUSEHOLDS WITHOUT COMPUTER
<b>Graham/Greenlee Region</b>	<b>37,975</b>	<b>81%</b>	<b>11%</b>	<b>8%</b>
Graham County	33,331	75%	13%	11%
Greenlee County	9,278	82%	11%	7%
Arizona	6,656,124	82%	9%	9%
United States	312,916,765	83%	9%	9%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B28005

Table 26. Children (ages 0-17) in households with and without computers and internet connectivity

GEOGRAPHY	NUMBER OF CHILDREN (AGES 0-17) LIVING IN HOUSEHOLDS	PERCENT IN HOUSEHOLDS WITH COMPUTER AND INTERNET	PERCENT IN HOUSEHOLDS WITH COMPUTER BUT NO INTERNET	PERCENT IN HOUSEHOLDS WITHOUT COMPUTER
<b>Graham/Greenlee Region</b>	<b>11,217</b>	<b>87%</b>	<b>10%</b>	<b>3%</b>
Graham County	10,320	78%	14%	8%
Greenlee County	2,639	90%	8%	2%
Arizona	1,619,346	83%	10%	8%
United States	73,392,369	85%	9%	5%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B28005

Table 27. Households by type of internet access (broadband, cellular data, and dial-up)

GEOGRAPHY	PEOPLE LIVING IN HOUSEHOLDS WITH COMPUTER AND INTERNET (ALL AGES)	PERCENT WITH FIXED BROADBAND WITH CELLULAR DATA PLAN	PERCENT WITH FIXED BROADBAND WITHOUT CELLULAR DATA PLAN	PERCENT WITH CELLULAR DATA PLAN, WITHOUT FIXED BROADBAND	PERCENT WITH DIAL-UP INTERNET ONLY
<b>Graham/Greenlee Region</b>	<b>30,657</b>	<b>47%</b>	<b>40%</b>	<b>13%</b>	<b>&lt;1%</b>
Graham County	25,120	43%	42%	14%	<1%
Greenlee County	7,640	49%	38%	13%	0%
Arizona	5,475,311	54%	35%	10%	1%
United States	258,531,929	55%	35%	10%	1%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B28008

## Educational Indicators

### Why it Matters

Measures of educational engagement and achievement in a community have important implications for the developmental and economic resources available to children and families in that region. Individuals with higher levels of education tend to live longer and healthier lives.<sup>82</sup> Indicators such as school attendance and absenteeism, achievement on standardized testing, high school graduation rates, and adult educational attainment can provide valuable information about a region's educational engagement and success.

**School attendance and absenteeism.** School attendance and academic engagement early in life can significantly impact the direction of a child's schooling trajectory. Chronic absenteeism is defined as missing more than 10 percent of the school days within a school year, and it affects even the youngest children, with more than 10 percent of U.S. kindergarteners and first graders considered chronically absent.<sup>83</sup> Poor school attendance can cause children to fall behind, leading to lower proficiency in reading and math and increased risk of not being promoted to the next grade.<sup>84</sup> Consistent school attendance is particularly important for children from economically disadvantaged backgrounds, the group of children most at risk for chronic absenteeism.<sup>85,86</sup>

**Achievement on standardized testing.** A child's third-grade reading comprehension skills have been identified as a critical indicator of future academic success.<sup>87</sup> Students who are at or above grade level reading in third grade are more likely to go on to graduate high school and attend college.<sup>88</sup> The link between poor reading skills and risk of dropping out of high school is even stronger for children living in poverty. More than a quarter (26%) of children who were living in poverty and not reading proficiently in third grade did not finish high school. This is more than six times the high school dropout rate of proficient readers.<sup>89</sup>

In 2010, the Arizona legislature, recognizing the importance of early identification and targeted intervention for struggling readers, enacted *Move on When Reading* legislation. As of 2015, the statewide assessment tool for English language arts (ELA), including reading and writing, is Arizona's Measurement of Education Readiness to Inform Teaching (AzMERIT).<sup>vi,90</sup>

AzMERIT scores are used to determine promotion from the third grade in accordance with the *Move on When Reading* policy. *Move on When Reading* legislation states that a student shall not be promoted to fourth grade if their reading score falls far below the third-grade level, as established by the State Board of Education.<sup>91</sup> Exceptions exist for students identified with or being evaluated for learning disabilities and/or reading impairments, English language learners,

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<sup>vi</sup> AzMERIT was renamed AzM2, a change that will take effect during the 2019-20 school year.



and those who have demonstrated reading proficiency on alternate forms of assessment approved by the State Board of Education.

**Graduation rates and adult educational attainment.** Ultimately, adult educational attainment speaks to the assets and challenges of a community's workforce, including those who are working with or on behalf of young children and their families. Adults who have graduated from high school have better health and financial stability, lower risk for incarceration, and better socio-emotional outcomes compared to adults who dropped out of high school.<sup>92,93</sup> Children whose parents have higher levels of education are more likely to have positive outcomes related to school readiness and educational achievement, promoting academic success across generations.<sup>94</sup> Given the cascading effect of early education on later academic achievement and success in adulthood, it is critical to provide substantial support for early education and promote policies and programs that encourage the persistence and success of Arizona's children.

## What the Data Tell Us

### School Attendance and Absenteeism

- In the Graham/Greenlee Region, many families with young children have at least one stay at home parent or family caregiver in the home, which means that many families may not enroll their children in out-of-home care. In the 2018-2019 school year, 288 children were enrolled in preschool in the Graham/Greenlee Region. Kindergarten through third grade enrollments for the region were all relatively similar, ranging from 635 children in 2<sup>nd</sup> grade to 693 children in 3<sup>rd</sup> grade (Table 28).
- Kindergarten through 3<sup>rd</sup> grade chronic absence rates fluctuated from 2015-2016 to 2018-2019 in the region, ranging from a 10 percent chronic absence rate in 2016-2017 to a 14 percent rate in 2015-2016. During the 2018-2019 school year, the Graham/Greenlee Region had a 12 percent chronic absence rate, with 373 kindergarten through 3<sup>rd</sup> grade students in the region chronically absent. While this was comparable to the state of Arizona (12%), it was notably lower than the chronic absence rate for Greenlee County (17%) (Table 29 & Table 30).
- By grade level, chronic absences ranged from 11 percent to 14 percent in the Graham/Greenlee Region during the 2018-2019 school year. In the region, Graham and Greenlee Counties, and the state, chronic absences were highest among kindergarteners (14%, 12%, 23%, and 13%, respectively). Graham County had a similar chronic absence rate for kindergarten and 1<sup>st</sup> graders (both 12%) (Table 31).

### Achievement on Standardized Testing

- Fewer than half (40%) of 3<sup>rd</sup> grade students are meeting proficiency expectations for 3<sup>rd</sup> grade literacy. Slightly more than half (55%) are meeting proficiency expectations for math.
- Arizona's Measurement of Educational Readiness to Inform Teaching (AzMERIT) 3<sup>rd</sup> Grade English Language Arts passing rate for the Graham/Greenlee Region (40%) was slightly lower than the statewide passing rate in 2017-2018 (44%) (Table 32 & Figure 6).
- AzMERIT 3<sup>rd</sup> Grade English Language Arts passing rates for the region declined slightly from the 2015-2016 school year (43%) to the 2017-2018 school year (40%). Greenlee County had a more marked decline in passing rates during the same period, from 53 percent to 42 percent (Figure 7).
- AzMERIT 3<sup>rd</sup> Grade Math passing rate for the Graham/Greenlee Region (55%) was slightly higher than the statewide passing rate in 2017-2018 (53%). Greenlee County had a notably higher passing rate (64%) compared to the region (55%) and Graham County (52%) (Table 33 & Figure 8).
- AzMERIT 3<sup>rd</sup> Grade Math passing rates have improved over time at the region, county, and state level, with regional passing rates increasing from 46 percent in 2015-2016 to 55 percent in 2017-2018 (Figure 9).

### **Graduation Rates and Adult Educational Attainment**

- In 2017, the four-year graduation rate for the Graham/Greenlee Region was 87 percent and the five-year graduation rate was 89 percent, both higher than statewide rates (78% and 82%, respectively). Since 2015, both the four-year and five-year graduation rates have increased in the region (Table 34, Table 35, & Table 36).
- The 7th-12th grade dropout rate for the Graham/Greenlee Region remained at three percent from 2015-2016 to 2017-2018 (Table 37).
- A smaller proportion of adults have more than a high-school education in the Graham/Greenlee Region (56%) than in Arizona (62%) and the United States overall (60%) (Figure 10).
- Specifically considering the level of education of mothers giving birth, a slightly higher proportion of births in the Graham/Greenlee Region were to mothers with more than a high-school education (58%) compared to the state (56%), though the proportion of births to mothers with more than a high-school education was notably lower in Greenlee County (46%) (Table 38).

## School Attendance and Absenteeism

Table 28. Students enrolled in preschool through 3rd grade, 2018-19

GEOGRAPHY	PRESCHOOL	KINDERGARTEN	1ST GRADE	2ND GRADE	3RD GRADE
<b>Graham/Greenlee Region</b>	<b>288</b>	<b>660</b>	<b>651</b>	<b>635</b>	<b>693</b>
Graham County	128	535	521	520	557
Greenlee County	157	153	149	134	151
Arizona	21,238	79,990	81,913	81,951	83,037

Source: Arizona Department of Education (2019). 2018-19 October 1 Enrollments. Custom tabulation of enrollment data facilitated by state agency staff

Note: Data on enrollments were calculated at the district-level. Where districts were split between regions, district enrollments were apportioned to regions based on the percentage of K-3 students in each region within the district. See Appendix 3 for a full list of districts within the region, including split districts. Data on K-3<sup>rd</sup> grade students enrolled at Dan Hinton Accommodation School in Pima, AZ were mistakenly included in calculations for Pima North instead of Graham/Greenlee due to a geocoding error, resulting in 14 K-3<sup>rd</sup> grade students missing from Graham/Greenlee enrollment numbers.

Table 29. Chronic absence rates, kindergarten through 3rd grade, 2015-16 to 2018-19

GEOGRAPHY	CHRONIC ABSENCE RATE (2015-16)	CHRONIC ABSENCE RATE (2016-17)	CHRONIC ABSENCE RATE (2017-18)	CHRONIC ABSENCE RATE (2018-19)
<b>Graham/Greenlee Region</b>	<b>14%</b>	<b>10%</b>	<b>11%</b>	<b>12%</b>
Graham County	12%	10%	10%	11%
Greenlee County	19%	15%	16%	17%
Arizona	9%	10%	11%	12%

Source: Arizona Department of Education. (2019). 2015-16 to 2018-19 Chronic Absenteeism Data. Unpublished data received by request

Note: The definition of chronic absenteeism used in this table includes children who are absent due to chronic illness. The regional row in this table does not include data from Dan Hinton Accommodation School.

Table 30. Chronic absence rates, kindergarten through 3rd grade, 2018-19

GEOGRAPHY	TOTAL NUMBER OF STUDENTS	NUMBER OF STUDENTS WITH CHRONIC ABSENCES	CHRONIC ABSENCE RATE
<b>Graham/Greenlee Region</b>	<b>3,056</b>	<b>373</b>	<b>12%</b>
Graham County	2,481	278	11%
Greenlee County	679	116	17%
Arizona	402,206	46,482	12%

Source: Arizona Department of Education. (2019). 2018-19 Chronic Absenteeism Data. Unpublished data received by request

Note: The definition of chronic absenteeism used in this table includes children who are absent due to chronic illness. The regional row in this table does not include data from Dan Hinton Accommodation School.

Table 31. Chronic absence rates for students by grade (Grade K-3), 2018-19

GEOGRAPHY	CHRONIC ABSENCE RATE (KINDERGARTEN)	CHRONIC ABSENCE RATE (1ST GRADE)	CHRONIC ABSENCE RATE (2ND GRADE)	CHRONIC ABSENCE RATE (3RD GRADE)	CHRONIC ABSENCE RATE (K-3RD GRADE)
<b>Graham/Greenlee Region</b>	<b>14%</b>	<b>12%</b>	<b>12%</b>	<b>11%</b>	<b>12%</b>
Graham County	12%	12%	11%	10%	11%
Greenlee County	23%	16%	17%	13%	17%
Arizona	13%	12%	11%	10%	12%

Source: Arizona Department of Education. (2019). 2015-16 to 2018-19 Chronic Absenteeism Data. Unpublished data received by request

Note: The definition of chronic absenteeism used in this table includes children who are absent due to chronic illness. The regional row in this table does not include data from Dan Hinton Accommodation School.

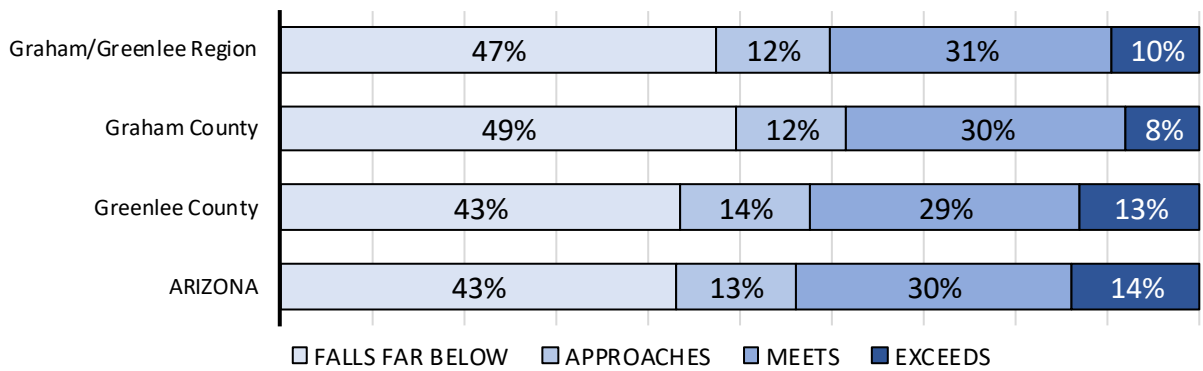
## Achievement on Standardized Testing

Table 32. AzMERIT Assessment Results: 3rd Grade English Language Arts, 2017-18

GEOGRAPHY	STUDENTS TESTED	FALLS FAR BELOW	APPROACHES	MEETS	EXCEEDS	PASSING
<b>Graham/Greenlee Region</b>	<b>668</b>	<b>47%</b>	<b>12%</b>	<b>31%</b>	<b>10%</b>	<b>40%</b>
Graham County	530	49%	12%	30%	8%	39%
Greenlee County	146	43%	14%	29%	13%	42%
Arizona	84,922	43%	13%	30%	14%	44%

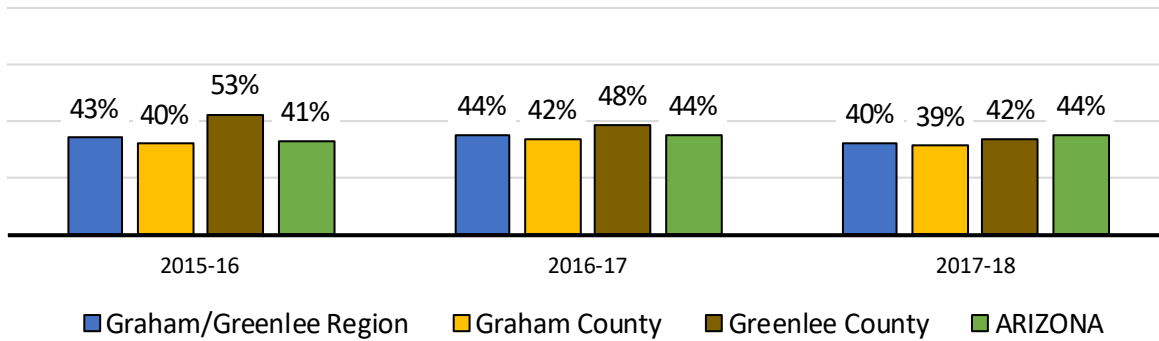
Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Figure 6. AzMERIT Assessment Results: 3rd Grade English Language Arts, 2017-18



Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Figure 7. Trends in passing rates for 3rd-grade English Language Arts AzMERIT, 2015-16 to 2017-18



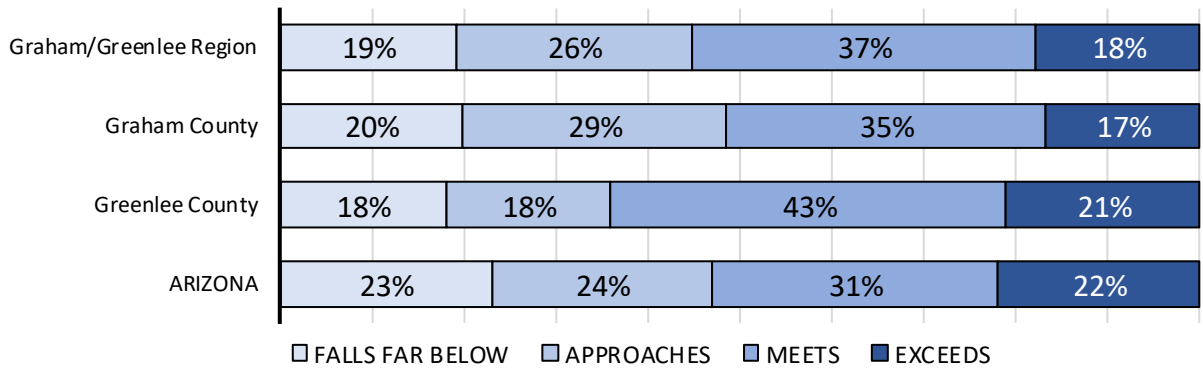
Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Table 33. AzMERIT Assessment Results: 3rd Grade Math, 2017-18

GEOGRAPHY	STUDENTS TESTED	FALLS FAR BELOW	APPROACHES	MEETS	EXCEEDS	PASSING
<b>Graham/Greenlee Region</b>	<b>668</b>	<b>19%</b>	<b>26%</b>	<b>37%</b>	<b>18%</b>	<b>55%</b>
Graham County	532	20%	29%	35%	17%	52%
Greenlee County	146	18%	18%	43%	21%	64%
Arizona	85,105	23%	24%	31%	22%	53%

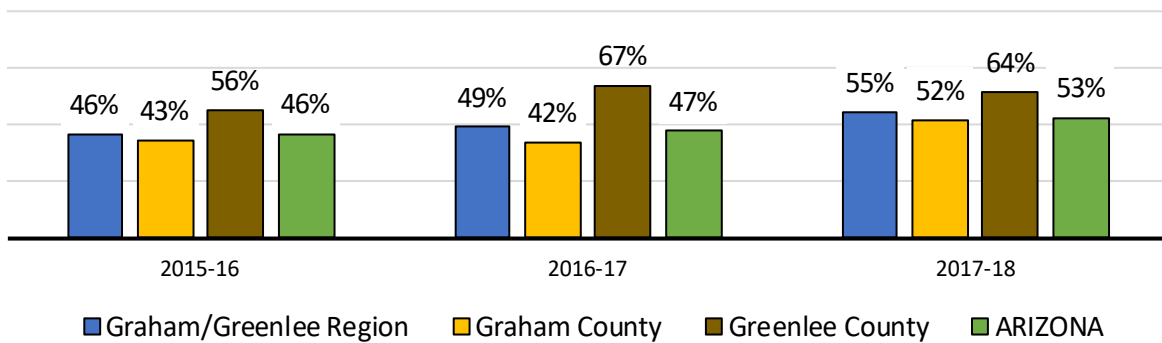
Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Figure 8. AzMERIT Assessment Results: 3rd Grade Math, 2017-18



Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Figure 9. Trends in passing rates for 3rd-grade Math AzMERIT, 2015-16 to 2017-18



Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data



## Graduation Rates and Adult Educational Attainment

Table 34. Graduation and dropout rates, 2017

GEOGRAPHY	FOUR-YEAR SENIOR COHORT	FOUR-YEAR GRADUATES	FOUR-YEAR GRADUATION RATE	FIVE-YEAR GRADUATES	FIVE-YEAR GRADUATION RATE	DROPOUT RATE (7TH TO 12TH GRADES)
<b>Graham/Greenlee Region</b>	<b>600</b>	<b>521</b>	<b>87%</b>	<b>536</b>	<b>89%</b>	<b>3%</b>
Graham County	505	429	85%	441	87%	4%
Greenlee County	121	107	88%	110	90%	1%
Arizona	84,802	66,363	78%	70,178	82%	5%

Source: Arizona Department of Education. (2019). Cohort 2017 Four Year Graduation Rate Data, Cohort 2017 Five Year Graduation Rate Data, and Dropout Rates 2017. Retrieved from <https://www.azed.gov/accountability-research/data/>

Table 35. Trends in four-year graduation rates, 2015 to 2017

GEOGRAPHY	FOUR-YEAR GRADUATION RATE (2015)	FOUR-YEAR GRADUATION RATE (2016)	FOUR-YEAR GRADUATION RATE (2017)
<b>Graham/Greenlee Region</b>	<b>85%</b>	<b>87%</b>	<b>87%</b>
Graham County	74%	84%	85%
Greenlee County	86%	92%	88%
Arizona	79%	80%	78%

Source: Arizona Department of Education. (2019). Cohort 2014-2017 Four Year Graduation Rate Data. Retrieved from <https://www.azed.gov/accountability-research/data/>

Table 36. Trends in five-year graduation rates, 2015 to 2017

GEOGRAPHY	FIVE-YEAR GRADUATION RATE (2015)	FIVE-YEAR GRADUATION RATE (2016)	FIVE-YEAR GRADUATION RATE (2017)
<b>Graham/Greenlee Region</b>	<b>87%</b>	<b>88%</b>	<b>89%</b>
Graham County	75%	86%	87%
Greenlee County	88%	92%	90%
Arizona	82%	83%	82%

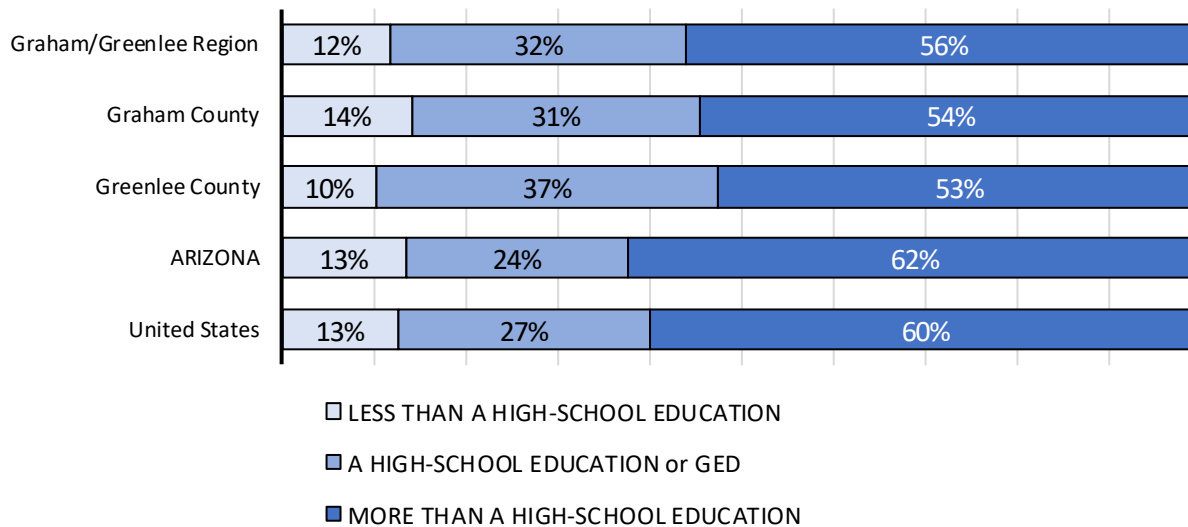
Source: Arizona Department of Education. (2019). Cohort 2014-2017 Five Year Graduation Rate Data. Retrieved from <https://www.azed.gov/accountability-research/data/>

Table 37. Trends in 7th-12th grade dropout rates, 2015-16 to 2017-18

GEOGRAPHY	DROPOUT RATE (2015-16)	DROPOUT RATE (2016-17)	DROPOUT RATE (2017-18)
<b>Graham/Greenlee Region</b>	<b>3%</b>	<b>3%</b>	<b>3%</b>
Graham County	4%	4%	4%
Greenlee County	1%	2%	1%
Arizona	4%	5%	5%

Source: Arizona Department of Education. (2019). 2015-16 to 2017-18 Dropout Rates. Retrieved from <https://www.azed.gov/accountability-research/data/>

Figure 10. Level of education for the adult population (ages 25 and older)



Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B15002

Table 38. Level of education for mothers giving birth during calendar year 2017

GEOGRAPHY	TOTAL NUMBER OF BIRTHS IN 2017	MOTHER HAD LESS THAN A HIGH-SCHOOL EDUCATION	MOTHER HAD HIGH-SCHOOL DIPLOMA OR GED	MOTHER HAD MORE THAN HIGH-SCHOOL
<b>Graham/Greenlee Region</b>	<b>586</b>	<b>15%</b>	<b>27%</b>	<b>58%</b>
Graham County	530	18%	28%	54%
Greenlee County	156	17%	37%	46%
Arizona	81,664	17%	26%	56%

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Note: Due to a small number of births for which the mother's educational attainment is unknown, entries in this table may not sum to 100%.

## Early Learning

### Why it Matters

Early childhood is an exciting time of rapid physical, cognitive, and social-emotional development. The experiences young children have during these early years are critical for healthy brain development and set the stage for lifelong learning and well-being.<sup>95,96</sup> Just as rich, stimulating environments can promote development, early negative experiences can have lasting effects. For example, gaps in language development between children from disadvantaged backgrounds and their more advantaged peers can be seen by 18 months of age;<sup>97</sup> those disparities that persist until kindergarten tend to predict later academic problems.<sup>98</sup>

**Access to early care and education.** Though high-quality early care and education can promote development, families often face barriers in accessing these opportunities for their children. Families living in rural areas are more likely to face an inadequate child care supply, but Arizona families in both urban and rural areas face a gap between the number of young children and the availability of licensed child care.<sup>99,100,101</sup> In fact, Arizona has a deficit of about 22,230 licensed early care and education slots to meet the needs of working families, without accounting for parents continuing their own education, or those not in the workforce but seeking out early learning programs to help assure their preschool age children are able to make a strong start in school.<sup>102</sup> Even when early education is available, the cost can be prohibitive. According to the U.S. Department of Education, only 19 percent of four-year-olds in Arizona are enrolled in publicly-funded free or reduced cost preschool programs, compared to 41 percent nationally.<sup>103</sup> If not enrolled in publicly-funded programs, the annual cost of full-time center-based care for a young child in Arizona is nearly equal to the cost of a year at a public college.<sup>104,105</sup>

Child care subsidies can be a support for families who have financial barriers to accessing early learning services.<sup>106</sup> In June 2019, for the first time since the Great Recession, the Arizona Department of Economic Security's (DES) child care subsidy waiting list was suspended, meaning all children who qualify for subsidies are able to receive them, assuming that they are able to find a provider.<sup>107</sup> This is due to \$56 million in additional federal funds from the Child Care and Development Fund (CCDF) that was authorized by the State Legislature, and the funding increase has also allowed DES to increase provider reimbursement rates, which may make it easier for families to use their child care subsidies.<sup>108</sup>

**High quality early care and education.** In addition to the early experiences children have in their homes, high quality early care and education services can also promote physical, cognitive, and social-emotional development and health, particularly for children from disadvantaged backgrounds.<sup>109,110,111</sup> Children whose education begins in high quality preschool programs repeat grades less frequently, obtain higher scores on standardized tests, experience

fewer behavior problems, and are more likely to graduate from high school.<sup>112</sup> This translates into a return on investment to society through increased educational achievement and employment, reductions in crime, and better overall health of children as they mature into adults.<sup>113,114</sup> Not only does access to affordable, quality child care make a positive difference for children's health and development, it also allows parents to maintain stable employment and support their families.<sup>115</sup>

Establishing that available early care and education programs meet quality standards is important to ensure these early environments support positive outcomes for children's well-being, academic achievement, and success later in life.<sup>116</sup> Providers are considered quality educational environments by the Arizona Department of Economic Security if they receive a Quality First three-star rating or higher (see below) or are accredited by a national organization, such as the Association for Early Learning Leaders or the National Association for the Education of Young Children (NAEYC)<sup>117</sup>.

High quality early education environments have teachers with more education, experience, and supports that increase their skills in developing positive teacher-child interactions, providing enriching age-appropriate experiences and guiding appropriate behaviors.<sup>118</sup> These quality environments may be particularly important for children with challenging behaviors, because lower teacher-child ratios and access to professional development and early childhood mental health consultation can help avoid preschool expulsion.<sup>119,120,121</sup>

Quality First is Arizona's Quality Improvement and Rating System (QIRS) for early child care and preschool providers.<sup>122</sup> A Quality First Star Rating represents where along the continuum of quality (1 to 5 stars) a program was rated and how they are implementing early childhood best practices. One star indicates a program is participating in Quality First, is regulated, in good standing, and is making the commitment to work on quality improvement. Three stars indicate that a program is of good quality care, and families can be confident that children are well cared for in such an environment. Five stars indicate the highest level of quality attainable, where families will find low staff-child ratios and group sizes, highly educated personnel, and strong curriculum which optimizes children's comprehensive development. The number of providers across the state that meet quality standards (three-star rating or higher) has increased across the last 5 years such that 25 percent of the 857 participating providers in 2013 met or exceeded quality standards, and 76 percent of 1,032 participating providers in 2019 met or exceeded quality standards.<sup>123</sup>

High quality early care and education practices, including lower teacher-child ratios, access to professional development, and early childhood mental health consultation, can help avoid preschool expulsion.<sup>124, 125</sup> Nationally, preschool expulsions and suspensions occur at high rates and disproportionately impact children of color, specifically young Black boys.<sup>126,127</sup> In 2016, an estimated 50,000 preschoolers were suspended and 17,000 preschoolers expelled nationwide, with Black children 2.2 times more likely to be suspended or expelled than other children.<sup>128</sup>

The U.S. Department of Education Office of Civil Rights began collecting data on preschool suspension and expulsion in 2011 and, as a result of federal changes to the Child Care Development Block Grant in 2014, Arizona began collecting provider-reported data on early learning environment expulsion in 2017.<sup>129,130</sup> Given the positive impact of early educational experiences on children’s cognitive and emotional development and the negative impact of suspension and expulsion on educational outcomes, it is essential to identify areas with higher rates of expulsion to provide targeted supports.<sup>131</sup>

As an alternative to expulsion, early education providers in Arizona have an opportunity to identify young children as being at risk for expulsion and to receive consultation from experts to help intervene in problem behaviors. Consultation is provided through on-site mental health consultation, available for Quality First and some non-Quality First providers in most but not all regions in the state, as well as through a statewide Department of Economic Security (DES)-managed hotline. If that child is then able to remain in the center, this is documented as a prevented expulsion and their case is closed out. The reported number of prevented expulsions of young children receiving subsidies increased from seven in 2017 to 45 in 2018.

**Young children with special needs.** The availability of early learning opportunities and services for young children with special needs is an ongoing concern across the state, particularly in the more geographically remote communities and some tribal communities. Children with special health care needs are defined as “those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.”<sup>132</sup> Adverse Childhood Experiences (ACEs)<sup>vii</sup> include childhood experiences of abuse, neglect, and other forms of potential trauma. According to the National Survey of Children’s Health, children with special health care needs are more likely to experience more adverse childhood experiences than typically developing children,<sup>133</sup> and are at an increased risk for maltreatment and neglect,<sup>134,135</sup> suggesting they may particularly benefit from high quality teacher-child interactions in classrooms.<sup>136,137</sup> Almost half (46%) of families with a child with special needs in Arizona have incomes below 200 percent of the federal poverty level, suggesting that even if they can identify an appropriate provider, affording quality care is likely to be a burden.<sup>138</sup>

Ensuring all families have access to timely and appropriate screenings for children who may benefit from early identification of special needs can help improve outcomes for these children and their families. Timely intervention can help young children with, or at risk for, developmental delays improve language, cognitive, and socio-emotional development.<sup>139,140</sup> It also reduces educational costs by decreasing the need for special education.<sup>141</sup> In Arizona,

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

services available to families with children with special needs include those provided through the Arizona Early Intervention Program (AzEIP),<sup>142</sup> the Arizona Department of Education Early Childhood Special Education program,<sup>143</sup> and the Division of Developmental Disabilities (DDD).<sup>144</sup>

## What the Data Tell Us

### Access to Early Care and Education

- In the Graham/Greenlee Region, 28 percent of children (ages 3 and 4) are enrolled in nursery school, preschool, or kindergarten. While this is a comparable proportion to Graham County (28%), it is lower than Greenlee County (54%), the state (38%), and the United States overall (48%) (Table 39). Many families with young children in the region have at least one stay at home parent or family caregiver in the home, and therefore many families may not enroll their children in out-of-home care (see Table 22).
- In the Graham/Greenlee Region, nearly all (95%) of licensed child care capacity is provided by child care centers, with a small proportion provided by family child care providers (5%) (Table 40).
- The Graham/Greenlee Region has a lower percentage of providers who are accredited (8%) than the state (10%), as well as a lower percentage of potential child care slots (provider capacity) with accredited providers (1%) than the state (12%) (Table 41).
- While median monthly child care costs for approved family homes are similar between the region and state, median monthly child care costs for licensed centers are notably lower in the region compared to the state. Median costs for infants at licensed centers are \$361 less per child per month in the Graham/Greenlee Region compared to the state. Overall, licensed centers are the most expensive and approved family homes the least expensive for all ages at the region, county, and state levels (Table 42).
- Child care costs are relatively less expensive in Graham County than the state overall. At median levels, sending an infant to a licensed center requires 10 percent of a family's income in Graham County, compared to 16 percent statewide (Table 43).
- Nearly all (96%) children who were eligible for Department of Economic Security (DES) child care subsidies in the Graham/Greenlee Region received them in 2018, a proportion slightly higher than the state overall, where 92 percent of eligible children received child care subsidies in 2018 (Table 44).
- For Department of Child Safety (DCS)-involved children specifically, the proportion of eligible children receiving subsidies in the region is lower than for non-DCS children and has declined over time, from 82 percent in 2015 to 67 percent in 2018. This decline in DCS-involved children receiving subsidies was also seen at the state level, with 82 percent of DCS-involved children receiving subsidies in Arizona in 2018 compared to 91 percent in 2015 (Table 45).
- The proportion of eligible families not using DES child care subsidies decreased over time at the regional level between 2015 and 2018, though the state saw an overall increase in subsidy use during this time. In 2018, five percent of eligible families in the Graham/Greenlee Region did not use their child care subsidies compared to eight percent statewide (Table 46).



### **High Quality Early Care and Education**

- Quality educational environments are defined by the Department of Economic Security (DES) as providers that are accredited by a national organization or providers that have received a state-approved quality indicator that is recognized by the department. From 2017 to 2018, the number of children receiving subsidies in quality environments, and particularly the number of Department of Child Safety (DCS)-involved children in quality environments, decreased in the Graham/Greenlee Region and in Graham County, though these numbers increased at the state level (Table 47).
- In 2019, a total of seven child care providers in the Graham/Greenlee Region participated in Quality First, six of which were quality-level settings (public 3-5 stars). A total of 378 children were enrolled at a Quality First provider site in the Graham/Greenlee Region, 93 percent of whom were enrolled at a quality-level setting (public 3-5 stars). In 2019, 74 children received Quality First scholarships in the region (Table 48 & Table 49).
- In 2018, no early learning programs in Graham or Greenlee Counties reported any expulsions or prevented expulsions of young children receiving child care subsidies to the Department of Economic Security (DES) (Table 50).

### **Young Children with Special Needs**

- The number of young children (ages 3-5) enrolled in special education increased from 2015-2016 (66) to 2018-2019 (107) in the Graham/Greenlee Region (Table 51).
- The largest proportion of young children (ages 3-5) enrolled in special education in the region were diagnosed with a speech or language impairment (56%) or developmental delay (38%) in 2018-2019 (Table 52).
- Thirteen percent of students (grades 1st-3rd) are enrolled in special education in the region, a proportion higher than Greenlee County (9%) and the state (12%) but lower than Graham County (15%). Special education enrollment for this age has increased over time in the Graham/Greenlee Region, from 11 percent in 2015-2016 to 13 percent in 2018-2019 (Table 53 & Table 54).
- From 2016 to 2017, the percentage of children (ages 0-2) who were referred to the Arizona Early Intervention Program (AzEIP) and found eligible increased from 68 percent to 74 percent in the Graham/Greenlee Region (Table 55).
- From 2017 to 2018, the number of active AzEIP cases in the Graham/Greenlee Region decreased by two percent (Table 56).
- The number of young children receiving services from the Division of Developmental Disabilities (DDD) decreased in the Graham/Greenlee Region and Graham County since 2015. In the region, the number of children ages 0-2 receiving DDD services decreased by 25 percent from 2015 to 2018, compared to a 27 percent increase in the number of children ages 0-2 receiving services from DDD at the state level (Table 57 & Table 58).

## Access to Early Care and Education

Table 39. School enrollment for children (ages 3 and 4)

GEOGRAPHY	POPULATION OF CHILDREN (AGES 3-4)	NUMBER ENROLLED IN SCHOOL	PERCENT ENROLLED IN SCHOOL
<b>Graham/Greenlee Region</b>	<b>1,144</b>	<b>321</b>	<b>28%</b>
Graham County	1,206	333	28%
Greenlee County	233	125	54%
Arizona	182,970	69,712	38%
United States	8,190,503	3,892,317	48%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B14003

Note: In this table, "school" may include nursery school, preschool, or kindergarten.

Table 40. Number and licensed capacity of licensed or registered child care providers by type, 2018

GEOGRAPHY	NANNIES OR INDIVIDUAL PROVIDERS		CHILD CARE CENTERS		FAMILY CHILD CARE PROVIDERS		TOTAL PROVIDERS	
	NUMBER	CAPACITY	NUMBER	CAPACITY	NUMBER	CAPACITY	NUMBER	CAPACITY
<b>Graham/Greenlee Region</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>418</b>	<b>6</b>	<b>24</b>	<b>12</b>	<b>442</b>
Graham County	0	0	5	273	4	16	9	289
Greenlee County	0	0	1	145	2	8	3	153
Arizona	26	90	1,527	182,561	656	3,871	2,209	186,522

Source: Arizona Department of Economic Security. (2019). 2018 Child Care Assistance Data. Unpublished data received by request

Table 41. Number and licensed capacity of nationally accredited child care providers, 2018

GEOGRAPHY	NUMBER OF ACCREDITED PROVIDERS	PERCENT OF PROVIDERS WHO ARE ACCREDITED	CAPACITY IN ACCREDITED PROVIDERS	PERCENT OF PROVIDER CAPACITY WHICH IS WITH ACCREDITED PROVIDERS
<b>Graham/Greenlee Region</b>	<b>1</b>	<b>8%</b>	<b>4</b>	<b>1%</b>
Graham County	1	11%	4	1%
Greenlee County	0	0%	0	0%
Arizona	213	10%	22,931	12%

Source: Arizona Department of Economic Security. (2019). 2018 Child Care Assistance Data. Unpublished data received by request

Note: This table shows the number of DES licensed or registered centers, homes, or individual providers listed in the CCR&R who have a national accreditation, such as NECPA—National Early Childhood Program Accreditation, CDA—Child Development Association, AMI—American Montessori International, or NAEYC—National Association for the Education of Young Children.

Table 42. Median monthly charge for full-time child care, 2018

GEOGRAPHY	APPROVED FAMILY HOMES			CERTIFIED GROUP HOMES			LICENSED CENTERS		
	INFANTS	1 TO 2	3 TO 5	INFANTS	1 TO 2	3 TO 5	INFANTS	1 TO 2	3 TO 5
		YEAR	YEAR		YEAR	YEAR		YEAR	YEAR
	OLDS	OLDS		OLDS	OLDS		OLDS	OLDS	
<b>Graham/Greenlee Region</b>	<b>\$400</b>	<b>\$470</b>	<b>\$400</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>\$500</b>	<b>\$500</b>	<b>\$500</b>
Graham County	\$470	\$470	\$400	N/A	N/A	N/A	\$500	\$500	\$500
Greenlee County	\$300	\$470	\$420	N/A	N/A	N/A	N/A	N/A	N/A
Arizona	\$400	\$400	\$400	\$600	\$560	\$560	\$861	\$760	\$660

Source: Arizona Department of Economic Security. (2019). 2018 Child Care Assistance Data. Unpublished data received by request

Note: In 2018, not enough certified group homes in the Graham/Greenlee Region, Graham County, or Greenlee County or licensed centers in Greenlee County reported cost data to DES for data to be reported in this table. Approved family homes are family home child care providers who care for up to 4 children in their home and have completed the necessary steps to apply and be certified by DES or a tribal authority. Certified group homes are family home child care providers who care for 5-10 children in their home and are licensed ("certified") by ADHS or a tribal authority. Child care centers are child care providers who care for 10 or more children at a location separate from their residence and are licensed by ADHS or regulated by a military or tribal authority.

Table 43. Cost of center-based child care as a percentage of income, 2018

GEOGRAPHY	MEDIAN FAMILY INCOME (ACS 2013-2017)	COST FOR AN INFANT	COST FOR A 1 TO 2 YEAR OLD CHILD	COST FOR A 3 TO 5 YEAR OLD CHILD
Graham County	\$58,732	10%	10%	10%
Greenlee County	\$60,857	N/A	N/A	N/A
Arizona	\$63,812	16%	14%	12%

Sources: Arizona Department of Economic Security. (2019). 2018 Child Care Market Rate Survey. Unpublished data received by request & Arizona Department of Economic Security. (2019). 2018 Child Care Market Rate Survey Report. Retrieved from <https://des.az.gov/file/14277/download>

Note: In 2018, not enough licensed centers in Greenlee County reported cost data to DES for data to be reported in this table.

Table 44. Children receiving DES child care subsidies, 2015 to 2018

GEOGRAPHY	NUMBER OF CHILDREN RECEIVING SUBSIDIES				PERCENT OF ELIGIBLE CHILDREN RECEIVING SUBSIDIES			
	2015	2016	2017	2018	2015	2016	2017	2018
<b>Graham/Greenlee Region</b>	<b>64</b>	<b>45</b>	<b>39</b>	<b>46</b>	<b>90%</b>	<b>96%</b>	<b>93%</b>	<b>96%</b>
Graham County	67	48	49	55	91%	96%	94%	93%
Greenlee County	<10	<10	0	0	DS	DS	N/A	N/A
Arizona	19,040	17,784	16,922	19,813	94%	93%	93%	92%

Source: Arizona Department of Economic Security. (2019). 2015-2018 Child Care Assistance Data. Unpublished data received by request

Note: This table reflects children receiving subsidies who are not DCS-involved.

Table 45. DCS-involved children receiving DES child care subsidies, 2015 to 2018

GEOGRAPHY	NUMBER OF DCS CHILDREN RECEIVING SUBSIDIES				PERCENT OF DCS ELIGIBLE CHILDREN RECEIVING SUBSIDIES			
	2015	2016	2017	2018	2015	2016	2017	2018
<b>Graham/Greenlee Region</b>	<b>28</b>	<b>33</b>	<b>28</b>	<b>16</b>	<b>82%</b>	<b>94%</b>	<b>88%</b>	<b>67%</b>
Graham County	25	32	26	14	81%	94%	90%	67%
Greenlee County	<10	<10	<10	<10	DS	DS	DS	DS
Arizona	13,098	13,352	12,201	12,219	91%	89%	88%	82%

Source: Arizona Department of Economic Security. (2019). 2015-2018 Child Care Assistance Data. Unpublished data received by request

Table 46. Eligible families not using DES child care subsidies, 2015 to 2018

GEOGRAPHY	FAMILIES NOT USING SUBSIDIES, 2015	FAMILIES NOT USING SUBSIDIES, 2016	FAMILIES NOT USING SUBSIDIES, 2017	FAMILIES NOT USING SUBSIDIES, 2018
<b>Graham/Greenlee Region</b>	<b>8%</b>	<b>6%</b>	<b>3%</b>	<b>5%</b>
Graham County	7%	5%	3%	7%
Greenlee County	0%	0%	DS	DS
Arizona	6%	6%	7%	8%

*Source: Arizona Department of Economic Security. (2019). 2015-2018 Child Care Assistance Data. Unpublished data received by request*

## High Quality Early Care and Education

Table 47. Children in quality educational environments, 2017 and 2018

GEOGRAPHY	TOTAL NUMBER OF CHILDREN IN QUALITY ENVIRONMENTS, 2017	TOTAL NUMBER OF CHILDREN IN QUALITY ENVIRONMENTS, 2018	NUMBER OF DCS CHILDREN IN QUALITY ENVIRONMENTS, 2017	NUMBER OF DCS CHILDREN IN QUALITY ENVIRONMENTS, 2018
<b>Graham/Greenlee Region</b>	<b>29</b>	<b>17 to 25</b>	<b>12</b>	<b>&lt;10</b>
Graham County	29	17 to 25	12	<10
Greenlee County	0	0	0	0
Arizona	13,706	17,295	6,063	6,938

Source: Arizona Department of Economic Security. (2019). Child Care Assistance Dataset. Unpublished data received by request

Note: These data only reflect children receiving child care subsidies from DES. Quality educational environments are defined by the Department of Economic Security as providers that are accredited by a national organization or providers that have received a state-approved quality indicator that is recognized by the department. More information about Arizona's quality educational environments can be found in the DES CCDF State Plan FY2019-FY2021, available at <https://des.az.gov/documents-center>

Table 48. First Things First Quality First child data, State Fiscal Year 2019

GEOGRAPHY	QUALITY FIRST SCHOLARSHIPS: NUMBER OF CHILDREN SERVED	NUMBER OF CHILDREN ENROLLED AT A QUALITY FIRST PROVIDER SITE	NUMBER OF CHILDREN ENROLLED AT A QUALITY FIRST PROVIDER SITE WITH A PUBLIC 3-5 STAR RATING	PERCENT OF CHILDREN IN A QUALITY-LEVEL SETTING (PUBLIC 3-5 STARS)
<b>Graham/Greenlee Region</b>	<b>74</b>	<b>378</b>	<b>353</b>	<b>93%</b>
Arizona	9,179	62,215	45,278	73%

Source: First Things First. (2019). Quality First, a Signature Program of First Thing First. Unpublished data received by request

Note: These data reflect regionally-funded Quality First provider sites and statewide-funded Quality First Redesign provider sites. Data reflect children enrolled at provider sites with a public rating. Star ratings are not publicly available when provider sites decline to publish their initial rating or when a rating is not yet assigned.

Table 49. First Things First Quality First child care provider data, State Fiscal Year 2019

GEOGRAPHY	NUMBER OF CHILD CARE PROVIDERS SERVED	NUMBER OF CHILD CARE PROVIDERS SERVED WITH A PUBLIC 3-5 STAR RATING	PERCENT OF CHILD CARE PROVIDERS SERVED WITH A PUBLIC 3-5 STAR RATING
<b>Graham/Greenlee Region</b>	<b>7</b>	<b>6</b>	<b>86%</b>
Arizona	1,119	821	73%

Source: First Things First. (2019). Quality First, a Signature Program of First Thing First. Unpublished data received by request

Note: These data reflect regionally-funded Quality First provider sites and statewide-funded Quality First Redesign provider sites. Data reflect children enrolled at provider sites with a public rating. Star ratings are not publicly available when provider sites decline to publish their initial rating or when a rating is not yet assigned.

Table 50. Number of children birth to five years old receiving subsidy expelled from an early learning program or expulsion was prevented, 2017 and 2018

GEOGRAPHY	NUMBER OF CHILDREN EXPELLED IN 2017	NUMBER OF CHILDREN EXPELLED IN 2018	NUMBER OF EXPULSIONS PREVENTED IN 2017	NUMBER OF EXPULSIONS PREVENTED IN 2018
Graham County	0	0	0	0
Greenlee County	0	0	0	0
Arizona	27	57	<10	45

Source: Arizona Department of Economic Security. (2019). 2017-2018 Child Care Assistance Data. Unpublished data received by request

## Young Children with Special Needs

Table 51. Children (ages 3-5) enrolled in special education, 2015-16 to 2018-19

GEOGRAPHY	CHILDREN (AGES 3-5) IN SPECIAL EDUCATION (2015-16)	CHILDREN (AGES 3-5) IN SPECIAL EDUCATION (2016-17)	CHILDREN (AGES 3-5) IN SPECIAL EDUCATION (2017-18)	CHILDREN (AGES 3-5) IN SPECIAL EDUCATION (2018-19)
<b>Graham/Greenlee Region</b>	<b>66</b>	<b>84</b>	<b>103</b>	<b>107</b>
Graham County	106	133	140	127
Greenlee County	18	22	26	35
Arizona	14,295	15,257	16,159	16,432

Source: Arizona Department of Education. (2019). 2015-16 to 2018-19 Special Education Enrollments. Unpublished data received by request

Note: The regional row of this table does not include data from Dan Hinton Accommodation School.

Table 52. Children (ages 3-5) enrolled in special education by type of disability, 2018-19

GEOGRAPHY	NUMBER OF CHILDREN (AGES 3-5) ENROLLED	DEVELOPMENTAL DELAY	SPEECH OR LANGUAGE IMPAIRMENT	PRE-SCHOOL SEVERE DELAY	AUTISM	HEARING IMPAIRMENT	OTHER DISABILITIES
<b>Graham/ Greenlee Region</b>	<b>107</b>	<b>38%</b>	<b>56%</b>	<b>DS</b>	<b>DS</b>	<b>DS</b>	<b>DS</b>
Graham County	127	43%	50%	DS	DS	DS	DS
Greenlee County	35	31%	63%	DS	DS	DS	DS
Arizona	16,432	42%	39%	12%	3%	1%	3%

Source: Arizona Department of Education. (2019). 2018-19 Special Education Enrollments. Unpublished data received by request

Note: The regional row of this table does not include data from Dan Hinton Accommodation School.



Table 53. Students (grades 1-3) enrolled in special education, 2018-19

GEOGRAPHY	TOTAL STUDENTS	STUDENTS IN SPECIAL EDUCATION	PERCENT OF STUDENTS IN SPECIAL EDUCATION
<b>Graham/Greenlee Region</b>	<b>1,981</b>	<b>266</b>	<b>13%</b>
Graham County	1,598	233	15%
Greenlee County	434	40	9%
Arizona	246,897	30,503	12%

Source: Arizona Department of Education. (2019). 2018-19 Special Education Enrollments. Unpublished data received by request

Note: The regional row of this table does not include data from Dan Hinton Accommodation School.

Table 54. Percent of students (grades 1-3) enrolled in special education, 2015-16 to 2018-19

GEOGRAPHY	STUDENTS IN SPECIAL EDUCATION (2015-16)	STUDENTS IN SPECIAL EDUCATION (2016-17)	STUDENTS IN SPECIAL EDUCATION (2017-18)	STUDENTS IN SPECIAL EDUCATION (2018-19)
<b>Graham/Greenlee Region</b>	<b>11%</b>	<b>12%</b>	<b>12%</b>	<b>13%</b>
Graham County	12%	13%	13%	15%
Greenlee County	11%	11%	9%	9%
Arizona	11%	11%	12%	12%

Source: Arizona Department of Education. (2019). 2015-16 to 2018-19 Special Education Enrollments. Unpublished data received by request

Note: The regional row of this table does not include data from Dan Hinton Accommodation School.

Table 55. Children referred to and found eligible for AzEIP, Federal Fiscal Years 2016 and 2017

GEOGRAPHY	NUMBER OF CHILDREN (AGES 0-2) REFERRED TO AzEIP, FFY2016	NUMBER OF CHILDREN (AGES 0-2) ELIGIBLE FOR AzEIP, FFY2016	PERCENT OF REFERRALS FOUND ELIGIBLE, FFY2016	NUMBER OF CHILDREN (AGES 0-2) REFERRED TO AzEIP, FFY2017	NUMBER OF CHILDREN (AGES 0-2) ELIGIBLE FOR AzEIP, FFY2017	PERCENT OF REFERRALS FOUND ELIGIBLE, FFY2017
<b>Graham/Greenlee Region</b>	<b>96</b>	<b>65</b>	<b>68%</b>	<b>110</b>	<b>81</b>	<b>74%</b>
Graham County	80	54	68%	98	72	73%
Greenlee County	3 to 27	3 to 27	DS	12 to 28	3 to 27	DS
Arizona	16,063	9,383	58%	16,344	9,770	60%

Source: Arizona Department of Economic Security. (2019). AZEIP Service Dataset. Unpublished data received by request

Table 56. AzEIP caseloads, calendar years 2017 and 2018

GEOGRAPHY	CUMULATIVE ACTIVE AzEIP CASES, 2017	CUMULATIVE ACTIVE AzEIP CASES, 2018	PERCENT CHANGE IN AzEIP CASELOADS FROM 2017 TO 2018
<b>Graham/Greenlee Region</b>	<b>99</b>	<b>97</b>	<b>-2%</b>
Graham County	83	83	0%
Greenlee County	18	19	+6%
Arizona	10,934	11,600	+6%

Source: Arizona Department of Economic Security. (2019). AZEIP Service Dataset. Unpublished data received by request

Table 57. Children (ages 0-2) receiving services from DDD, State Fiscal Years 2015 to 2018

GEOGRAPHY	CHILDREN (AGES 0-2) RECEIVING DDD SERVICES, SFY2015	CHILDREN (AGES 0-2) RECEIVING DDD SERVICES, SFY2016	CHILDREN (AGES 0-2) RECEIVING DDD SERVICES, SFY2017	CHILDREN (AGES 0-2) RECEIVING DDD SERVICES, SFY2018	PERCENT CHANGE FROM 2015 TO 2018
<b>Graham/Greenlee Region</b>	<b>28</b>	<b>20</b>	<b>31</b>	<b>21</b>	<b>-25%</b>
Graham County	21	16	20	17	-19%
Greenlee County	<10	<10	<10	<10	DS
Arizona	3,948	4,095	4,505	5,012	+27%

Source: Arizona Department of Economic Security. (2019). 2015-2018 Division Developmental Disabilities Data. Unpublished data received by request

Table 58. Children (ages 3-5) receiving services from DDD, State Fiscal Years 2015 to 2018

GEOGRAPHY	CHILDREN (AGES 3-5) RECEIVING DDD SERVICES, SFY2015	CHILDREN (AGES 3-5) RECEIVING DDD SERVICES, SFY2016	CHILDREN (AGES 3-5) RECEIVING DDD SERVICES, SFY2017	CHILDREN (AGES 3-5) RECEIVING DDD SERVICES, SFY2018	PERCENT CHANGE FROM 2015 TO 2018
<b>Graham/Greenlee Region</b>	<b>&lt;10</b>	<b>&lt;10</b>	<b>&lt;10</b>	<b>&lt;10</b>	<b>DS</b>
Graham County	<10	<10	<10	<10	DS
Greenlee County	0	<10	<10	<10	DS
Arizona	887	898	1,049	1,154	+30%

Source: Arizona Department of Economic Security. (2019). 2015-2018 Division Developmental Disabilities Data. Unpublished data received by request

## Child Health

### Why it Matters

The physical and mental health of both children and their parents are important for optimal child development and well-being. Starting with the mother's health before pregnancy, many factors influence a child's health.<sup>145</sup> Exposures and experiences in utero, at birth, and during the early years set the stage for health and well-being throughout a child's life.<sup>146,147</sup> Access to health insurance and preventive care influence not only a child's current health, but long-term development and future health.<sup>148,149,150</sup>

**Access to health services.** The ability to obtain health care is critical for supporting the health of pregnant mothers and young children. Health care during pregnancy, or prenatal care, can reduce maternal and infant mortality and complications during pregnancy.<sup>151,152</sup> In the early years of a child's life, well-baby and well-child visits allow clinicians to assess and monitor the child's development and offer developmentally appropriate information and guidance to parents.<sup>153</sup> Families without health insurance are more likely to skip these visits, and are less likely to receive preventive care for their children, or care for health conditions and chronic diseases.<sup>154,155</sup> Thus, access to health insurance is an indicator of children's access to health services. Children who lack health insurance are also more likely to be hospitalized and to miss school.<sup>156</sup>

**Maternal, infant, and child health.** A number of factors occurring before conception and in utero influence child health, making characteristics of pregnant women important determinants of the birth and developmental outcomes of their children. Pregnancy during the teen years is associated with a number of health concerns for infants, including neonatal death, sudden infant death syndrome, and child abuse and neglect.<sup>157</sup> Teenaged mothers (and fathers) themselves are less likely to complete high school or college, and more likely to require public assistance and to live in poverty than their peers who are not parents.<sup>158,159,160</sup>

In addition to age, a mother's health status before, during, and after pregnancy influences her child's health. Women who are obese before they become pregnant are at a higher risk of birth complications and neonatal and infant mortality than women who are normal weight before pregnancy.<sup>161,162</sup> Babies born to obese women are at risk for chronic conditions later in life such as diabetes and heart disease.<sup>163</sup> Preterm birth, in addition to being associated with higher infant and child mortality, often results in longer hospitalization, increased health care costs, and longer-term impacts such as physical and developmental impairments. Babies born at a low-birth weight (less than 5 pounds, 8 ounces) are also at increased risk of infant mortality and longer-term health problems such as diabetes, hypertension and cardiac disease.<sup>164</sup>

Maternal mental health is a factor for children's well-being as well. Maternal depression during and after pregnancy negatively influences the mother's ability to maintain a healthy pregnancy as well as meet the demands of motherhood and form a secure attachment with her baby.<sup>165,</sup>

<sup>166</sup> Quality preconception counseling and early-onset prenatal care can help reduce some of these risks for poor prenatal and postnatal outcomes by providing information, conducting screenings, and supporting an expectant mother's health and nutrition.<sup>167</sup>

**Substance use disorders.** A mother's use of substances such as drugs and alcohol also has implications for her baby. Babies born to mothers who smoke are more likely to be born early (pre-term), have low birth weight, die from sudden infant death syndrome (SIDS) and have weaker lungs than babies born to mothers who do not smoke.<sup>168,169</sup> Opiate use during pregnancy, either illegal or prescribed, has been associated with neonatal abstinence syndrome (NAS), a group of conditions that cause infants exposed to these substances in the womb to be born exhibiting withdrawal symptoms.<sup>170</sup> This can create longer hospital stays, increase health care costs and increase complications for infants born with NAS. Infants exposed to cannabis (marijuana) in utero often have lower birth weights and are more likely to be placed in neonatal intensive care compared to infants whose mothers had not used the drug during pregnancy.<sup>171</sup>

Parental substance abuse also has other impacts on family wellbeing. According to the National Survey of Children's Health, young children in Arizona are more than twice as likely to live with someone with a problem with alcohol or drugs than children in the U.S. as a whole (9.8 percent compared to 4.5 percent).<sup>172</sup> Children of parents with substance use disorders are more likely to be neglected or abused and face a higher risk of later mental health and behavioral health issues, including developing substance use disorders themselves.<sup>173,174</sup> Substance abuse treatment and supports for parents and families grappling with these issues can help to ameliorate the short and long-term impacts on young children.<sup>175</sup>

**Nutrition and weight status.** After birth, a number of factors have been associated with improved health outcomes for infants and young children. One factor is breastfeeding, which has been shown to reduce the risk of ear, respiratory and gastrointestinal infections, SIDS, overweight, and type 2 diabetes.<sup>176</sup> The American Academy of Pediatrics recommends exclusive breastfeeding for about 6 months, and continuing to breastfeed as new foods are introduced for 1 year or longer.<sup>177</sup>

A child's weight status can have long-term impacts on health and well-being. Nationwide, an estimated 3 percent of children ages 2-19 are underweight, 16.6 percent are overweight, and 18.5 percent are obese.<sup>178,179</sup> Obesity can have negative consequences on physical, social, and psychological well-being that begin in childhood and continue into and throughout adulthood.<sup>180</sup> Higher birth weight and higher infancy weight, as well as lower-socioeconomic status and low-quality mother-child relationships, have all been shown to be related to higher childhood weight and increased risk for obesity and metabolic syndrome (which is linked to an increase risk of heart disease, stroke, and diabetes).<sup>181, 182</sup>

**Oral health.** Oral health and good oral hygiene practices are important to children's overall health. Tooth decay and early childhood cavities can have short- and long-term consequences including pain, poor appetite, disturbed sleep, lost school days, and reduced ability to learn and

concentrate.<sup>183</sup> A national study showed that low-income children were more likely than higher-income children to have untreated cavities.<sup>184</sup> Despite high percentages of young Arizona children who have preventative dental care visits (68.4%) compared to the national average (57.8%), there is a relatively high percentage who have had decayed teeth or cavities (11.1%) compared to those across the nation overall (7.7%).<sup>185</sup> Low-income children in Arizona, specifically, are more likely to have untreated cavities and less likely to have had an annual dental visit than their higher-income peers.<sup>186</sup>

First Things First's Oral Health strategy was able to provide 24,664 children birth to age 5 with a dental screening, and 16,837 children with a fluoride varnish in the Arizona State Fiscal Year 2019.<sup>187</sup> Many children had untreated tooth decay and other oral health needs identified through the screenings. Further, attempts were made to connect children to dental homes who either did not already have a dental home or who needed dental care.

**Childhood immunizations.** Immunization against preventable diseases protects children and the surrounding community from illness and potentially death. In order to ensure community immunity of preventable diseases, which helps to protect unvaccinated children and adults, rates of vaccination in a community need to remain high.<sup>188</sup>

**Illness and injury.** Asthma is the most common chronic illness affecting children<sup>189</sup>, and it is more prevalent among boys, Black children, American Indian or Alaska Native children, and children in low-income households.<sup>190,191</sup> The total healthcare costs of childhood asthma in the United States are estimated to be between \$1.4 billion and \$6.4 billion, but these costs could be reduced through better management of asthma to prevent hospitalizations.<sup>192</sup> Unintentional injuries are the leading cause of death for children in Arizona<sup>193</sup> and nationwide.<sup>194</sup> It is estimated that as many as ninety percent of unintentional injury-related deaths could be preventable through better safety practices, such as use of proper child restraints in vehicles and supervision of children around water.<sup>195</sup> Children in rural areas are at higher risk of unintentional injuries than those who live in more urban areas, as are children in Native communities, suggesting that injury prevention is an especially salient need in these areas.<sup>196,197</sup>

One useful metric for evaluating child health in Arizona are the Healthy People objectives. These science-based objectives define priorities for improving the nation's health and are updated every 10 years. Understanding where Arizona mothers and children fall in relation to these current national benchmarks (Healthy People 2020) can help highlight areas of strength in relation to young children's health and those in need of improvement in the state. The Arizona Department of Health Services monitors state level progress towards a number of maternal, infant and child health objectives for which data are available at the county level, including increasing the proportion of pregnant women who receive prenatal care in the first trimester; reducing low birth weight; reducing preterm births; and increasing abstinence from cigarette smoking among pregnant women.<sup>198</sup>

## What the Data Tell Us

### Access to Health Services

- In the Graham/Greenlee Region, seven percent of people don't have health insurance coverage, a proportion that is lower than at the county (9%), state (12%), or national (10%) levels (Table 59).
- For young children specifically, health insurance coverage is slightly better than the overall population in the region, with five percent of young children uninsured in the Graham/Greenlee Region compared to seven percent in Arizona and four percent nationally. While Graham County is comparable to the region (5%), Greenlee County's percentage of young children who are uninsured is twice that of the region (10%) (Table 59 & Figure 11).
- Almost half of births (48%) in the Graham/Greenlee Region were covered by Arizona's Health Care Cost Containment System (AHCCCS)<sup>viii</sup> in 2017, a percentage slightly lower than the state (53%) and higher than Greenlee County (36%). The proportion of self-paid births were comparable across the region (5%), Graham County (5%), and the state (5%) in 2017 (Table 60).

### Maternal, Infant, and Child Health

- The Graham/Greenlee Region had somewhat better rates of prenatal care in 2017 compared to the state, with a smaller proportion of births to mothers who had no prenatal care at all (2%) and no prenatal care in the first trimester (25.6%) compared to the state (3% and 26.4%, respectively). Rates of prenatal care were also notably lower in both Graham and Greenlee County compared to the region in 2017. Neither the region, counties, nor the state met the Healthy People 2020 target of at least 77.9 percent of births to mothers who received prenatal care in the first trimester (Table 61).
- The proportion of babies born at low birth weight is higher in the Graham/Greenlee Region (8.9%) than Graham County (7.7%) and the state (7.5%) but lower than Greenlee County (10.3%). The region did not meet the Healthy People 2020 target of below 7.8 percent of babies born at low birth weight (Table 62).
- For rates of preterm birth, the Graham/Greenlee Region, along with Graham and Greenlee Counties, did not meet the Healthy People 2020 target of no more than 9.4 percent of births before 37 weeks gestation (Table 62).
- The Graham/Greenlee Region also did not meet the Healthy People 2020 target for maternal use of tobacco during pregnancy (1.4%), with 11.9 percent of births to mothers using tobacco while pregnant, more than two and a half times the state rate (4.7%). In Greenlee County specifically, 16.7 percent of the 156 births in 2017 were to mothers who used tobacco while pregnant (Table 62).

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<sup>viii</sup> AHCCCS is Arizona's Medicaid agency

- In 2017, both Graham and Greenlee Counties had fewer than six infant deaths within seven days of birth (Table 63).
- Between 2016 and 2017, both Graham and Greenlee Counties had fewer than six babies born with neonatal abstinence syndrome (NAS) (Table 64).

### **Substance Use Disorders**

- Between June 2017 and June 2018, there were 55 suspected opioid overdoses among people of all ages in Graham County and fewer than 10 in Greenlee County (Table 65).
- In 2017, there were fewer than 10 deaths directly attributed to opioids in both Graham and Greenlee Counties (Table 65).

### **Nutrition and Weight Status**

- In Graham and Greenlee Counties, overall rates of breastfeeding for infants in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) were lower than the state. In 2018, 69 percent of WIC infants in Graham County and 56 percent of WIC infants in Greenlee County were breastfed at some point in infancy, compared to 77 percent in the state. For all geographies, rates of breastfeeding declined with the baby's age. Although the American Academy of Pediatrics recommends exclusive breastfeeding until six months of age, at six months of age, only 31 percent of WIC infants in Graham County and 18 percent of WIC infants in Greenlee County were ever breastfed. Rates of exclusive breastfeeding at six months were minimal in Graham County (2%), Greenlee County (0%) and the state (3%). Even at three months old, exclusive breastfeeding for WIC infants in both Graham and Greenlee Counties was low (25% and 31%, respectively), though notably higher than the state (13%) (Table 66).

### **Child Immunizations**

- During the four-year period from 2015 to 2018, Graham County had 62 cases of influenza and 17 cases of respiratory syncytial virus (RSV) in young children (ages 0-5). During this same period, Greenlee County had 28 cases of influenza in young children (Table 67).
- Across all required immunizations, children in child care in the Graham/Greenlee Region had higher vaccination rates than the state as a whole and met the Healthy People 2020 targets during the 2018-2019 school year. The region also exceeded statewide immunization rates for kindergarten immunizations during this time, but only met Healthy People 2020 targets for hepatitis B and varicella (Table 68 & Table 69).
- In terms of immunization exemptions among children in child care, between the 2016-2017 and 2018-2019 school years the region had lower rates of children receiving religious exemptions and exemptions from all required vaccines than the statewide averages. During the 2018-2019 school year, 1.7 percent of children in child care received a religious exemption in the Graham/Greenlee Region compared to 4.5 percent



of children statewide, and 1.3 percent of children in child care received exemptions from all required vaccines in the region compared to 3 percent of children statewide (Table 70).

- The Graham/Greenlee Region also had lower rates of children in kindergarten receiving personal belief exemptions than statewide rates between the 2016-2017 and 2018-2019 school years. During the 2018-2019 school year, 4.9 percent of children in kindergarten received a personal belief exemption in the region compared to 5.9 percent of children statewide. Kindergarten exemptions from all required vaccines in the region exceeded state rates in the 2018-2019 school year, with 4.6 percent of children in kindergarten receiving exemptions from all required vaccines in the region compared to 3.8 percent statewide. Personal belief exemptions and exemptions from all required vaccines in 2018-2019 were notably higher in Graham County (5.8% and 5.4%, respectively) than in Greenlee County (1.3% and 1.3%, respectively) and the region (4.9% and 4.6%, respectively) (Table 71).

### **Illness and Injury**

- Between 2015 and 2018, there were 35 non-fatal inpatient hospitalizations of young children (ages 0-5) for unintentional injuries in the Graham/Greenlee Region. The most common reasons for non-fatal inpatient hospitalizations in the region were falls (26%) and burns (23%). Statewide, the most common reasons for non-fatal inpatient hospitalizations were falls (33%) and poisoning (15%) (Table 72).
- Between 2015 and 2018, there were 1,675 non-fatal emergency room visits for young children (ages 0-5) in the Graham/Greenlee Region. The most common reason for non-fatal emergency room visits, falls, was similar across the region (39%), Graham (38%) and Greenlee (41%) Counties, and state (46%). The second most common reason for non-fatal emergency room visits for the region was 'natural or environmental' (15%) (e.g., natural heat, natural cold, lightning strike, dog bites, and venomous creatures) (Table 73).
- Between 2015 and 2017, there were 93 emergency room visits and fewer than 6 inpatient hospitalizations for asthma for young children in the Graham/Greenlee Region (Table 74).
- Between 2015 and 2017, there were 15 deaths of children in the Graham/Greenlee Region, 67 percent of which were in young children (10 deaths). The proportion of child deaths that involved young children was lower in the Graham/Greenlee Region than in the state (71%) (Table 75).

## Access to Health Services

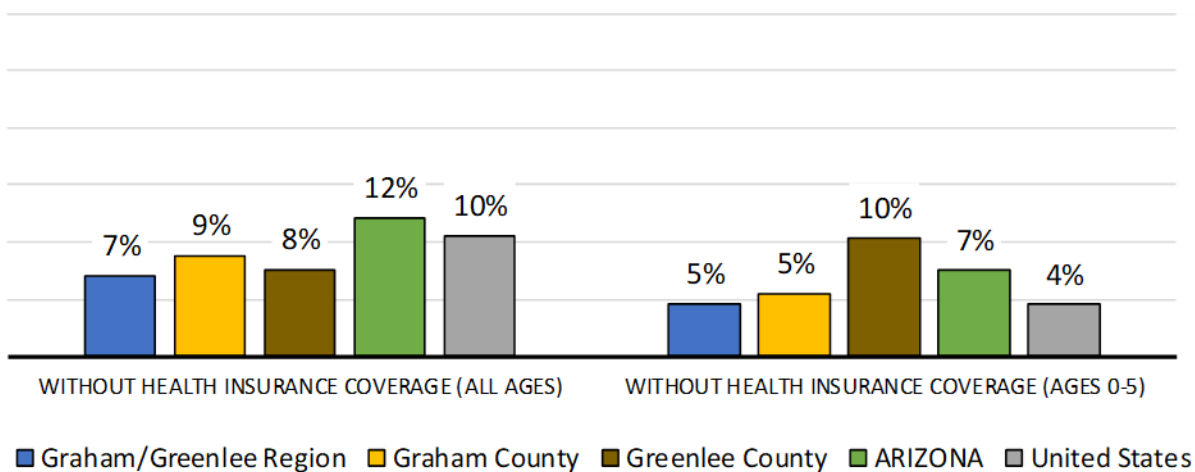
Table 59. Health insurance coverage

GEOGRAPHY	POPULATION (ALL AGES)	PERCENT WITHOUT HEALTH INSURANCE COVERAGE (ALL AGES)	POPULATION OF YOUNG CHILDREN (AGES 0-5)	PERCENT WITHOUT HEALTH INSURANCE COVERAGE (AGES 0-5)
<b>Graham/Greenlee Region</b>	<b>38,342</b>	<b>7%</b>	<b>3,642</b>	<b>5%</b>
Graham County	33,658	9%	3,483	5%
Greenlee County	9,325	8%	884	10%
Arizona	6,701,990	12%	520,741	7%
United States	316,027,641	10%	23,832,080	4%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B27001

Note: This table excludes persons in the military and persons living in institutions such as college dormitories. People whose only health coverage is the Indian Health Service (IHS) are considered "uninsured" according to the U.S. Census Bureau.

Figure 11. Health insurance coverage for the population (all ages) and for young children (ages 0 to 5)



Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B27001

Note: This figure excludes persons in the military and persons living in institutions such as college dormitories. People whose only health coverage is the Indian Health Service (IHS) are considered "uninsured" according to the U.S. Census Bureau.

Table 60. Payors for births during calendar year 2017

GEOGRAPHY	TOTAL NUMBER OF BIRTHS IN 2017	BIRTHS PAID BY AHCCCS	BIRTHS PAID BY IHS	BIRTHS SELF-PAY
<b>Graham/Greenlee Region</b>	<b>586</b>	<b>48%</b>	<b>DS</b>	<b>5%</b>
Graham County	530	48%	12%	5%
Greenlee County	156	36%	DS	DS
Arizona	81,664	53%	1%	5%

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

## Maternal, Infant, and Child Health

Table 61. Prenatal care for mothers giving birth during calendar year 2017

GEOGRAPHY	TOTAL NUMBER OF BIRTHS IN 2017	MOTHERS WHO HAD NO PRENATAL CARE	MOTHERS WHO HAD NO PRENATAL CARE IN FIRST TRIMESTER	MOTHERS WHO HAD FEWER THAN FIVE PRENATAL VISITS
<b>Graham/Greenlee Region</b>	<b>586</b>	<b>2%</b>	<b>25.6%</b>	<b>9%</b>
Graham County	530	4%	31.9%	15%
Greenlee County	156	DS	32.1%	13%
Arizona	81,664	3%	26.4%	8%
Healthy People 2020 targets			22.1%	

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Table 62. Various risk factors for births during calendar year 2017

GEOGRAPHY	TOTAL NUMBER OF BIRTHS IN 2017	LOW BIRTH WEIGHT	PRETERM (LESS THAN 37 WEEKS)	NICU ADMISSIONS	MOTHER USED TOBACCO	MOTHER YOUNGER THAN 18	MOTHER YOUNGER THAN 20
<b>Graham/Greenlee Region</b>	<b>586</b>	<b>8.9%</b>	<b>11.8%</b>	<b>6%</b>	<b>11.9%</b>	<b>2%</b>	<b>8%</b>
Graham County	530	7.7%	12.5%	6%	9.2%	3%	8%
Greenlee County	156	10.3%	11.5%	6%	16.7%	DS	7%
Arizona	81,664	7.5%	9.3%	7%	4.7%	2%	6%
Healthy People 2020 targets		7.8%	9.4%		1.4%		

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Table 63. Infant mortality, calendar year 2017

GEOGRAPHY	INFANT DEATHS WITHIN SEVEN DAYS OF BIRTH, 2017	INFANT MORTALITY RATE (WITHIN ONE YEAR; PER THOUSAND LIVE BIRTHS), 2017
Graham County	<6	DS
Greenlee County	<6	DS
Arizona	234	5.6
Healthy People 2020 targets		6.0

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Table 64. Neonatal abstinence syndrome, calendar years 2016 and 2017

GEOGRAPHY	NUMBER OF BABIES BORN WITH NEONATAL ABSTINENCE SYNDROME (NAS)	NAS RATE PER 1,000 LIVE BIRTHS
Graham County	<6	DS
Greenlee County	<6	DS
Arizona	1,228	7.4

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

## Substance Use Disorders

Table 65. Opioid overdoses and deaths, June 2017 to June 2018

GEOGRAPHY	SUSPECTED OPIOID OVERDOSES, JUNE 2017 TO JUNE 2018	DEATHS DIRECTLY ATTRIBUTED TO OPIOIDS, CALENDAR YEAR 2017
Graham County	55	<10
Greenlee County	<10	<10
Arizona	8,591	949

Source: Arizona Department of Health Services. (2018). *Arizona Opioid Emergency Response Report, June 2017-June 2018*. Retrieved from <https://www.azdhs.gov/documents/prevention/womens-childrens-health/injury-prevention/opioid-prevention/2017-opioid-emergency-response-report.pdf>

## Nutrition and Weight Status

Table 66. Breastfeeding rates for infants in the WIC program, calendar year 2018

GEOGRAPHY	WIC INFANTS EVER BREASTFED	WIC INFANTS BREASTFED AT 6 MONTHS	WIC INFANTS BREASTFED AT 12 MONTHS	WIC INFANTS EXCLUSIVELY BREASTFED AT 3 MONTHS	WIC INFANTS EXCLUSIVELY BREASTFED AT 6 MONTHS
Graham County	69%	31%	18%	25%	2%
Greenlee County	56%	18%	20%	31%	0%
Arizona	77%	26%	14%	13%	3%

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

## Child Immunizations

Table 67. Cases of infectious diseases among young children (ages 0-5), 2015-2018 cumulative

GEOGRAPHY	RESPIRATORY SYNCYTIAL VIRUS (RSV)			PERTUSSIS	HAEMOPHILUS INFLUENZAE		MUMPS
	INFLUENZA	VARICELLA					
Graham County	62	17	<6	<6	<6	<6	<6
Greenlee County	28	<6	<6	<6	<6	<6	<6
Arizona	5,449	4,201	70	51	31	<6	<6

Source: Arizona Department of Health Services. (2019). 2015-2018 Child Infectious Disease Data. Custom data tabulation from requested data

Note: These numbers include both confirmed and probable cases. There were zero reported cases of meningococcal meningitis or measles.

Table 68. Children in child care with required immunizations, 2018-19

GEOGRAPHY	NUMBER OF CHILDREN ENROLLED IN CHILD CARE							
		DTAP	POLIO	MMR	HIB	HEPATITIS A	HEPATITIS B	VARICELLA
<b>Graham/Greenlee Region</b>	<b>464</b>	<b>96.3%</b>	<b>97.0%</b>	<b>96.8%</b>	<b>97.4%</b>	<b>88.1%</b>	<b>97.2%</b>	<b>96.8%</b>
Graham County	244	95.9%	97.1%	97.1%	98.0%	84.0%	97.1%	97.1%
Greenlee County	220	96.8%	97.3%	96.8%	96.8%	92.7%	97.3%	96.4%
Arizona	86,829	92.4%	94.2%	94.9%	94.2%	85.5%	93.3%	94.7%
Healthy People 2020 targets		90.0%	90.0%	90.0%	90.0%	85.0%	90.0%	90.0%

Source: Arizona Department of Health Services. (2019). 2018-19 Child Care Immunization Data. Custom data tabulation from requested data; Arizona Department of Health Services. (2019). Childcare Immunization Coverage by County, 2018-2019 School Years. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Note: The hepatitis A vaccine series (2 doses) is only required in Maricopa County child care settings but is recommended in all other Arizona counties.



Table 69. Kindergarteners with required immunizations, 2018-19

GEOGRAPHY	NUMBER OF CHILDREN ENROLLED IN					
	KINDERGARTEN	DTAP	POLIO	MMR	HEPATITIS B	VARICELLA
<b>Graham/Greenlee Region</b>	<b>674</b>	<b>93.2%</b>	<b>93.3%</b>	<b>93.3%</b>	<b>95.7%</b>	<b>97.0%</b>
Graham County	534	92.5%	92.5%	92.9%	94.8%	96.4%
Greenlee County	159	95.6%	96.2%	95.0%	98.7%	98.7%
Arizona	79,981	92.7%	93.3%	93.0%	94.4%	95.6%
Healthy People 2020 targets		95.0%	95.0%	95.0%	95.0%	95.0%

Source: Arizona Department of Health Services. (2019). 2018-19 Kindergarten Immunization Data. Custom data tabulation from requested data; Arizona Department of Health Services. (2019). Kindergarten Immunization Coverage by County, 2018-2019 School Years. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Table 70. Child care immunization exemption rates, 2016-17 to 2018-19

GEOGRAPHY	RELIGIOUS EXEMPTION (2016-17)	RELIGIOUS EXEMPTION (2017-18)	RELIGIOUS EXEMPTION (2018-19)	EXEMPT FROM EVERY REQUIRED VACCINE (2017-18)	EXEMPT FROM EVERY REQUIRED VACCINE (2018-19)
	<b>Graham/Greenlee Region</b>	<b>3.2%</b>	<b>2.6%</b>	<b>1.7%</b>	<b>1.3%</b>
Graham County	3.3%	2.8%	2.9%	1.4%	2.0%
Greenlee County	2.0%	1.5%	5.0%	1.5%	0.5%
Arizona	3.9%	4.3%	4.5%	2.9%	3.0%

Source: Arizona Department of Health Services. (2019). 2016-17 to 2018-19 Child Care Immunization Data. Custom data tabulation from requested data; Arizona Department of Health Services. (2019). Childcare Immunization Coverage by County, 2016-17 to 2018-2019 School Years. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Table 71. Kindergarten immunization exemption rates, 2016-17 to 2018-19

GEOGRAPHY	PERSONAL BELIEF EXEMPTION (2016-17)	PERSONAL BELIEF EXEMPTION (2017-18)	PERSONAL BELIEF EXEMPTION (2018-19)	EXEMPT FROM EVERY REQUIRED VACCINE (2017-18)	EXEMPT FROM EVERY REQUIRED VACCINE (2018-19)
<b>Graham/Greenlee Region</b>	<b>2.6%</b>	<b>2.3%</b>	<b>4.9%</b>	<b>1.5%</b>	<b>4.6%</b>
Graham County	3.1%	2.7%	5.8%	1.1%	5.4%
Greenlee County	0.7%	2.5%	1.3%	2.5%	1.3%
Arizona	4.9%	5.4%	5.9%	3.5%	3.8%

Source: Arizona Department of Health Services. (2019). 2016-17 to 2018-19 Kindergarten Immunization Data. Custom data tabulation from requested data; Arizona Department of Health Services. (2019). Kindergarten Immunization Coverage by County, 2016-17 to 2018-2019 School Years. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

## Illness and Injury

Table 72. Non-fatal hospitalizations of young children (ages 0-5) for unintentional injuries, 2015-2018 cumulative

GEOGRAPHY	NUMBER OF NON-FATAL INPATIENT HOSPITALIZATIONS FOR CHILDREN (AGES 0-5), 2015-2018 TOTALS	MOST COMMON REASON FOR HOSPITALIZATION	SECOND MOST COMMON REASON FOR HOSPITALIZATION
<b>Graham/Greenlee Region</b>	<b>35</b>	<b>Falls (26%)</b>	<b>Burns (23%)</b>
Graham County	51	Burns (31%)	Falls (25%)
Greenlee County	9	DS	DS
Arizona	3,015	Falls (33%)	Poisoning (15%)

Source: Arizona Department of Health Services. (2019). 2015-2018 Child Injury Data. Unpublished data received by request

Table 73. Non-fatal emergency-room visits by young children (ages 0-5) for unintentional injuries, 2015-2018 cumulative

GEOGRAPHY	NUMBER OF NON-FATAL EMERGENCY ROOM VISITS FOR CHILDREN (AGES 0-5), 2015-2018 TOTALS	MOST COMMON REASON FOR EMERGENCY ROOM VISIT	SECOND MOST COMMON REASON FOR EMERGENCY ROOM VISIT
<b>Graham/Greenlee Region</b>	<b>1,675</b>	<b>Falls (39%)</b>	<b>Natural or environment (15%)</b>
Graham County	1,783	Falls (38%)	Natural or environment (16%)
Greenlee County	128	Falls (41%)	Struck by or against (14%)
Arizona	181,068	Falls (46%)	Struck by or against (14%)

Source: Arizona Department of Health Services. (2019). 2015-2018 Child Injury Data. Unpublished data received by request

Note: "Struck by or against" denotes being struck by or against an object or person, not including vehicles. "Natural or environmental" reasons include natural heat, natural cold, lightning strikes, dog bites, and venomous creatures.

Table 74. Asthma hospitalizations and emergency-room visits, 2015-2017 cumulative

GEOGRAPHY	NUMBER OF INPATIENT HOSPITALIZATIONS FOR ASTHMA (AGES 0 TO 5, EXCEPT NEWBORNS), 2015-2017 TOTALS	AVERAGE LENGTH OF STAY (DAYS) FOR ASTHMA HOSPITALIZATION (AGES 0-5 EXCEPT NEWBORNS), 2015-2017	NUMBER OF EMERGENCY ROOM VISITS FOR ASTHMA (AGES 0 TO 5, EXCEPT NEWBORNS), 2015-2017 TOTALS
<b>Graham/Greenlee Region</b>	<6	<b>DS</b>	<b>93</b>
Graham County	14	2.8	122
Greenlee County	<6	DS	6
Arizona	2,232	1.9	12,812

Source: Arizona Department of Health Services. (2019). 2015-2017 Child Asthma Data. Unpublished data received by request

Table 75. Child mortality, 2015-2017 cumulative

GEOGRAPHY	TOTAL NUMBER OF DEATHS OF YOUNG CHILDREN (AGES 0-4), 2015 TO 2017	TOTAL NUMBER OF DEATHS OF CHILDREN (AGES 0-17), 2015 TO 2017
<b>Graham/Greenlee Region</b>	<b>10</b>	<b>15</b>
Graham County	<6	<6
Greenlee County	<6	<6
Arizona	1,682	2,357

Source: Arizona Department of Health Services. (2019). 2015-2017 Child Mortality Data. Unpublished data received by request

## Family Support and Literacy

### Why it Matters

Families and caregivers play a critical role as their child's first and most important teacher. Positive and responsive early relationships and interactions support optimal brain development during a child's earliest years and lead to better social, physical, academic, and economic outcomes later in life.<sup>199,200,201,202</sup> Parental and family involvement is positively linked to academic skills and literacy in preschool, kindergarten, and elementary school.<sup>203</sup> Children benefit when their families have the knowledge, resources, and support to use positive parenting practices, and support their child's healthy development, nutrition, early learning, and language acquisition. Specifically, knowledge of positive parenting practices and child development has been identified as one of five key protective factors that improve child outcomes and reduce the incidence of child abuse and neglect.<sup>ix,204</sup>

**Early literacy.** Parental and family involvement is positively linked to academic skills and literacy in preschool, kindergarten and elementary school.<sup>205</sup> Early literacy promotion, through singing, telling stories, and reading together, is so central to a child's development that the American Academy of Pediatrics has emphasized it as a key issue in primary pediatric care, aiming to make parents more aware of their important role in literacy.<sup>206</sup>

A child's reading skills when entering elementary school have been shown to strongly predict academic performance in later grades, emphasizing the importance of early literacy for future academic success.<sup>207,208</sup> Home-based literacy practices between parents and caregivers and young children, specifically, have been shown to improve children's reading and comprehension, as well as children's motivation to learn.<sup>209,210</sup> However, low-income families may face additional barriers to home-based literacy practices, including limited free time with children, limited access to books at home, and a lack of knowledge of kindergarten readiness.<sup>211</sup>

Communities may employ many resources to support families in engaging with their children, including through targeted programs like home visitation programs and "stay and play" programs, or participating in larger initiatives like Read On Arizona or the national "Reach Out & Read" program.<sup>212</sup>

**Adverse childhood experiences.** Unfortunately, not all children are able to begin their lives in positive, stable, nurturing environments. Experiences early in life can have lasting impacts on an individual's mental and physical health. Adverse Childhood Experiences (ACEs) have been linked

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<sup>ix</sup> The Center for the Study of Social Policy developed Strengthening Families: A Protective Factors Framework™ to define and promote quality practice for families. The research-based, evidence-informed Protective Factors are characteristics that have been shown to make positive outcomes more likely for young children and their families, and to reduce the likelihood of child abuse and neglect. Protective factors include: parental resilience, social connections, concrete supports, knowledge of parenting and child development, and social and emotional competence of children.

to future risky health behaviors (such as smoking, drug use, and alcoholism), chronic health conditions (including diabetes, depression, and obesity), poorer life outcomes (such as lower educational achievement and increased lost work time), and early death.<sup>213</sup> Alternatively, Positive Childhood Experiences (PCEs), including positive parent-child relationships and feelings of safety and support, have been shown to have similarly cumulative, though positive, long-term impacts on mental and relational health.<sup>214</sup> Nationally and in Arizona, very young children are most at risk for child abuse, neglect, and fatalities from abuse and neglect. In 2017, children five years old and younger made up more than half (55%) of child maltreatment victims in Arizona.<sup>215</sup> Future poor health outcomes are also more likely as an individual's ACE score increases.<sup>216</sup> Children in Arizona are considerably more likely to have experienced two or more ACEs (27.3%), compared to children across the country (8.3%).<sup>217</sup> These children and their families may require specific, targeted resources and interventions in order to reduce harm and prevent future risk.<sup>218</sup>

**Mental and behavioral health.** Behavioral health supports, both for children and caregivers, are often needed to address exposure to adverse childhood events. Infant and toddler mental health development involves the young child's developing capacity to "experience, regulate and express emotions; form close interpersonal relationships; and explore the environment and learn."<sup>219</sup> When young children experience stress and trauma they often suffer physical, psychological, and behavioral consequences and have limited responses available to react to those experiences. Understanding the behavioral health of mothers is also important for the well-being of Arizona's young children. Mothers dealing with behavioral health issues such as depression may not be able to perform daily caregiving activities, form positive bonds with their children, or maintain relationships that serve as family supports.<sup>220</sup>

**Child removals and foster care.** There are situations where the harm in remaining with their family is determined to be too great to a child and they are removed from their home, either temporarily or permanently. In accordance with the Indian Child Welfare Act of 1978, many tribal governments manage their own child welfare systems that must work cooperatively with state systems.<sup>221</sup> Children involved in foster care systems often have physical and behavioral health issues, in addition to the social-emotional needs brought on by being removed from a parent's care.<sup>222</sup> Foster parents often need education, support, and resources to ensure they are able to successfully care for foster children who may have these added health needs. According to a 2015 Arizona Department of Child Safety Independent Review, focusing on evidence-based targeted interventions for families at risk of child removal—including home visitation, positive parenting programs, and family-based therapy—may help lower this risk, thus reducing placements in foster care systems.<sup>223</sup>

## What the Data Tell Us

### Home Visitation

- In 2019, 22 families in the Graham/Greenlee Region received First Things First-funded home visitation services, including 5 families who successfully completed and graduated<sup>x</sup> from home visitation programs (Table 76).

### Child Removals and Foster Care

- Between January 2018 and June 2018, there were 11 substantiated maltreatment reports in Graham County and no substantiated maltreatment reports in Greenlee County. Of the substantiated reports in Graham County, the majority were related to neglect (91%), with a smaller proportion related to sexual abuse (9%). Statewide, thirteen percent of reports were related to physical abuse, while there were no reports of physical abuse in Graham County during this period (Table 77).
- The statewide number of child removals by the Department of Child Safety (DCS) declined from 2014 to 2017. Between January 2018 and June 2018, three percent of DCS reports resulted in a child removal in Graham County, with seven children removed. While the percentage of children removed was lower in the county than the state (16%), there was a higher percentage of children with a prior removal in the last 24 months in Graham County (14%) compared to the state (9%) (Table 78, Figure 12, & Table 79).
- While the number of foster placements declined from 2015 to 2018, the statewide number of licensed foster homes steadily increased during this time (Table 80 & Table 81).

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<sup>x</sup> Graduation rates do not necessarily reflect those retained in the program. Families who did not graduate may still be continuing in the program.

## Home Visitation

Table 76. First Things First-funded home visiting program data, State Fiscal Year 2019

GEOGRAPHY	NUMBER OF FAMILIES SERVED	FAMILIES SUCCESSFULLY GRADUATED FROM HOME VISITATION PROGRAMS
<b>Graham/Greenlee Region</b>	<b>22</b>	<b>5</b>
Arizona	4,106	241

Source: First Things First. (2019). Home Visitation Program Data. Unpublished data received by request

Note: This is an unduplicated count of families who received home visitation services since the beginning of the contract year. Families are only counted one time during the year even if they enrolled in home visitation multiple times. Graduation rates do not necessarily reflect those retained in the program. Families who did not graduate may still be continuing in the program. Program completion/graduation is defined differently by home visitation models: PAT: Services are offered for 2 years or until the child ages out (age 6). HFAZ: Services are offered until the child is at least three years old and can continue up to age five. NFP: Services are offered prenatally until the child's 2nd birthday.



## Child Removals and Foster Care

Table 77. Substantiated maltreatment reports by type, January to June, 2018

GEOGRAPHY	TOTAL SUBSTANTIATED MALTREATMENT REPORTS	PHYSICAL ABUSE			EMOTIONAL ABUSE
		NEGLECT	SEXUAL ABUSE	ABUSE	
Graham County	11	91%	0%	9%	0%
Greenlee County	0	N/A	N/A	N/A	N/A
Arizona	3,104	83%	13%	4%	<1%

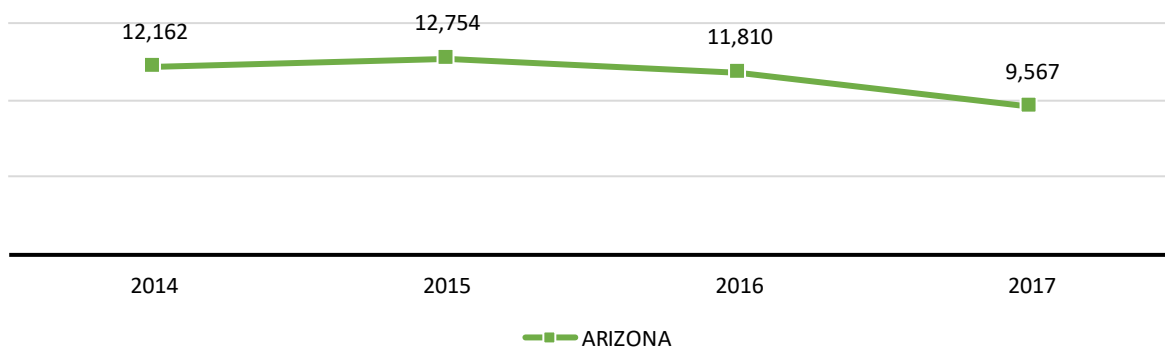
Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Table 78. Children removed by the Department of Child Safety (DCS), 2014 to 2017

GEOGRAPHY	2014	2015	2016	2017
Arizona	12,162	12,754	11,810	9,567

Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Figure 12. Children removed by the Department of Child Safety (DCS), 2014 to 2017



Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Table 79. Children removed by the Department of Child Safety (DCS), January to June, 2018

GEOGRAPHY	TOTAL REPORTS	NUMBER OF CHILDREN REMOVED	PERCENT OF CHILDREN REMOVED	NUMBER OF CHILDREN WITH PRIOR REMOVAL IN LAST 24 MONTHS	PERCENT OF CHILDREN WITH PRIOR REMOVAL IN LAST 24 MONTHS
Graham County	224	7	3%	1	14%
Greenlee County	0	0		0	
Arizona	30,943	4,797	16%	434	9%

Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Table 80. Number of foster placements, 2015 to 2018

GEOGRAPHY	2015	2016	2017	2018
Arizona	17,592	18,906	16,899	14,929

Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Table 81. Number of licensed foster homes, 2015 to 2018

GEOGRAPHY	2015	2016	2017	2018
Arizona	4,497	4,681	5,000	5,213

Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

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

### **Why it Matters**

From November 2016 to June 2017, First Things First convened the second Arizona Early Childhood Task Force, comprised of diverse leaders from across the state. The goal of the task force was to create an ambitious, yet attainable, statewide five-year plan for First Things First and Arizona’s early childhood system. Building from the model early-childhood system developed in 2010, the task force identified six desired outcomes, one of which is “When the early childhood system is successful, everyone will benefit from living in communities where the early childhood system is high-quality, centered on children and families, coordinated, integrated and comprehensive.” First Things First’s role in building this system is to foster cross-system collaboration among local, state, federal, and tribal organizations to improve the coordination and integration of programs, services, and resources for young children and their families.

Through system building, First Things First connects various components of the early childhood system to create a more holistic system that promotes shared results for children and families. Agencies that work together are often easier for families to access, and the services they provide are more responsive to those families’ needs. Coordination efforts may also increase agencies’ capacity to deliver services by identifying and addressing gaps in the service delivery continuum. By supporting a variety of coordination efforts, First Things First aims to create a high quality, interconnected, and comprehensive system of early-childhood service delivery that enhances children’s overall development and that is timely, culturally responsive, family driven, and community based. Determining how these efforts are affecting each of the 28 regions and their families can help inform services, programs, and policy decisions to benefit families and young children throughout the state.

## **What the Data Tell Us**

In the Graham/Greenlee Region, coordination and collaboration efforts are driven by the need to support at risk families by increasing their access to, and awareness of, services available, as well as access to high quality early childhood education settings.

One effort involves collaborating with partners through the updating, printing, and distribution of the Graham/Greenlee Community Resource Guide. The purpose of the resource guide is to help build awareness of existing resources available to families with young children and to make them easily accessible. Additionally, the region's system-building strategies are building the network of family supports and services for young children and their families as the region partners with local philanthropic and business organizations to expand access to high quality early care and education in the region. The region has expanded access to child care and preschool opportunities by leveraging partnerships with local philanthropic organizations. Through these partnerships, the region has added additional child care scholarships available to the working poor as well as offering kinder camps in the school districts in the region with the highest free and reduced lunch rates and the lowest access to preschool opportunities.

## Communication, Public Information and Awareness

### Why it Matters

Public awareness of the importance of early childhood development and health is critical in building a comprehensive, effective early childhood system in Arizona. Building public awareness and support for early childhood impacts individual behaviors as well as the broader objectives of system building. For the general public, information and awareness is the first step in taking positive action in support of children birth to 5. This could include a range of actions—from influencing their personal networks by sharing early childhood information to actively encouraging community leaders to support programs and services for young children. For parents and other caregivers, awareness is the first step to engaging in programs or behaviors that will better support their child’s health and development.

There is no single communications strategy that will achieve the goal of making early childhood an issue that more Arizonans value and prioritize. Therefore, integrated strategies that complement and build on each other are key to any successful strategic communications effort. Employing a range of communications strategies to share information—from traditional broad-based tactics such as paid media advertising to grassroots, community-based tactics such as community outreach—ensures that diverse audiences are reached more effectively across multiple media platforms. A thoughtful and disciplined combination of methods of delivering information is required to ensure multiple messaging touch-points for diverse audiences: families, civic organizations, faith communities, businesses, local leaders, and others.

## What the Data Tell Us

Since State Fiscal Year 2011, First Things First (FTF) has led a collaborative, concerted effort to build public awareness and support across Arizona employing integrated communications strategies that now include:

- strategic messaging and branding
- community outreach
- community awareness
- social media
- digital content marketing
- earned media
- paid media advertising

Progress toward building support for children birth to age 5 can be measured by changes in awareness, attitudes and behaviors, as demonstrated through key results of a periodic statewide survey and through tactical impact measures. The most recent statewide survey was conducted in September 2018 and included a general phone survey as well as an online survey of parents of young children. Key results include the following:

- Those who agree that the state should ensure all children have access to early childhood services increased from 80 percent in 2012 to 84 percent in 2018.
- Among parents, this measure increased from 81 percent in 2016 (the first available parent survey results) to 87 percent in 2018.
- Those who agree that a child who received early education and healthcare services before age 5 is more likely to succeed in school and beyond increased from 82 percent in 2012 to 88 percent in 2018.
- Among parents, agreement increased from 85 percent in 2016 to 87 percent in 2018.
- Those who agree that the state should put the same priority on early education as it does on K-12 education increased from 62 percent in 2012 to 72 percent in 2018.
- Among parents, agreement increased from 69 percent in 2016 to 74 percent in 2018.

While understanding and supporting early childhood in general is critical, it's also important that Arizonans have a trustworthy source of early childhood resources and know about the availability of early childhood resources, programs and tools. For this reason, building awareness of FTF as a credible source is critical. Results of the most recent statewide survey show that, while some progress has been made, there is still more to be done to increase awareness about FTF.

- In the 2018 general survey, 87 percent of respondents had never heard of FTF, compared to 89 percent in 2012.
- Among parents specifically, more had heard of FTF, with 66 percent stating they had never heard of FTF, compared to 69 percent in 2016.

While this statewide survey offers a measure of broad changes in attitudes and awareness, specific tactical measures of awareness and support-building strategies employed by FTF offer another point of information. These include:

- FTF implemented three annual statewide awareness campaigns since the last regional needs and assets reporting period. The SFY17-SFY18 campaign—*Help Them Get There*—shared messaging about the importance of the early years for future school and life success and that parents’ everyday positive interactions with babies, toddlers and preschoolers promote healthy development. The SFY19 campaign—*Givers of Care*—focused specifically on the important role of caregivers and quality early learning environments.
- These paid campaigns reached a large number of Arizonans, measured through the total number of traditional and digital media impressions. Traditional media impressions refer to television, radio, cinema, and billboard ads, while digital media impressions refer to online ads which appear on both desktop and smartphone devices. These statewide impressions—which measure the estimated number of views of FTF ads—are detailed below.

Table 82. First Things First media awareness campaign impressions, SFY17-SFY19

	SFY17	SFY18	SFY19
Traditional media impressions	10 million	17 million	11 million
Digital media impressions	66 million	100 million	76 million

Source: *First Things First. (2019). Communications Strategy Data. Unpublished data received by request*

- In addition, targeted digital advertising allows geographically-based targeting of audiences within regions with the ability to measure the number of click-throughs that digital ads garnered. The click-throughs delivered viewers to the FTF website. In SFY19, in the Graham/Greenlee Region, digital advertising led to a total of 2,364 click-throughs to the FTF website where families could access more information and resources.
- In the area of social media, engagement with FTF early childhood online platforms has grown over the years. Particular success has been seen in the growth of Facebook Page Likes for FTF, which grew from just 3,000 in 2012 to 142,600 in 2019. Content is also distributed through Twitter, LinkedIn and Instagram.
- Since inception in SFY17, FTF’s digital content marketing strategy which targets parents and families with engaging and informative video and blog posts via website, social

media, and email has expanded its reach. In SFY19, 40 original, high-quality content pieces were published.

- In SFY19, an online searchable database of early childhood programs funded by FTF in all the regions launched. In the first six months, over 24,187 visits were logged.

In addition, FTF began a community engagement effort in SFY14 to recruit, motivate and support community members to take action on behalf of young children. The community engagement program is led by community outreach staff in regions which fund the FTF Community Outreach strategy. This effort focuses on engaging individuals across sectors—including business, faith, K-12 educators, and civic organizations—in the work of spreading the word about the importance of early childhood as trusted, credible messengers in their communities.

Focused efforts to engage parents' most trusted messengers—which include pediatricians—included creating and distributing a toolkit for health providers to help them better understand and share information on the statewide free Birth to 5 Helpline. This toolkit was also distributed to attendees of the annual conference of the Arizona Chapter of the American Academy of Pediatrics. Other statewide awareness partnerships included creation and distribution of a grocery list tip pad for parents and caregivers sharing Read On Arizona's Smart Talk tips, a digital content sharing partnership with Expect More Arizona and partnering with the Arizona Association for the Education of Young Children on a social media campaign promoting Week of the Young Child.

Because Arizona is so vast—with more than 500,000 children under age 6 and nearly 400,000 households with kids under age 6—engaging others in spreading the word about early childhood is critical to reaching across diverse geographic areas and expanding our reach. Supporters and Champions—who are trained in early childhood messaging and effective ways to share early childhood information—reported a total of 940 positive actions taken on behalf of young children throughout Arizona in SFY19. In the Graham/Greenlee Region specifically, 145 Supporters and 25 Champions reported a total of 49 positive actions taken on behalf of young children in 2019. These actions range from leading presentations in support of early childhood to sharing FTF's early childhood resources with parents at community events. Table 83 shows total recruitment of Supporters and Champions through SFY19 and actions taken in SFY19.



Table 83. FTF engagement of early childhood supporters and champions, SFY19

GEOGRAPHY	SUPPORTERS	CHAMPIONS	SUPPORTER AND CHAMPION ACTIONS IN SFY19
<b>Graham/Greenlee Region</b>	<b>145</b>	<b>25</b>	<b>49</b>
Arizona	6,258	1,170	940

Source: First Things First. (2019). Communications Strategy Data. Unpublished data received by request

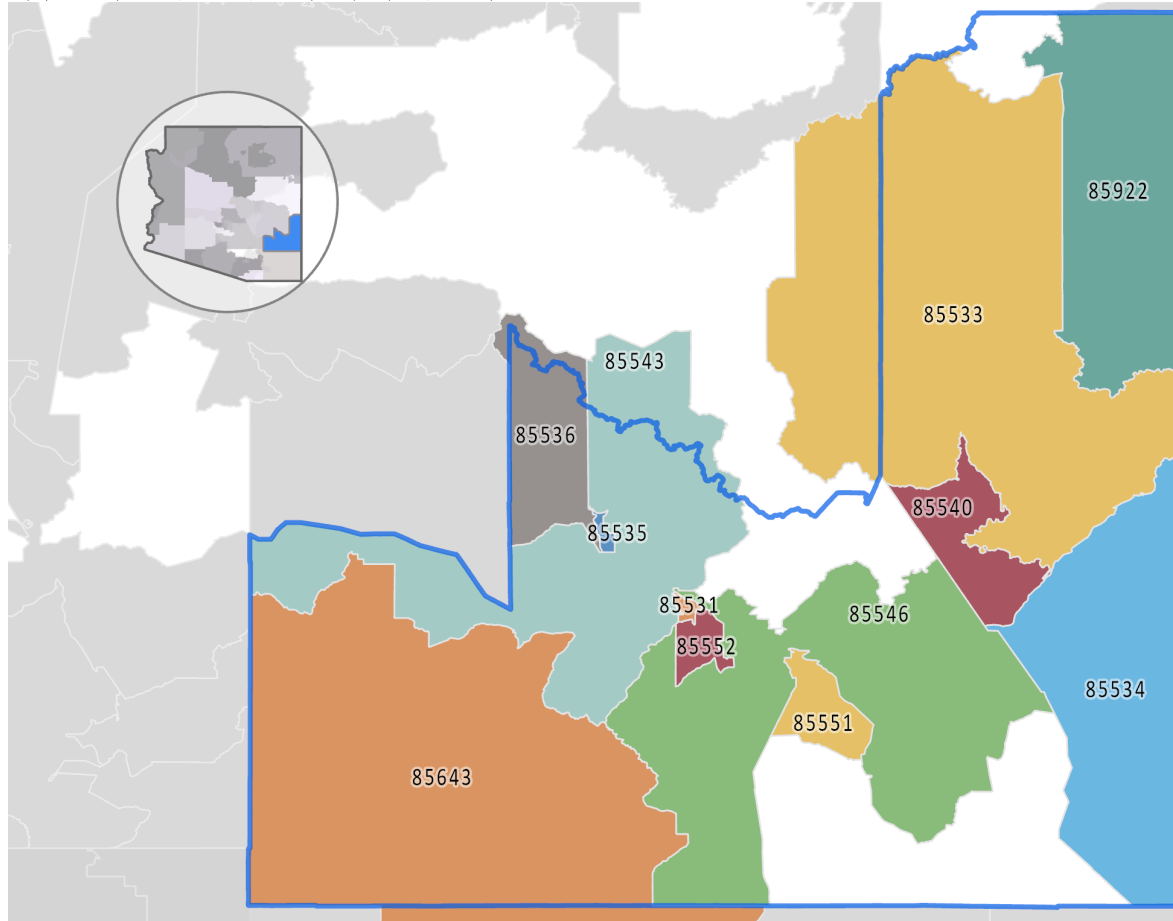
First Things First has also led a concerted effort to build awareness among policymakers at all levels (federal, tribal, state, and municipal) of the importance of early childhood. This includes: in-office meetings with elected leaders to provide general information on early childhood, as well as discuss the impact of proposed legislation; regular communication to policymakers with updates on early childhood research and the work of FTF (such as a quarterly email newsletter for policymakers and their staff); and site tours of FTF-funded programs to allow policymakers to see the impact of early childhood investments in their area. In SFY19, FTF also launched ACT4KIDS, a text-based system that alerts participants to timely developments in early childhood policy and opportunities to engage with policymakers. In its first nine months of implementation, more than 700 Arizonans had signed up to participate in ACT4KIDS.

In addition, FTF actively participates in the Arizona Early Childhood Alliance, comprised of more than 50 early childhood system leaders like United Way, the state affiliates of the National Association for the Education of Young Children, Southwest Human Development, Children’s Action Alliance, Read On Arizona, Stand for Children, Expect More Arizona, and the Helios Foundation, which represents a united voice of the early childhood community in advocating for early childhood programs and services. For the past three years, the Alliance has also led an annual Early Childhood Day at the legislature, which draws hundreds of Arizonans to the state Capitol to engage with policymakers and show their support for early childhood development and health.

## Appendix 1: Map of zip codes of the Graham/Greenlee Region

Figure 13. Map of the ZIP codes in the Graham/Greenlee Region

Map by Community Research, Evaluation, & Development (CRED) Team, University of Arizona



Source: Custom map by the Community Research, Evaluation, & Development (CRED) Team using shapefiles obtained from First Things First and the U.S. Census Bureau 2019 TIGER/Line Shapefiles (<https://www.census.gov/cgi-bin/geo/shapefiles/index.php>)

## Appendix 2: Zip Codes of the Graham/Greenlee Region

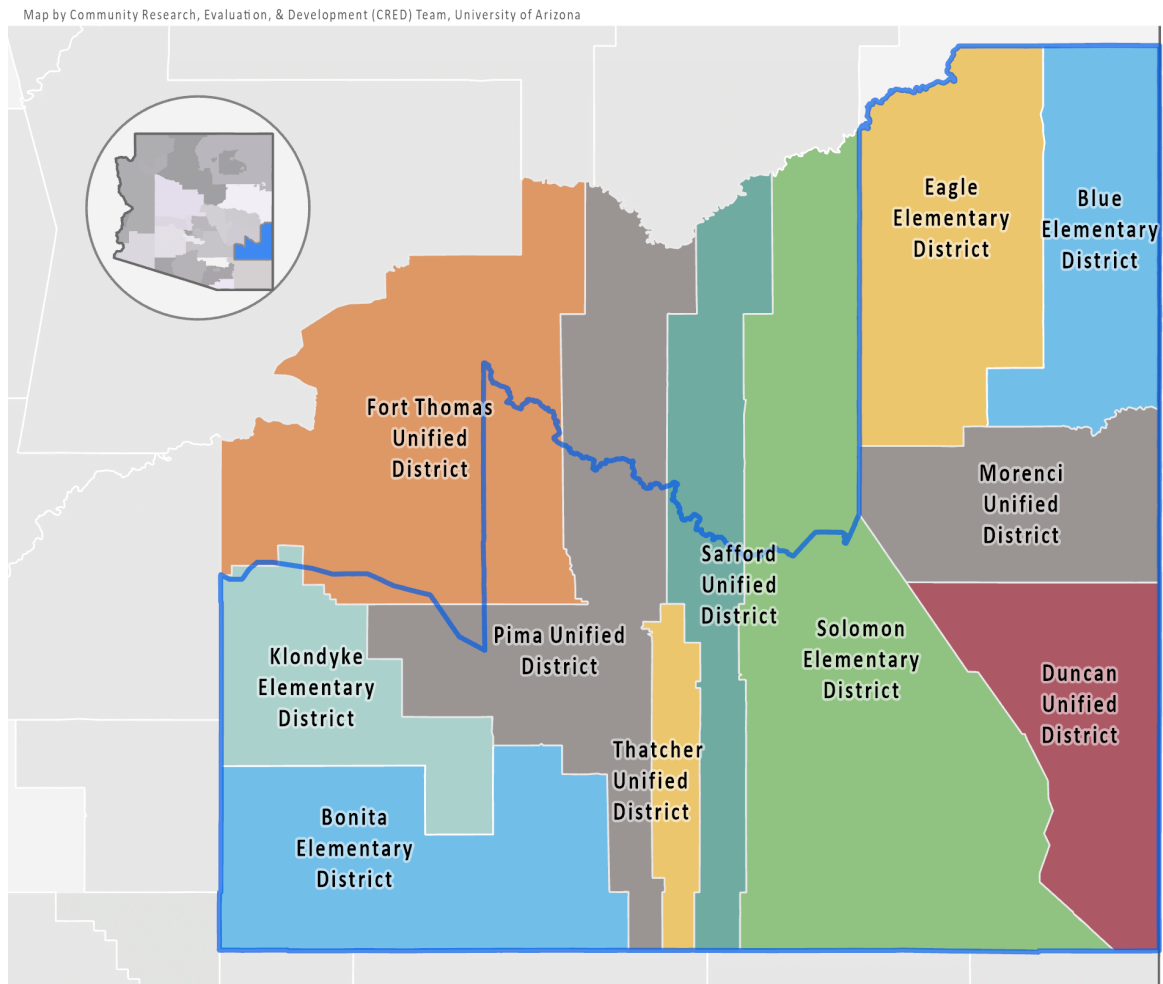
Table 84. Zip Code Tabulation Areas in the Graham/Greenlee Region

ZIP CODE TABULATION AREA (ZCTA)	TOTAL POPULATION	POPULATION (AGES 0-5)	TOTAL NUMBER OF HOUSEHOLDS	HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5)	PERCENT OF ZCTA'S TOTAL POPULATION LIVING IN THE GRAHAM/ GREENLEE REGION	THIS ZCTA IS SHARED WITH
<b>Graham/Gree nlee Region</b>	<b>40,877</b>	<b>3,903</b>	<b>13,249</b>	<b>2,600</b>		
85531	623	75	185	44	100%	
85533	2,934	273	1,111	195	100%	San Carlos Apache
85534	2,588	191	1,023	130	100%	
85535	21	0	6	0	100%	
85536	408	32	170	22	100%	
85540	2,874	330	1,033	241	100%	
85543	3,821	427	1,236	277	100%	San Carlos Apache
85546	19,677	1,874	6,105	1,245	100%	
85551	405	38	142	26	100%	
85552	6,218	652	2,046	411	100%	
85643	1,267	11	171	9	13%	Cochise
85922	41	0	21	0	100%	

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

## Appendix 3: School Districts in the Graham/Greenlee Region

Figure 14. Map of school districts in the Graham/Greenlee Region



Source: Custom map by the Community Research, Evaluation, & Development (CRED) Team using shapefiles obtained from First Things First and the U.S. Census Bureau 2019 TIGER/Line Shapefiles (<https://www.census.gov/cgi-bin/geo/shapefiles/index.php>)

Table 85. School Districts/Local Education Authorities in the Graham/Greenlee Region

DISTRICT/LEA NAME	SCHOOLS IN DISTRICT/LEA	K-3RD GRADE STUDENTS IN DISTRICT/LEA	PERCENT OF K-3RD GRADE STUDENTS IN REGION	THIS DISTRICT IS SHARED WITH
<b>Graham/Greenlee Region</b>	<b>30</b>	<b>2,718</b>		
Safford Unified District	7	911	100%	
Thatcher Unified District	4	519	100%	
Morenci Unified District	3	489	100%	
Pima Unified District	4	232	100%	
Fort Thomas Unified District	4	203	67%	San Carlos Apache
Duncan Unified District	2	96	100%	
Solomon Elementary District	1	86	100%	
Discovery Plus Academy	1	74	100%	
Bonita Elementary District	1	50	100%	
Triumphant Learning Center	1	44	100%	
Blue Elementary District	1	<11	100%	
<i>Graham County Special Services*</i>	<i>1</i>	<i>14</i>	<i>100%</i>	

Source: Arizona Department of Education. (2019). FY 2018 & FY 2019 Enrollment Data. Custom tabulation facilitated by agency staff

Note: This table only contains Districts/LEAs with enrolled K-3rd grade students physically located within regional boundaries. It does not reflect the residence of students that attend these schools. It does not include high school districts. These are the districts and charter operators from which data on preschool to 3rd grade students were drawn for the tables and figures presented in this report. The percentage shown in the "Percent of K-3rd grade students in the region" column was used to apportion district-level enrollment counts to the region. All other data were aggregated at the school level. The "Schools in district/LEA" and "K-3rd grade students in district/LEA" columns reflect totals for the district, not only the portion within the region.

\*Data on K-3<sup>rd</sup> grade students enrolled at Dan Hinton Accommodation School in Pima, AZ were mistakenly included in calculations for Pima North, resulting in 14 fewer K-3 students in FY 2019 included in Graham/Greenlee enrollment figures in Table 28.

## Appendix 4: Data Sources

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