

# 2024

## NEEDS AND ASSETS REPORT



 **FIRST THINGS FIRST**

Pima North Region

# **PIMA NORTH REGIONAL PARTNERSHIP COUNCIL 2024 NEEDS AND ASSETS REPORT**

Funded by the  
**First Things First Pima North Regional Partnership Council**

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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 start 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 well-being in our communities and our state.

This Needs and Assets Report for the Pima North Region helps us in understanding the needs of young children, the resources available to meet those needs and gaps that may exist in those resources. An overview of this information is provided in the Executive Summary and documented in further detail in the full report.

The report is organized by topic areas pertinent to young children in the region, such as 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 Pima North 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 and education of young children in their care. It is our sincere hope that this information will help guide community conversations about how we can best support school readiness for all children in the Pima North Region. To that end, this information may be useful to local stakeholders 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 age 5 in communities throughout the region.

# ACKNOWLEDGEMENTS

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We also want to thank parents and caregivers, local service providers and members of the public who attended regional council meetings and voiced their opinions, as well as all the organizations working to transform the vision of the regional council into concrete programs and services for children and families in the Pima North Region.

Lastly, we want to acknowledge the current and past members of the FTF Pima North Regional Partnership Council whose vision, dedication and passion have been instrumental in improving outcomes for young children and families within the region. As we build upon those successes, we move ever closer to our ultimate goal of creating a comprehensive early childhood system that ensures children throughout Arizona are ready for school and set for life.

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# EXECUTIVE SUMMARY

***The Pima North Region.*** The First Things First Pima North Region is defined as the northern portion of Pima County, not including the lands belonging to the Pascua Yaqui Tribe and the Tohono O’odham Nation. The border between the Pima North and Pima South Regions is irregular, but it primarily follows Kinney Road, Ajo Way, and Irvington Road. The region includes the city of South Tucson, the towns of Oro Valley and Marana, and the unincorporated communities of Catalina Foothills, Tanque Verde, Picture Rocks, Catalina, Avra Valley and Nelson. The Pima North Region does not include the Redington area in the northeastern corner of Pima County, which is assigned to the Cochise Region.

***Population Characteristics.*** According to the U.S. Census, the Pima North Region had a population of 731,668 in 2020, a 5% increase from 2010, when 697,919 people resided in the region. Conversely, the population of young children birth to age 5 decreased 15% over the same period from 48,064 in 2010 to 40,788 in 2020. This increase in the total population in the region (+5%) is comparable to the change in Pima County as a whole (+6%) but is smaller than the increase seen across the state (+12%) from 2010 to 2020. The 15% decrease in the population of young children in the region was also comparable to the county as a whole (-16%), but a larger decrease than the decrease seen across the state during those years (-12%). One in ten households (10%) in the region included a young child in 2020, a slightly lower proportion of households than across Pima County (11%) and the state (13%).

There is evidence of a possible 2020 Census undercount of young children<sup>i</sup> in the Pima North Region. The number of young children (birth to age 5) born in the region by 2020 (42,866) was about 5% higher than the number of young children counted in the 2020 Census (40,788). The discrepancies are similar across each age. Another potential factor influencing these differences is migration (i.e., more families with young children moving out of the region than moving in).

The racial and ethnic make-up of the Pima North Region is similar to that of Arizona as a whole. Whereas the majority (61% region, 57% state) of the overall population identifies as non-Hispanic White, Hispanic or Latino children make up the largest group among children birth to age 4 (46% region, 44% state). In the region, 44% of children identify as non-Hispanic White, 25% as multiracial, 11% as Black or African American, 8% as Asian or Pacific Islander, and 6% as American Indian or Alaska Native.

One in five (20%) children birth to age 5 in the Pima North Region live with foreign-born parents, a similar proportion to the county (21%) but smaller than the state overall (24%). Household language use also reflects these demographic patterns; 22% of individuals speak Spanish (17%) or another non-English language (5%) at home in the region compared to a larger proportion in Pima County (28%) and the state overall (26%). Of residents in the region age 5 and older, 17% are multilingual, reporting that they speak another language at home and also speak English very well. However, 6% report they speak

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<sup>i</sup> See “2020 Census data and its limitations” at the beginning of the Population Characteristics section for fuller context on the 2020 Census undercount of young children.

another language at home and do not speak English very well. These values are both slightly lower than values seen across the state, where 18% are functionally multilingual and 8% have limited English proficiency. Similarly, the percentage of limited-English-speaking households, meaning no one over the age of 13 speaks English ‘very well,’ in the region (3%) is slightly lower than the county and state (both 4%). The proportion of English Language Learners (ELL) remained consistent in the Pima North Region between the 2020-21 and 2021-22 school years, with 6% of students (representing over 5,500 students) enrolled in all grades considered ELL in the region each school year. This is a slightly lower proportion of students than in Pima County (7%) and the state (8%) those same school years.

Sixty percent of young children in the Pima North Region live in two married parent households, similar to the county (58%) and Arizona overall (59%). The proportions of young children in the region (36%), county (37%), and state (37%) living in a household with one parent are also similar. Eleven percent of children birth to age 5 in the region live in their grandparent’s household, compared to 13% of children birth to age 5 in Pima County and Arizona. Of grandparents who live with and are responsible for their grandchildren under age 18 in the Pima North Region, the majority are female (60%), over age 60 (59%) and in the labor force (52%). About one-third (31%) do not have the child’s parent in the household and 16% have incomes below the poverty level. Overall, 11% of grandparents in the region have grandchildren under age 18 in their household with no parent present, the same as the proportion across the county and state.

***Economic Circumstances.*** Median family incomes for families in Pima County are slightly lower than for families in Arizona across all household types. The median income for married couple families with children in Pima County (\$97,500) is most comparable to Arizona overall (\$100,000). However, this income is more than double the median income for single-male-headed families (\$42,800) and more than triple that of single-female-headed families (\$31,300) in the county.

According to 2017-2021 American Community Survey (ACS) estimates, rates of poverty in the region across the entire population (15%) and for children birth to age 5 (22%) are slightly higher than those across the state (13% and 20%, respectively). Rates of poverty for young children have decreased since 2012-2016 ACS estimates in the region (2012-2016, 28%; 2017-2021, 22%), county (2012-2016, 30%; 2017-2021, 22%) and state (2012-2016, 28%; 2017-2021, 20%). Over four in ten young children in the Pima North Region (41%) live below 185% of the poverty level (a commonly used threshold for safety net benefits such as the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) and reduced-price school meals). In 2021, for a family of two adults and two children, this equated to \$50,836, far below the self-sufficiency standard<sup>ii</sup> for two parents with one infant and one preschooler in 2022 in Pima County (\$76,929).

Between state fiscal years (SFY) 2018 and 2022, with the exception of SFY 2019, there were about 2,000 children birth to age 5 and 1,500 families with children birth to age 5 receiving Temporary

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<sup>ii</sup> For more information on the Arizona 2022 Self-sufficiency standard, please see [https://womensgiving.org/wp-content/uploads/2022/12/AZ2022\\_SSS\\_Web.pdf](https://womensgiving.org/wp-content/uploads/2022/12/AZ2022_SSS_Web.pdf)

Assistance for Needy Families (TANF) in the region. The proportion of young children participating in TANF in the region has averaged about 5% and has been consistently higher than that of the state overall (average of about 2.8%).

Participation in the Supplemental Nutrition Assistance Program (SNAP) by households with young children declined in the Pima North Region between SFY 2018 and SFY 2022, as did participation across the state. The number of young children birth to age 5 participating in SNAP also decreased during those years in both the region and state. The percentage of young children participating in SNAP was generally about 3 percentage points higher in the region than across the state during this period, with 43% of children birth to age 5 participating in the region in SFY 2022 compared to 40% across the state.

The number of children birth to age 4 enrolled in and participating in WIC in the Pima North Region and across the state declined between 2018 and 2021, with a slight uptick in 2022. There were 13,800 young children participating in WIC in the region in 2022. WIC participation rates were high in 2022, with 97% of women, 98% of infants and 96% of children enrolled receiving benefits that year in the region, very similar to rates across the county and state.

The number of lunches served through the National School Lunch Program (NSLP), Summer Food Service Program (SFSP), and Child and Adult Care Food Program (CACFP) varied substantially between program years 2019-20 and 2021-22. After the change in school meal policy following the start of the COVID-19 pandemic, meal service through SFSP increased nearly sevenfold in Pima County between 2019-20 and 2020-21, while meal service through NSLP fell by 60%. In the 2021-22 school year, NSLP meal service increased, though it remained nowhere near pre-pandemic levels, while SFSP meal service continued to increase in the county, contrasting statewide declines. Compared to 2019-20, the number of lunches served through CACFP more than tripled in Pima County in 2021-22, indicating higher ongoing participation in CACFP following the onset of the pandemic. Uptake of CACFP in the region is notably high, with meals served in 2020-21 through CACFP exceeding meals served through NSLP.

Unemployment rates in Pima County tracked with Arizona's between 2017 and 2022 but tended to fall just below statewide rates before 2020. Despite the spike during the onset of the COVID-19 pandemic in 2020, unemployment rates fell to their lowest level in six years in 2022, with a 3.8% unemployment rate in Pima County and across Arizona. The labor force participation rate<sup>iii</sup> in the Pima North Region (60%) is similar to that of the county (59%) and state (61%). An unemployment rate of 6% is shared by the region, county and state as well.

An estimated 92% of young children in the Pima North Region live in families with at least one parent in the labor force, similar to the proportion across the state (90%). More than two-thirds (68%) of

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<sup>iii</sup> The "labor force" is all persons who are working (employed) or looking for work (unemployed). The "labor force participation rate" is the fraction of the population who are in the labor force, whether employed or unemployed. Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The "unemployment rate" is the fraction of the civilian labor force which are unemployed.

children birth to age 5 in the region live with all parents in the labor force, making it likely that these families need some form of child care.

Traditionally, housing has been deemed affordable for families if it costs less than 30% of annual household income. One-third of households in the Pima North Region (33%) spend 30% or more of their income on housing, which is slightly higher than the proportion across the county (31%) and state (29%). Housing costs do differ by home ownership status, with fewer homeowners in the region (22%), county (21%) and state (21%) spending 30% or more of household income on housing, compared to 49% of renter-occupied households in the region, 48% in the county and 45% across the state.

The McKinney-Vento Act definition of homelessness includes children living in shelters, transitional housing, campgrounds, motels, trailer parks and cars, as well as children whose families are temporarily living within another family's household. Less than 2% of students enrolled in public and charter schools in the region and state experienced homelessness in the 2021-22 school year. However, the number of students in kindergarten to 12<sup>th</sup> grade experiencing homelessness in the region jumped from 661 students in the 2020-21 school year to 1,065 students in the 2021-22 school year, a 61% increase in one year.

Looking at households, 89% of households in the Pima North Region have both a computer (including smartphones) and broadband internet connectivity, similar to the county (89%) and state overall (88%). Looking at the population, almost all people (of all ages) (92%) in the region live in households with both a computer and internet connection. Children are more likely to live in a household with a computer and an internet connection, with 95% of those under age 18 with this access in the region.

**Educational Indicators.** In the 2021-22 school year, 1,366 children were enrolled in preschool in the Pima North Region. Kindergarten through 3<sup>rd</sup> grade enrollments for the region were all much higher, ranging from a low of 6,480 in kindergarten to a high of 6,843 children enrolled in 3<sup>rd</sup> grade. For the K-3 grades, the Pima North students comprise 64% of the overall student population for the county, but they only make up 58% of preschoolers.

Across the state and Pima County, kindergarten through 3<sup>rd</sup> grade chronic absence rates more than tripled from the 2019-20 school year (Arizona, 8%; Pima County, 10%) to the 2021-22 school year (Arizona, 34%; Pima County, 38%). In the Pima North Region, chronic absence rates increased less drastically from 20% in the 2020-21 school year to 22% in the 2021-22 school year (data was not available at the region level for the 2019-20 school year).

In the 2021-22 school year, less than half (43%) of 3<sup>rd</sup> grade students in the Pima North Region were meeting or exceeding proficiency expectations (i.e., passing) for 3<sup>rd</sup> grade English Language Arts. While concerning, this is slightly higher than the proportion across the county (39%) and state (41%). In better news, passing rates did increase from the 2020-21 school year (39%) to the 2021-22 school year (43%). Passing rates were similarly low for 3<sup>rd</sup> grade Math, with only 42% of students in the region meeting or exceeding proficiency expectations in the 2021-22 school year. This too had increased from the prior year (38%) and was higher than passing rates in the county (38%) and state (40%).

In 2021 (the most recent year of data available for both rates), the four-year graduation rate for the Pima North Region was 72% and the five-year graduation rate was 74%. Both rates were lower than state four- and five-year graduation rates that year (76% and 79%, respectively). The 7<sup>th</sup>-12<sup>th</sup> grade dropout rate for the region increased from 3% in 2019-20 to 5% in 2021-22. Both Pima County and Arizona also had increasing dropout rates during this time, though they were slightly higher in the county (4% to 7%).

In the Pima North Region, 71% of adults ages 25 and older have more than a high-school education, a higher proportion than adults across the state (65%). In 2021, 86% of births in the region were to mothers who had at least a high school diploma, General Educational Development (GED) certificate or higher educational attainment, similar to 2020 (87%). This slight increase mirrors the trends in Pima County and Arizona.

**Early Learning.** In the Pima North Region, 44% of children (ages 3 and 4) were estimated to be enrolled in preschool or kindergarten, higher than the proportions in the county (41%) and state (36%). Preschool enrollment in the region increased slightly in recent years from 43% to 44%. In 2021, preschool enrollment in Arizona hit a 10-year low.<sup>iv</sup>

The vast majority of licensed child care capacity in the region is provided by child care centers (98%), with a small proportion provided by the 99 licensed family child care providers (2%). Given that there are about 27,000 children with all parents in the labor force in the region according to the 2017-2021 ACS, an availability of over 27,000 child care slots suggests that supply and demand for early care and education may be fairly well-matched at the regional level.

An area is labeled a child care desert if the ratio of children to child care slots is 3 to 1 or more. Looking collectively across all children birth to age 5, the Pima North Region does not meet the criteria of a child care desert, with a ratio of 1.5 children to each slot. However, for infant and 1-year-old care, the situation is different. There are 3.1 times the number of 1-year-olds in the region as available slots for those children and 7.7 times the number of infants than infant child care slots. While this pattern is similar across the state, the relative availability of infant and 1-year-old child care is slightly better in the Pima North Region. There were 2,889 slots for infants and 1-year-olds in Arizona Department of Health Services (ADHS)-licensed child care providers in July 2023 in the region. Given that the 2020 Census estimated 12,697 children under age 2 in the region, this child care capacity suggests that parents of the youngest children in this region may face particular challenges in finding quality child care for their children.

Certified family homes in Pima County are the lowest priced type of care for young children in the region, at a median monthly cost of \$630 per month for infants through 5-year-olds. For other types of care, care for infants is the most expensive in the county and the state, with the median monthly cost for infant care in public schools (\$1,067) and licensed centers (\$1,050) the most expensive and slightly more costly than similar care across the state (\$1,011 and \$949, respectively).

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<sup>iv</sup> For more information, see the <https://www.firstthingsfirst.org/wp-content/uploads/2023/12/State-Needs-and-Assets-Report-2023.pdf>

Child care cost as a percentage of income is slightly elevated in Pima County compared to the state overall. In 2022, sending an infant to a licensed center in Pima County cost more than one-sixth (18%) of a family's income, compared to 15% for families across the state. The percentage of income spent on older children's care was lower in comparison in both the county and state. Median child care costs have also been increasing in the county and state since 2018. For example, the cost of care in the most available type of care in Pima County, licensed centers, increased 16% for one infant, 6% for one 1–2-year-old and 9% for one 3–5-year-old between 2018 and 2022. However, county-level increases in the cost of care during this time were notably smaller than those seen statewide for all ages and provider types.

The number of children eligible for and receiving Department of Economic Security (DES) child care assistance in the Pima North Region has generally mirrored the pattern seen across the state in recent years. The number of children receiving assistance was steadily increasing before the onset of the COVID-19 pandemic, peaking at 3,407 in 2019 then dropping in 2020. By 2022, the number of children receiving assistance in the region had rebounded to 3,074. Also tracking with the COVID-19 pandemic, the proportion of eligible families not using DES child care assistance peaked in the region and state in 2020 (region, 17.5%; Arizona, 18.3%), declining substantially by 2022 (region, 7.2%; Arizona, 9.2%), though still higher than pre-pandemic levels.

Children are automatically eligible for DES child care assistance when they are involved with the Department of Child Safety (DCS).<sup>v</sup> For DCS-involved children, the number of children receiving assistance in the region has decreased in recent years, from a high of 1,821 young children in 2018 to 1,292 in 2022 with a notable drop in 2020, aligning with statewide trends.

The 196 Quality First child care providers in the Pima North Region enrolled 8,545 young children in SFY 2023. The majority (70%) of children in Quality First sites in the region were enrolled at a site with a 3-5-star rating, indicating a high-quality provider. An additional 23% were enrolled at a site that had not yet been given a star rating. This was similar to rates across the state, where 68% of children enrolled in Quality First sites were at a site with a 3-5-star rating. More than one in eight (13%) children enrolled in a Quality First provider site in the region (1,118 of 8,545) were served by Quality First Scholarships in SFY 2023.

In May 2023, 43 licensed or registered child care providers in the region were nationally accredited, representing 12% of providers in the region. These accredited providers had the capacity to serve 4,156 children, which represents 15% of child care capacity in the region. DES defines quality environments as child care providers with a 3-, 4-, or 5-star Quality First rating, a national accreditation, or a Child Development Associate (CDA) credential for family child care providers. At the regional level in 2022, 73% of non-DCS-involved young children and 83% of DCS-involved children receiving DES child care

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<sup>v</sup> Children involved with DCS include children who have been removed by DCS and placed with a foster family or kinship caregiver as well as children who are residing with their own family but receiving services from DCS (such as in-home family support and counseling). Families of these children are not required to pay a co-pay for child care.



assistance were enrolled in quality environments, higher proportions than across the state as a whole (68% non-DCS; 72% DCS).

Children birth to age 2 are most frequently referred to the Arizona Early Intervention Program (AzEIP) by physicians in both the Pima North Region and across the state, comprising more than half of referrals in federal fiscal year (FFY) 2021 and 2022. Public health and social service agency referrals have been consistently higher in the region than across the state in recent years, while parent and family referrals consistently made up a lower proportion in the region compared to the state. About a quarter (27%) of children birth to age 2 referred to AzEIP in FFY 2022 were found eligible (10%) or received services (17%) in the Pima North Region, a smaller proportion than the 37.1% referred across the state who were found eligible (16.1%) or received services (21%). Among referred children in the region, a higher proportion (26%) were assessed and found to not have a qualifying developmental delay compared to children across the state (22%).

In the Pima North Region, the number of children birth to age 2 receiving services from AzEIP decreased between 2019 (n=426) and 2022 (n=355), mirroring the statewide trend. The Pima North Region and the state were serving a notably lower number of children through the Division of Developmental Disabilities (DDD) in SFYs 2019 to 2022 compared to SFY 2017 and 2018. Following a low of 186 young children served in SFY 2021, in SFY 2022, 234 children birth to age 5 received DDD services in the region. The annual pattern of children served in the region follows that of the state as a whole.

Qualifying children may receive services from AzEIP and/or DDD, a number which can be used to estimate the total number of young children receiving early intervention services in a region. The total number of children birth to age 2 receiving AzEIP and/or DDD services decreased overall between SFY 2019 and SFY 2022 in the region, similar to the overall decrease seen across the state. In SFY 2022, a total of 367 children birth to age 2 were receiving services from AzEIP and/or DDD in the Pima North Region. Based on 2020 Census population counts, about 1.9% of children birth to age 2 were receiving AzEIP and/or DDD services in the region, compared to 2.6% across the state in SFY 2022.

The number of preschoolers with disabilities served in local education agencies (LEA)s has decreased in both the region and the state since SFY 2020. In SFY 2022, 566 preschoolers with disabilities were served in the Pima North Region, the lowest number served since SFY 2018 (n=752). Among those receiving services, 49% had a developmental delay, 35% had a speech or language impairment and 15% had a preschool severe delay. The number of kindergarten through 3<sup>rd</sup> grade students enrolled in special education in public and charter schools in the Pima North Region has averaged about 3,500 between SFY 2018 and 2022. In SFY 2022, 43% of the 3,452 students (K-3<sup>rd</sup>) enrolled in special education in the region were diagnosed with a speech or language impairment, a larger proportion than students statewide (36%). An additional 25% were diagnosed with a developmental delay, 12% with a specific learning disability, 8% with autism and 12% with another disability.

***Child Health.*** According to 2017-2021 ACS estimates, 8% of the population lacked health insurance coverage, less than the proportion across the state of Arizona overall (11%). Health insurance coverage

for young children, specifically, was slightly higher than that of the overall population in the region, with only 4% of children birth to age 5 not having health insurance, again smaller than the proportion seen across the state (7%). The proportion of young children without health insurance shrank by about half in the region and county in recent years, compared to a much smaller declines seen in the state and nation. In 2022, about half (48%) of births in the Pima North Region were paid for by the Arizona Health Care Cost Containment System (AHCCCS; Arizona’s Medicaid agency) or the Indian Health Service (IHS, which covers less than 1% of births in the region). This proportion has tracked closely with the state in recent years.

Rates of timely prenatal care have increased in the Pima North Region in recent years. While the region consistently had a lower proportion of births to mothers who began prenatal care in the first trimester compared to Arizona between 2018 and 2022, the gap is closing (70% region, 71% state). The region also had a dramatic decline in the proportion of births to mothers with inadequate prenatal care between 2018 and 2022. The proportion of births to mothers with no prenatal care dropped from a high of 6.0% in 2018 to just 2.8% in 2022. After exceeding statewide trends for four years, in 2022 births with no prenatal care and fewer than 5 prenatal visits in the region (2.8% and 4.9%, respectively) more closely matched the state (2.3% and 4.7%, respectively).

The Pima North Region had an overall decline in the proportion of births to teenaged mothers between 2018 and 2022, a pattern similar to what was seen across the state. The proportion of births to mothers under age 20 fell from 5.1% in 2018 to 4.2% in 2022 in the region. The proportion of births to teen mothers in the region has tracked with but been consistently lower than those seen statewide from 2018 to 2021.

Conversely, the Pima North Region has consistently had a slightly higher proportion of births to mothers who smoked cigarettes while pregnant than the state as a whole. Fortunately, rates have declined between 2018 and 2022, decreasing in the region from 5.8% in 2018 to 3.8% in 2022. For the first time in 2022, the region met the Healthy People 2030 target of 4.3% or less. Between 2018 and 2022, 1,203 newborns in the region were hospitalized because of maternal drug use during pregnancy, with an average length of stay of 11 days. This equates to 3.6 newborns hospitalized due to maternal drug use during pregnancy per 100 live births, slightly below the state rate of 3.3.

The proportion of births to mothers with gestational diabetes and pre-pregnancy obesity has generally increased since 2018. In 2022, 31% of births in the Pima North Region were to mothers with pre-pregnancy obesity and 10.5% were to mothers who had gestational diabetes. The region generally is higher than the state overall on the prevalence of these risk factors. More than one in 10 mothers in Arizona (13.7%) reported experiencing post-partum depression in 2020 according to the Pregnancy Risk Assessment Monitoring System.

The proportion of babies born at low birth weight in the Pima North Region has been consistently higher than across the state in recent years, with 8.5% of births considered low birth weight in the region and 7.8% across Arizona in 2022. In the region, this proportion has remained relatively stable since 2018 (8.5%). The proportion of preterm births (less than 37 weeks gestation) was similar between the region and the state, with the region at 9.3% and the state 10.0% in 2021 (the most recent year that both data

points are available). In 2022, the region (9.9%) did not meet the Healthy People 2030 target of 9.4% or fewer births before 37 weeks. Births with an admission to a neonatal intensive care unit (NICU) in the region remained above the rates seen across the state between 2018 and 2021. In 2021, 12.4% of births in the region had a NICU admission compared to 7.9% statewide.

In the Pima North Region, rates of breastfeeding were slightly higher than those across the state between 2019 and 2022. In 2022, 84% of WIC-enrolled infants in the region were ever breastfed, compared to 79% statewide.

Childhood immunizations protect against many diseases, including diphtheria, tetanus and pertussis (DTaP); polio; and measles, mumps and rubella (MMR). Across all required immunizations, children in child care in the Pima North Region had higher vaccination rates (DTaP, 94.6%; Polio, 95.9%; MMR, 96.3%) than the state as a whole (DTaP, 90.6%; Polio, 92.2%; MMR, 93%) in the 2022-23 school year. The region and state both met the Healthy People 2030 DTaP immunization target of at least 90%. Immunization exemptions among children in child care have climbed in the region in recent years, though they remain below rates seen statewide. In the 2022-23 school year, 4.0% of children in child care in the region filed a religious exemption and 1.9% were exempt from all vaccinations each year, compared to 5.7% and 4.0%, respectively, of children statewide. Exemptions driven by medical need have remained at or below 0.6% in the region and state.

The Pima North Region also had higher kindergarten immunization rates in the 2022-23 school year (DTaP, 92.6%; Polio, 93.3%; MMR, 92.8%) compared to the state (DTaP, 89.6%; Polio, 90.3%; MMR, 89.9%). The region, county and state all failed to meet the Healthy People 2030 kindergarten MMR immunization target of 95% or higher. Regional immunization rates are likely inadequate to assure community immunity of preventable infectious diseases. For example, 95% of children need to be vaccinated to create herd immunity in order to protect communities and achieve and maintain measles elimination. The Pima North Region also had climbing rates of children in kindergarten receiving personal belief exemptions and exemptions from all required vaccinations in recent years. During the 2022-23 school year, 4.3% of children in kindergarten received a personal belief exemption in the region compared to 7.3% of children statewide, and 2.6% received exemptions from all required vaccines compared to 4.6% statewide.

The patterns of confirmed and probable cases of respiratory syncytial virus (RSV) and influenza in young children birth to age 5 were generally similar in both the Pima North Region and state; RSV cases increased from 2020 to 2022, while influenza cases showed a marked decrease in 2021 followed by a steep increase in 2022. In 2022, there were 502 confirmed and probable cases of RSV and 140 cases of influenza in young children in the region, the highest numbers since 2019.

Falls were the most common unintentional injuries that led to emergency department visits for children under 5 in both the Pima North Region and the state between 2018 and 2022, followed by 'other' injuries or being 'struck by or against' an object or person. During those years, the region saw 7,220 emergency department visits due to falls, 2,777 for other reasons and 2,158 due to being struck. The pattern of injuries prompting inpatient hospitalizations was also the same for the region and state, with falls being most common, followed by poisoning and 'other' injuries. Between 2018-2022, 84 young

children in the region were hospitalized due to falls, 68 for poisoning and 36 for other reasons. There were relatively fewer hospitalizations caused by motor vehicle traffic in the region compared to the state.

Between 2019 and 2021, the infant mortality rate was just slightly higher in the Pima North Region (5.6 deaths per 1,000 live births) and county (5.6) compared to the state (5.4); none met the Healthy People 2030 target of 5.0 or less. Overall, 283 children birth to age 17 died in the region between 2018 and 2021. More than one in six deaths (18%) were due to accidents, followed by congenital malformations (14%), low birth weight (8%) and assault/homicide (6%). The region differs from the state in that assault/homicide is not a top-five cause of child death across the state, but self-harm/suicide is.

**Family Support.** The number of non-fatal opioid-related overdoses in Pima County more than doubled from 2017 (n=300) to 2021 (n=621), compared to an overall decrease during those years across the state. Opioid-related deaths in the county also doubled during this time, from 176 in 2017 to 348 in 2021, following a similar statewide trend. To help address opioid addiction, the state of Arizona has made three resources available in recent years; the Opioid Assistance and Referral line launched in 2018, no cost availability of naloxone (also called Narcan, a medication that rapidly reverses opioid overdose) to many organizations across the state through the ADHS and access to naloxone without a prescription at pharmacies.

The number of child abuse and neglect reports assigned for investigation by DCS in Pima County showed an overall decline between the first half of 2020 (n=3,868) and the second half of 2022 (n=3,472), contrary to an overall increase seen across the state during that period. The number of children under 18 removed by DCS in Pima County and Arizona peaked in the second half of 2020, followed by an overall decline. Between July and December 2022, a total of 744 children birth to age 17 were removed by DCS in Pima County. Neglect was the most common type of substantiated maltreatment during this period in both the county (69%) and state (71%), followed by physical abuse (27% and 24%, respectively) and sexual abuse (4% and 5%, respectively).

In the last six months of 2022, more than half (55%) of young children birth to age 5 placed in out-of-home care by DCS across Arizona were able to remain with family through a kinship placement. Children in DCS custody most often exited out-of-home care to be reunified with their parents (55%) or adopted (39%). The number of licensed kinship foster homes in Arizona steadily declined between January 2018 and June 2022, though there was an uptick again in the latter half of 2022. Generally, fewer than one in five kinship homes are licensed, and the number of unlicensed kinship homes increased slightly overall during the same period and exceeded the number of community foster homes during the most intense years of the pandemic.

# ABOUT THIS REPORT

There is growing acknowledgement of the role our physical, social, and economic environments play in our day-to-day health and wellbeing.<sup>1</sup> These factors, known as the social determinants of health, have an especially strong effect on the development of young children ages birth to 5 and accumulate over time.<sup>2, 3</sup> Measuring and addressing these conditions can significantly impact not only early health and education outcomes, but also health and economic circumstances later in life.<sup>4, 5, 6</sup> It is important to acknowledge that structural inequities in access to quality health care, schools, and education as well as living, working and leisure conditions lead to disparate outcomes within and between groups of people.<sup>7</sup> For example, the U.S.'s history of segregation, discriminatory policy and differential investment across communities has created generational disparities in outcomes for people of color.<sup>8</sup> Native communities have additionally experienced periods of genocide, forced relocation and assimilation leading to systemically poorer economics and health compared with other groups.<sup>9, 10</sup> This Needs and Assets Report covers many structural and social determinants of health including population characteristics, economic characteristics, early learning and educational indicators, child health, and family support and literacy for the First Things First (FTF) Pima North Region.

The data in this report come from a variety of sources including federal and state agencies and local agencies or service providers. Federal government sources include publicly available data from the 2020 Census and the 2017-2021 American Community Survey (ACS) 5-Year Estimates. Data in this report from the ACS summarize the responses from samples of residents taken between 2017 and 2021. Because these estimates are based on samples rather than the entire population, ACS data should not be considered exact. Estimates for smaller geographies, such as regions, are less accurate than estimates for larger geographies, such as the state, because they are based on smaller sample sizes.

Data were provided to FTF by state agencies including the Arizona Department of Health Services, the Arizona Department of Education and the Arizona Department of Economic Security. In most cases, the data in this report were calculated specifically for the Needs and Assets process and are more detailed than the data that are published by these agencies for the general public. Whenever possible, this report will use data tailored to the region, but in some cases, there are only county-level or statewide data available to report. This report also includes publicly available data for the state and counties to supplement data received through specific requests, including from state agencies such as the Arizona Department of Commerce's Office of Economic Opportunity and the Arizona Department of Child Safety semi-annual child welfare reports.

In most tables in this report, the top rows of data correspond to the FTF Pima North Region. Not all data are available at the FTF regional level because not all data sources analyze their data based on FTF regional boundaries. The other table rows present data that are useful for comparison purposes, including Pima County, the state of Arizona and national estimates or targets where available. Data tables and graphs are as complete as possible. Data which are not available for a particular geography are indicated by the abbreviation "N/A." State agencies have varying policies about reporting small values. Entries such as "<11" are used when the count is too small to be reported and has been

suppressed to protect privacy. In some cases, table entries will indicate a range of values such as "1 to 9" because the suppression policy prevented the vendor from knowing the exact value, but comparison of these ranges of possible values to other values in the table or figure may still be useful. Table entries of "DS" indicate that data have been suppressed and we are unable to provide a useful range of possible values. Additional data tables not included in the body of the report can be found in Appendix 1.

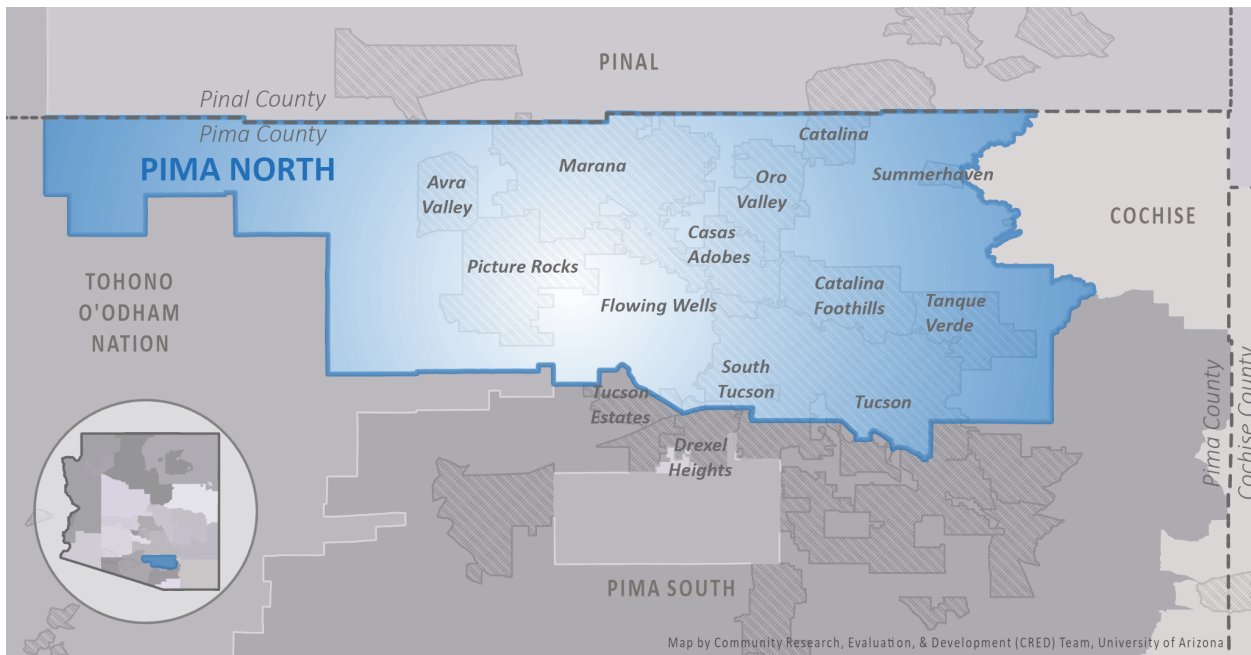
# THE PIMA NORTH REGION

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 Pima North Region is defined as the northern portion of Pima County, not including the lands belonging to the Pascua Yaqui Tribe and the Tohono O’odham Nation. The border between the Pima North and Pima South Regions is irregular, but it primarily follows Kinney Road, Ajo Way, and Irvington Road. The region includes the city of South Tucson, the towns of Oro Valley and Marana, and the unincorporated communities of Catalina Foothills, Tanque Verde, Picture Rocks, Catalina, Avra Valley and Nelson. The Pima North Region does not include the Redington area in the northeastern corner of Pima County, which is assigned to the Cochise Region.

Figure 1 shows the geographical area covered by the Pima North Region. Additional information available at the end of this report includes a map of the region by zip code and a table listing zip codes for the region in Appendix 3, and a map and a list of school districts in the region in Appendix 4.

Figure 1. The First Things First Pima North Region



Source: 2020 TIGER/Line Shapefiles prepared by the U.S. Census. Map produced by CRED.





# POPULATION CHARACTERISTICS



# POPULATION CHARACTERISTICS

## Why It Matters

Accurate information about the number and characteristics of families allows policymakers and program providers to understand what resources are needed in their communities, including where services should be located and how to tailor offerings to the specific needs of those who are likely to use them.<sup>11, 12, 13, 14</sup> For example, identifying which communities have high numbers of families with young children can facilitate strategic investments in libraries, playgrounds, health care facilities, social services and educational systems, which can help families with young children thrive.<sup>15, 16</sup> Program and policy decisions that are informed by data on the composition of children’s home and community environments help ensure more effective supports for families and have a greater chance to improve well-being, economic security and educational outcomes for children.

### 2020 Census data and its limitations

The release of 2020 Census data in 2023 provided updated information on the population of Arizona and the nation as a whole. However, the 2020 Census faced unprecedented challenges in conducting an accurate count of the population, the foremost of which included the COVID-19 pandemic and its related disruptions to institutions such as local and tribal governments, schools and health care facilities.<sup>17, 18, 19, 20, 21</sup> Overall, data quality reviews of the 2020 Census have concluded that the data are generally reliable and accurate for the overall population; however, specific groups that have been undercounted in the past were again undercounted, often more severely.<sup>22</sup> Young children birth to age 4 were undercounted by 3-5% nationwide (meaning that as many as one in 20 children birth to age 4 were missed by the Census).<sup>23</sup> Nationwide, American Indians living on reservations and Hispanic or Latino individuals were also undercounted by 5.6% and 5.0%, respectively, marking notable increases in undercounting rates compared to the 2010 Census (4.9% and 1.5%, respectively). These undercounts are important to keep in mind when using Census data, particularly data for young children and for communities with substantial American Indian and Hispanic or Latino populations. Undercounted communities risk receiving fewer resources for at least the next decade since the decennial census counts are the basis of many federal funding allocations.<sup>24, 25</sup>

## What the Data Tell Us

### Population, race and ethnicity

While young children make up a small proportion of the overall population, their well-being has wide-reaching impacts on families, social service systems and the state’s future population. Continued investment in children’s well-being and the well-being of their families was deemed by the National Academy of Sciences as “the most efficient strategy” for strengthening the future workforce and supporting a thriving community.<sup>26, 27</sup>

Knowing the racial-ethnic composition of communities can inform efforts to ensure equitable access to services and resources. Many racial and ethnic minority groups in the U.S. experience reduced access to health care services, more poverty and housing inequality, poorer living conditions and increased rates of homelessness in comparison to non-Hispanic White Americans.<sup>28, 29, 30, 31</sup> These inequities result in disproportionately worse overall health as indicated by higher rates of disease and illness, untreated mental and physical health conditions and lower life expectancies within these groups.<sup>32</sup> Understanding a community's racial-ethnic composition is also critical for identifying communities facing higher risks from environmental and public health hazards due to historic underinvestment and other factors—as the COVID-19 pandemic made woefully clear.<sup>33</sup>

### ***How the Pima North Region is faring***

- According to the U.S. Census, the Pima North Region had a population of 731,668 in 2020 (Table 1), a 5% increase from 2010, when 697,919 people resided in the region (Table 2). Conversely, the population of young children birth to age 5 decreased 15% over the same period from 48,064 in 2010 to 40,788 in 2020. This increase in the total population in the region (+5%) is comparable to the change in Pima County as a whole (+6%) but is smaller than the increase seen across the state (+12%) from 2010 to 2020. The 15% decrease in the population of young children in the region was also comparable to the county as a whole (-16%), but a larger decrease than the decrease seen across the state during those years (-12%) (Figure 2).
- One in ten households (10%) in the region included a young child in 2020, a slightly lower proportion of households than across Pima County (11%) and the state (13%) (Table 1).
- There is evidence of a possible 2020 Census undercount of young children<sup>vi</sup> in the Pima North Region. The number of young children (birth to age 5) born in the region by 2020 (42,866) was about 5% higher than the number of young children counted in the 2020 Census (40,788). The discrepancies are similar across each age (Figure 3). Another potential factor influencing these differences is migration (i.e., more families with young children moving out of the region than moving in).
- The racial and ethnic make-up of the Pima North Region is similar to that of Arizona as a whole. Whereas the majority (61% region, 57% state) of the overall population identifies as non-Hispanic White, Hispanic or Latino children make up the largest group among children birth to age 4 (46% region, 44% state). In the region, 44% of children identify as non-Hispanic White, 25% as multiracial, 11% as Black or African American, 8% as Asian or Pacific Islander, and 6% as American Indian or Alaska Native (Figure 4 & Figure 5).

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<sup>vi</sup> See “2020 Census data and its limitations” at the beginning of the Population Characteristics section for fuller context on the 2020 Census undercount of young children.

Table 1. Population and households in the 2020 U.S. Census

Geography	Total population	Population (ages 0-5)	Total number of households	Number and percent of households with one or more children (ages 0-5)	
<b>Pima North Region</b>	<b>731,668</b>	<b>40,788</b>	<b>316,267</b>	<b>30,352</b>	<b>10%</b>
Pima County	1,043,433	62,466	427,021	45,676	11%
Arizona	7,151,502	480,744	2,705,878	345,601	13%
United States	331,449,281	22,401,565	126,817,580	16,429,111	13%

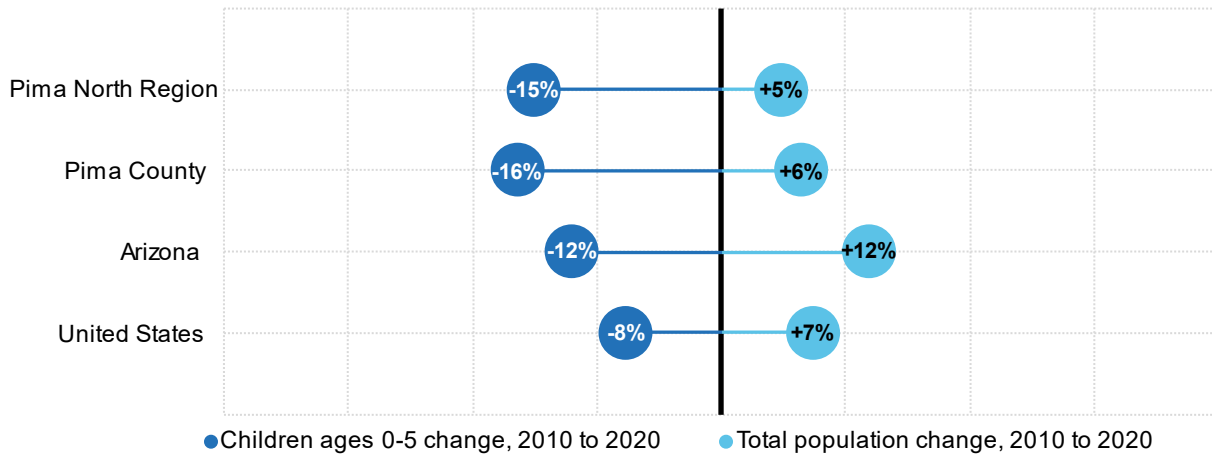
Source: U.S. Census Bureau. (2023). 2020 Decennial Census, Demographic & Housing Characteristics (DHC), Tables P1, P14, P20 & HCT3

Table 2. Change in the total population and population of children birth to age 5, 2010 to 2020 Census

Geography	Total population			Population (Ages 0-5)		
	2010	2020	% Change 2010 to 2020	2010	2020	% Change 2010 to 2020
<b>Pima North Region</b>	<b>697,919</b>	<b>731,668</b>	<b>+5%</b>	<b>48,064</b>	<b>40,788</b>	<b>-15%</b>
Pima County	980,263	1,043,433	+6%	74,796	62,466	-16%
Arizona	6,392,017	7,151,502	+12%	546,609	480,744	-12%
United States	308,745,538	331,449,281	+7%	24,258,220	22,401,565	-8%

Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14, HCT3. U.S. Census Bureau (2010). 2010 Decennial Census, Summary File 1, Tables P1, P14, P20.

Figure 2. Change in the total population and population of children birth to age 5, 2010 to 2020 Census



Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14, HCT3. U.S. Census Bureau (2010). 2010 Decennial Census, Summary File 1, Tables P1, P14, P20.

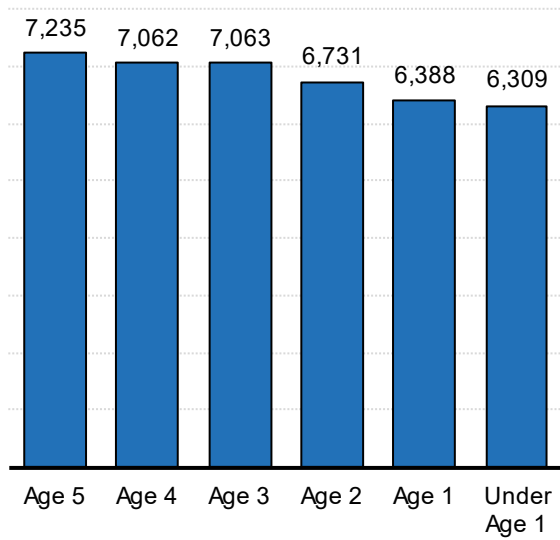
Table 3. Population birth to age 5 by single years of age in the 2020 Census

Geography	Population (Ages 0-5)	Population under age 1	Population age 1	Population age 2	Population age 3	Population age 4	Population age 5
<b>Pima North Region</b>	<b>40,788</b>	<b>6,309</b>	<b>6,388</b>	<b>6,731</b>	<b>7,063</b>	<b>7,062</b>	<b>7,235</b>
Pima County	62,466	9,473	9,595	10,296	10,761	10,940	11,401
Arizona	480,744	72,415	75,163	78,159	82,033	84,600	88,374
United States	22,401,565	3,480,117	3,532,512	3,672,703	3,797,741	3,917,162	4,001,330

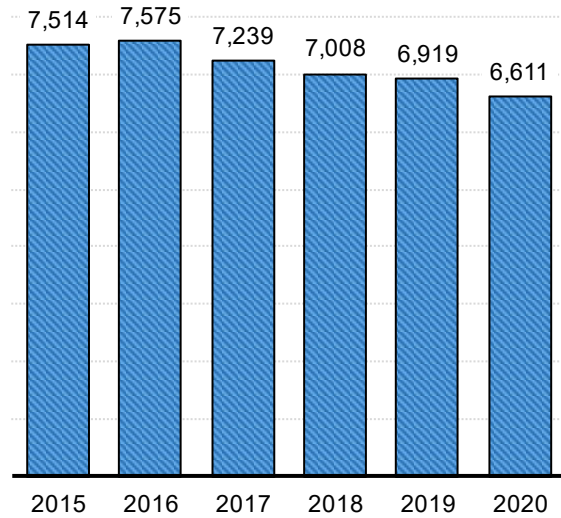
Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14. U.S. Census Bureau (2010). 2010 Decennial Census, Summary File 1, Tables P1, P14.

Figure 3. Children by single year of age in the 2020 Census compared to births (2015 to 2020)

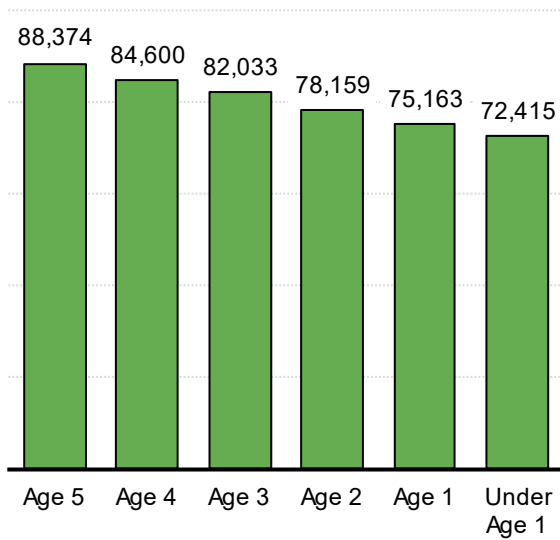
Children by age, Pima North Region



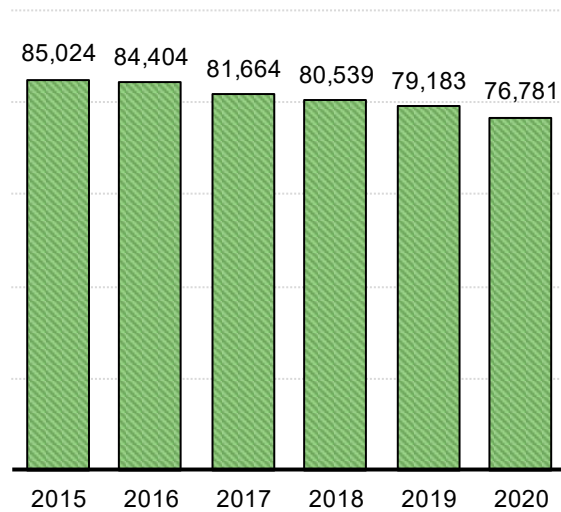
Births by year, Pima North Region



Children by age, Arizona

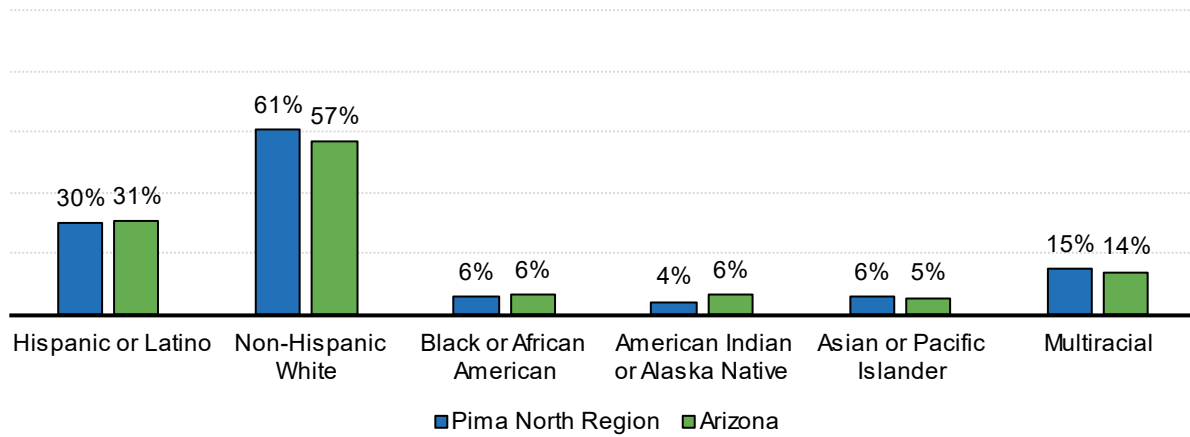


Births by year, Arizona



Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data.

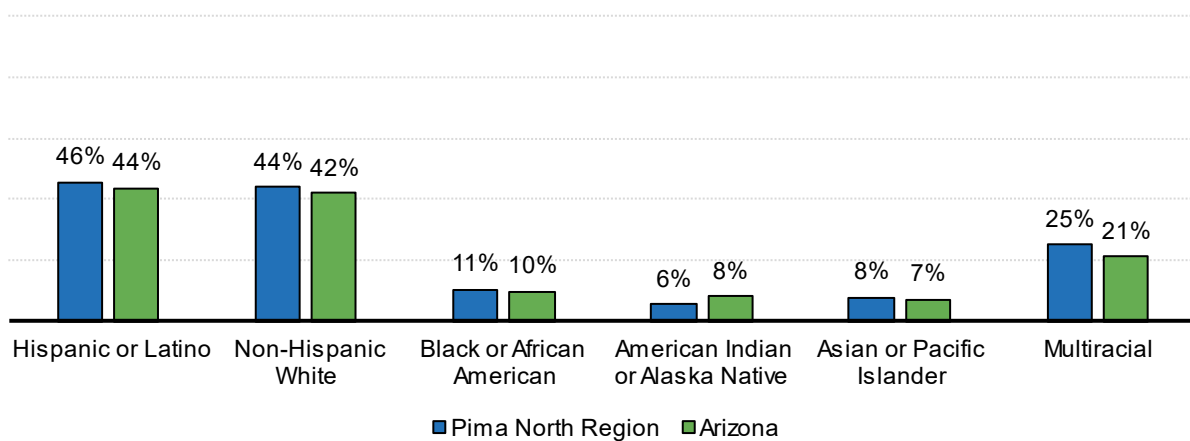
Figure 4. Race and ethnicity of the population of all ages, 2020 Census



Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), P6, P7, P8, P9, P12, P12A-W.

Note: The six percentages shown in this figure may sum to more or less than 100% because (a) persons reporting Hispanic ethnicity are counted twice if their race is Black, American Indian, Asian, Pacific Islander, or any combination of two or more races, (b) persons reporting any other race are not counted here unless they have Hispanic ethnicity, and (c) rounding.

Figure 5. Race and ethnicity for children birth to age 4, 2020 Census



Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), P6, P7, P8, P9, P12, P12A-W.

Note: The six percentages shown in this figure may sum to more or less than 100% because (a) persons reporting Hispanic ethnicity are counted twice if their race is Black, American Indian, Asian, Pacific Islander, or any combination of two or more races, (b) persons reporting any other race are not counted here unless they have Hispanic ethnicity, and (c) rounding.

### Immigrant families and language use

Both immigrants of all ages and children born to immigrant parents are growing populations in the U.S., and the U.S. is continuing to become an increasingly diverse nation.<sup>34, 35</sup> Immigrant parents in Arizona

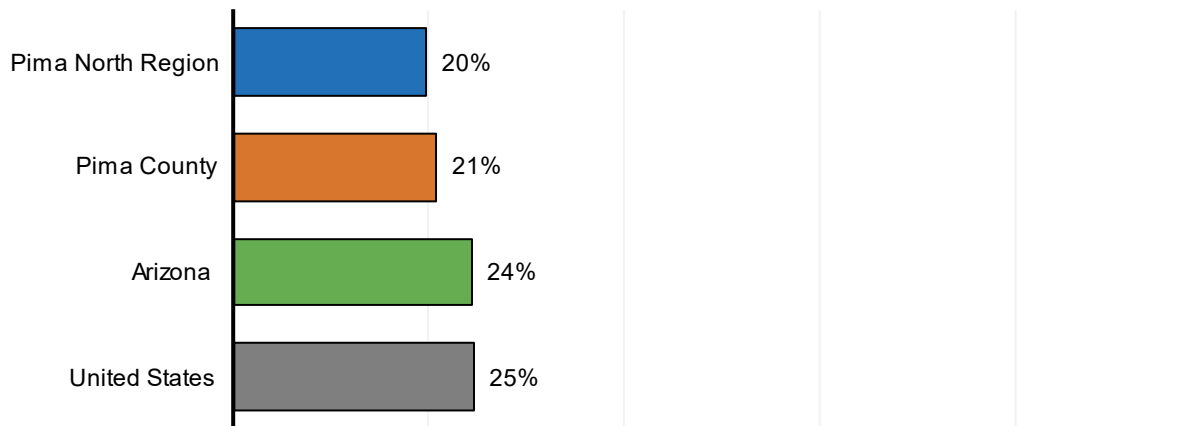
have typically lived in the U.S. for at least nine years, and the vast majority of young children of these foreign-born parents are citizens.<sup>36, 37, 38</sup> Some immigrant parents avoid using social services for which they and their children legally qualify due to fear of deportation or risking their legal status in the country.<sup>39, 40, 41</sup> This can put immigrant families and children at risk of reduced access to medical care and increased food insecurity, which can lead to long-term impacts on health and educational attainment, as well as community-level economic impacts.<sup>42, 43, 44, 45</sup> Understanding the needs of immigrant families and their children is essential to ensuring they have access to available resources that can help them thrive.<sup>46</sup>

Language provides an important connection to family, community and culture.<sup>47</sup> Mastery of more than one language is an asset in school readiness and academic achievement and may offer cognitive and social-emotional benefits in early school experiences and across one's lifetime.<sup>48, 49, 50, 51, 52</sup> However, families with lower English proficiency may face barriers to accessing information about health care and other services or engaging with their children's teachers. Children who do not yet have a full grasp of English may also experience difficulties in school, impeding their academic success and resulting in negative health outcomes.<sup>53, 54</sup> Knowing the languages spoken and level of English proficiency in a region can inform the development of resources and services in multiple languages, ensuring that they are accessible to all families.<sup>55, 56</sup>

### ***How the Pima North Region is faring***

- One in five (20%) children birth to age 5 in the Pima North Region live with foreign-born parents, a similar proportion to the county (21%) but smaller than the state overall (24%) (Figure 6).
- Household language use also reflects these demographic patterns; 22% of individuals speak Spanish (17%) or another non-English language (5%) at home in the region compared to a larger proportion in Pima County (28%) and the state overall (26%) (Figure 7).
- Of residents in the region age 5 and older, 17% are multilingual, reporting that they speak another language at home and also speak English very well. However, 6% report they speak another language at home and do not speak English very well. These values are both slightly lower than values seen across the state, where 18% are functionally multilingual and 8% have limited English proficiency (Figure 8).
- Similarly, the percentage of limited-English-speaking households, meaning no one over the age of 13 speaks English 'very well,' in the region (3%) is slightly lower than the county and state (both 4%) (Figure 9).
- The proportion of English Language Learners (ELL) remained consistent in the Pima North Region between 2020-21 and 2021-22, with 6% of students (representing over 5,500 students) enrolled in all grades considered ELL in the region each school year. This is a slightly lower proportion of students than in Pima County (7%) and the state (8%) those same school years (Table 4).

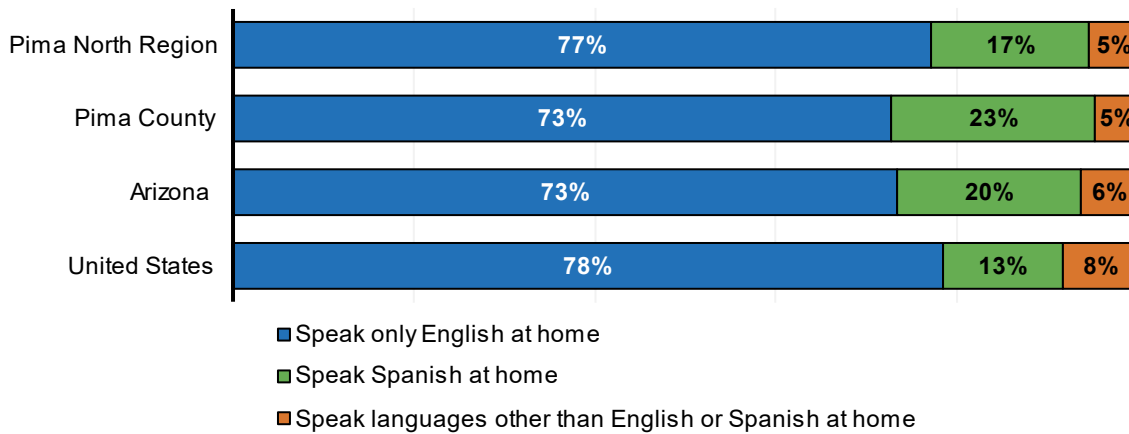
Figure 6. Children birth to age 5 living with parents who are foreign-born, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table B05009

Note: The term "parent" here includes stepparents.

Figure 7. Language spoken at home (by persons ages 5 and older), 2017-2021 ACS

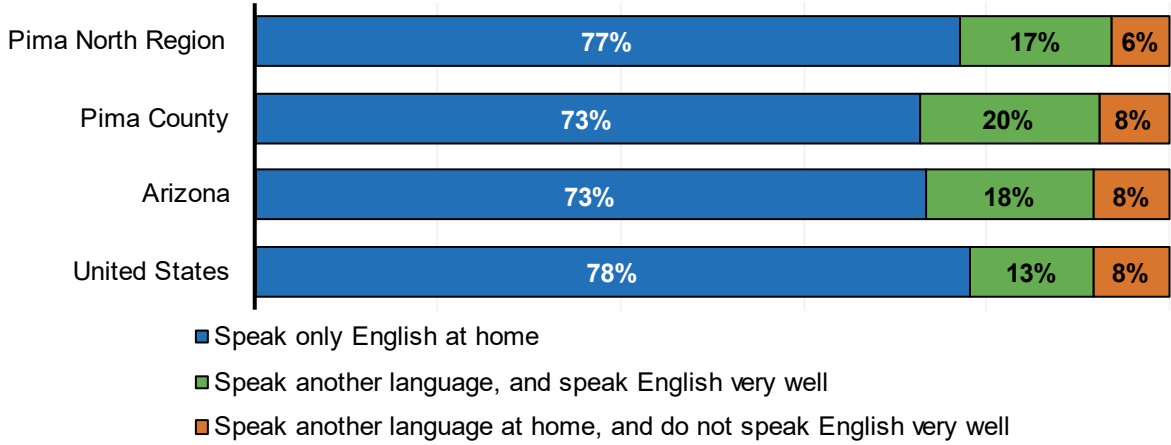


Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table C16001

Note: The three percentages in each bar may not sum to 100% because of rounding. The American Community Survey (ACS) no longer specifies the proportion of the population who speak Native North American languages for geographies smaller than the state. In Arizona, Navajo and other Native American languages (including Apache, Hopi, and O'odham) are the most commonly spoken (2%), following English (73%) and Spanish (20%).

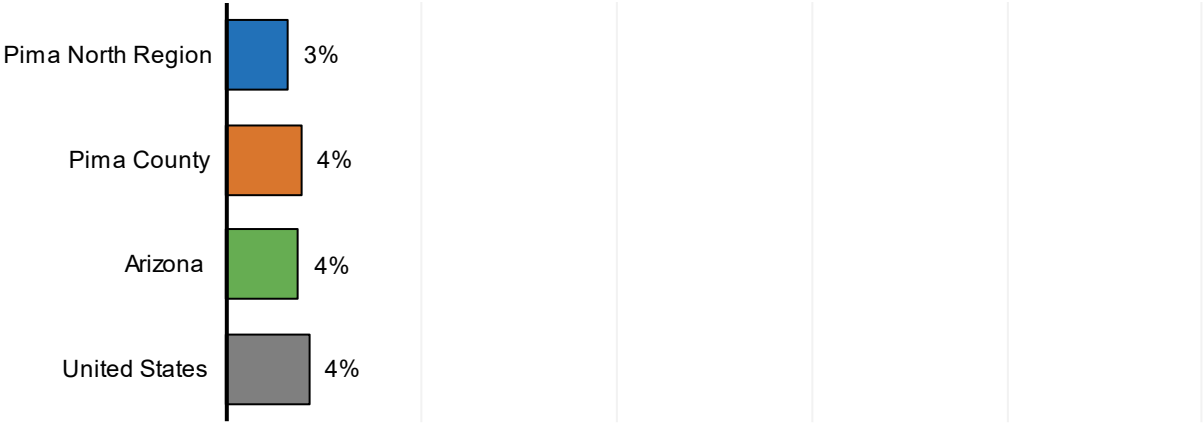


Figure 8. English-language proficiency (for persons ages 5 and older), 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table C16001  
 Note: The three percentages in the figure should sum to 100%, but may not because of rounding.

Figure 9. Share of households that are limited-English-speaking, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table C16002  
 Note: A "limited-English-speaking" household is one in which no one over the age of 13 speaks English very well.

Table 4. Number of English Language Learners enrolled in all grades, 2020-21 to 2021-22

Geography	Number of PS-12 students who were English Language Learners		Percent of PS-12 students who were English Language Learners	
	2020-21	2021-22	2020-21	2021-22
<b>Pima North Region schools</b>	<b>5,538</b>	<b>5,633</b>	<b>6%</b>	<b>6%</b>
Pima County schools	10,450	10,703	7%	7%
Arizona schools	86,405	91,881	8%	8%

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Notes: English Language Learners are students who do not score 'proficient' in the English language based on the Arizona English Language Learning Assessment (AZELLA) and thus are eligible for additional supportive services for English language acquisition. Legislation in Arizona requires children in Arizona public schools be taught in English, and English Language Learners to attend English immersion programs. Senate Bill 1014 passed in 2019, increased the flexibility districts have in structuring English Language Learners immersion programs, and lessened the duration required of this instruction. For more information see <https://www.azed.gov/oelas/structured-english-immersion-models>

## Family and household composition

Young children in Arizona live in many types of families, each of which has possible implications for child development.<sup>57</sup> For example, families with two married parents tend to offer stability that promotes child well-being.<sup>58, 59, 60</sup> Single-parent households tend to be at higher risk for poverty, and can face challenges accessing health and education resources.<sup>61, 62, 63, 64, 65, 66, 67</sup> Multi-generational living, particularly arrangements where grandparents live in the home with children and parents, has long been practiced in some cultures and communities but is becoming increasingly common in U.S. families of all racial and ethnic groups.<sup>68, 69, 70, 71</sup> These living arrangements can offer financial and social benefits but also specific stressors, such as managing conflicts in parenting styles and family roles.<sup>72, 73, 74, 75, 76</sup> It is also increasingly common for children to live in kinship care, defined as the care of children by someone other than their parents, such as relatives or close friends.<sup>77, 78, 79</sup> These kinship caregivers, especially grandparents who care for their grandchildren, can face unique challenges, including navigating the logistics of informal guardianship (e.g., difficulties in registering children for school), coping with parental absence and addressing the challenges of being an aging caregiver for a young child.<sup>80, 81, 82, 83</sup> Each of these family structures carries with it a unique set of strengths and challenges that are important to consider in relation to the health and development of children.<sup>84, 85, 86</sup>

### *How the Pima North Region is faring*

- Sixty percent of young children in the Pima North Region live in two married parent households, similar to the county (58%) and Arizona overall (59%). The proportions of young children in the region (36%), county (37%), and state (37%) living in a household with one parent are also similar (Table 5).
- Eleven percent of children birth to age 5 in the region live in their grandparent's household, compared to 13% of children birth to age 5 in Pima County and Arizona (Figure 10).

- Of grandparents who live with and are responsible for their grandchildren under age 18 in the Pima North Region, the majority are female (60%), over age 60 (59%) and in the labor force (52%). About one-third (31%) do not have the child’s parent in the household and 16% have incomes below the poverty level (Table 6).
- Overall, 11% of grandparents in the region have grandchildren under age 18 in their household with no parent present, the same as the proportion across the county and state (Figure 11).

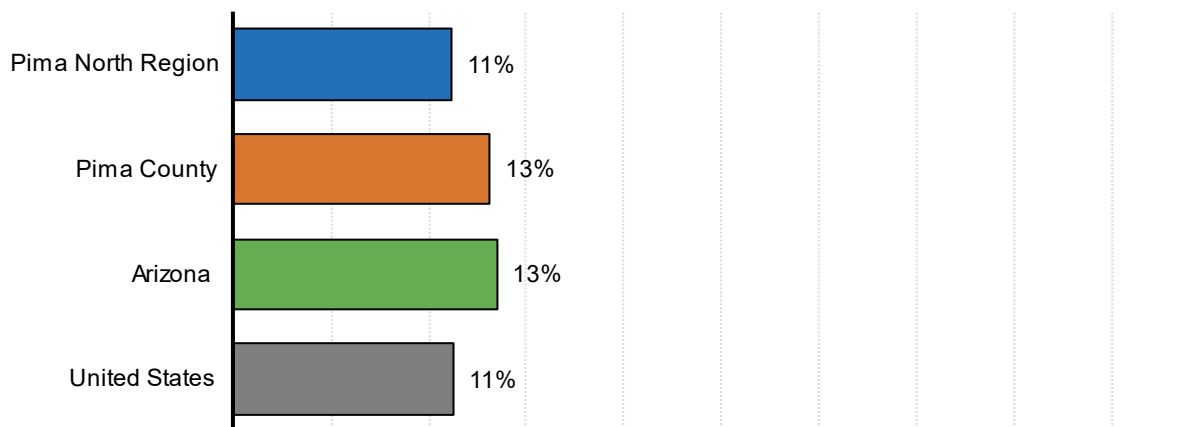
Table 5. Living arrangements for children birth to age 5, 2017-2021

Geography	Estimated number of children (birth to 5 years old) living in households	Living with two married parents	Living with one parent	Living not with parents but with other relatives	Living with non-relatives
<b>Pima North Region</b>	<b>41,331</b>	<b>60%</b>	<b>36%</b>	<b>2%</b>	<b>2%</b>
Pima County	66,105	58%	37%	3%	2%
Arizona	496,219	59%	37%	3%	2%
United States	23,353,556	64%	32%	2%	2%

Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Tables B05009, B09001, & B17001

Note: The four percentages in each row should sum to 100%, but may not because of rounding. The term "parent" here includes stepparents. Please note that due to the way the ACS asks about family relationships, children living with two unmarried, cohabitating parents are not counted as living with two parents (these children are counted in the 'one parent' category).

Figure 10. Grandchildren birth to age 5 living in a grandparent's household, 2020 Census



Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P14, PCT11.

Note: This table includes all children (under 6 years old) living in a household headed by a grandparent, regardless of whether the grandparent is responsible for them, or whether the child's parent lives in the same household.

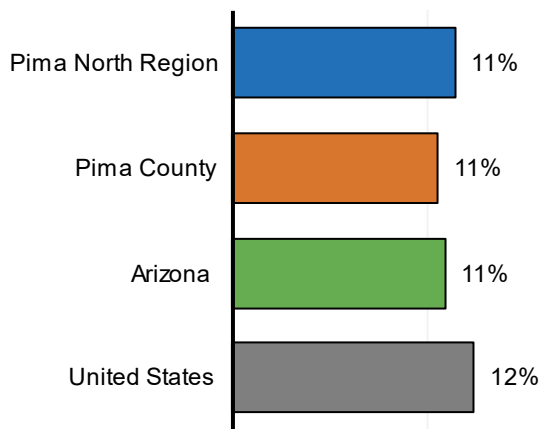
Table 6. Selected characteristics of grandparents who are responsible for one or more grandchildren under age 18 in their households, 2017-2021 ACS

Geography	Estimated number of grandparents who live with and are responsible for grandchildren under 18 years old	Percent of these grandparents who:					
		Do not have the child's parents in the household	Are 60 years old or older	Are female	Do not speak English very well	In labor force	Have an income below the poverty level
<b>Pima North Region</b>	<b>4,400</b>	<b>31%</b>	<b>59%</b>	<b>60%</b>	<b>15%</b>	<b>52%</b>	<b>16%</b>
Pima County	7,863	29%	50%	63%	22%	55%	21%
Arizona	56,079	33%	45%	62%	21%	57%	21%
United States	2,319,443	38%	47%	63%	14%	56%	18%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Tables B10051, B10054, B10056, & B10059

Note: Grandparents are considered responsible for their grandchild or grandchildren if they are "currently responsible for most of the basic needs of any grandchildren under the age of 18" who live in the grandparent's household.

Figure 11. Percent of grandparents who are living with their grandchildren birth to age 17 with no parent present in the household, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Tables B10051, B10054, B10056, & B10059

Note: The denominator in this figure is all grandparents living with grandchildren (including both grandparents who are responsible for their grandchildren and those that are not).

Additional data tables related to *Population Characteristics* can be found in Appendix 1 of this report.



## **ECONOMIC CIRCUMSTANCES**

# ECONOMIC CIRCUMSTANCES

## Why it Matters

A family's economic stability impacts children's well-being and predicts a variety of health outcomes.<sup>87</sup> Children who grow up in poverty and unstable economic conditions are more likely to experience negative effects on their cognitive, behavioral, social and emotional development compared to those in stable economic environments.<sup>88, 89, 90, 91, 92</sup> The challenges they face might continue into adulthood, and such difficulties may be passed on to the next generation.<sup>93, 94, 95</sup> Poverty also affects children by straining parent well-being and parent-child interactions. Stressors related to poverty, like unemployment, food and housing insecurity and poor mental and physical health, make it difficult for caregivers to provide the necessary support for children's optimal development.<sup>96</sup> In light of these broad impacts, economic stability is a key social determinant of health and is included as a domain in the Healthy People 2030 Objectives.<sup>vii</sup>

## What the Data Tell Us

### Income and poverty

Poverty is associated with reduced access to nutrition, green space and health care and greater exposure to psychosocial stress and environmental toxins, factors that can both directly and indirectly hinder children's growth and brain development.<sup>97, 98, 99</sup> Children living in poverty are thus at a higher risk of negative impacts including being born at a low birth weight, lower school achievement and poor health.<sup>100, 101, 102, 103, 104, 105, 106</sup> Economic hardship is included in some definitions of adverse childhood experiences (ACEs) and children living in poverty experience other non-economic ACEs, such as parental divorce or separation, exposure to violence, parental incarceration and living with someone with mental illness or a substance use disorder, at higher rates than children in higher income households.<sup>107, 108</sup> Given the many negative effects of poverty on child development, programs that alleviate poverty through providing cash assistance or food, housing or health care assistance can improve child well-being.<sup>109</sup>

The Temporary Assistance for Needy Families Cash Assistance Program (TANF)<sup>viii</sup> provides temporary cash benefits and supportive services to children and families. Eligibility is based on citizenship or qualified resident status, Arizona residency and limits on resources and monthly income.<sup>110</sup>

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<sup>vii</sup> For more information on the Economic Stability Healthy People 2030 Objectives please see <https://health.gov/healthypeople/objectives-and-data/browse-objectives/economic-stability>

<sup>viii</sup> For more information see: <https://www.acf.hhs.gov/ofa/programs/temporary-assistance-needy-families-tanf> and <https://des.az.gov/ca>

### ***How the Pima North Region is faring***

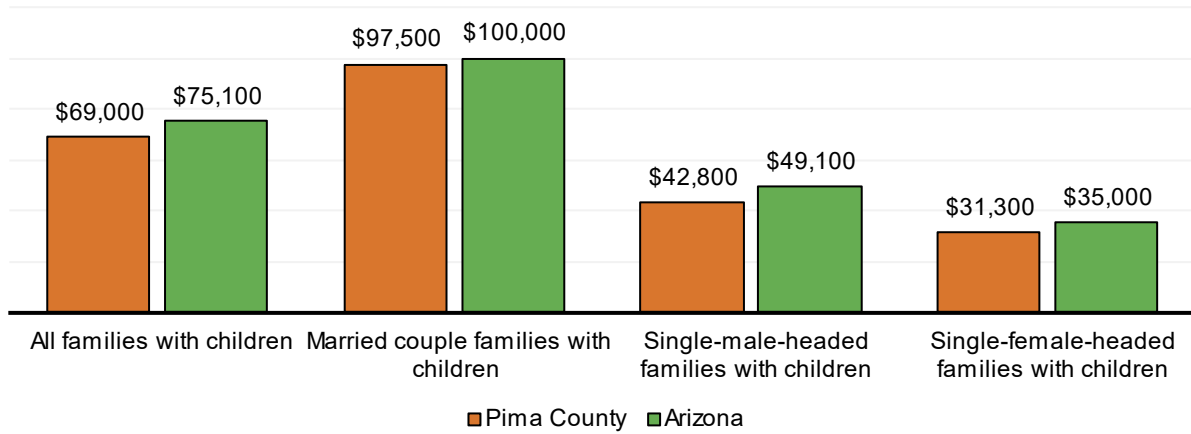
- Median family incomes for families in Pima County are slightly lower than for families in Arizona across all household types. The median income for married couple families with children in Pima County (\$97,500) is most comparable to Arizona overall (\$100,000). However, this income is more than double the median income for single-male-headed families (\$42,800) and more than triple that of single-female-headed families (\$31,300) in the county (Figure 12).
- According to 2017-2021 American Community Survey (ACS) estimates, rates of poverty in the region across the entire population (15%) and for children birth to age 5 (22%) are slightly higher than those across the state (13% and 20%, respectively). Rates of poverty for young children have decreased since 2012-2016 ACS estimates in the region (2012-2016, 28%; 2017-2021, 22%), county (2012-2016, 30%; 2017-2021, 22%) and state (2012-2016, 28%; 2017-2021, 20%) (Figure 13 & Figure 14).
- Over four in ten young children in the Pima North Region (41%) live below 185% of the poverty level (a commonly used threshold for safety net benefits such as the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) and reduced-price school meals) (Figure 15). In 2021, for a family of two adults and two children, this equates to \$50,836, far below the self-sufficiency standard<sup>ix</sup> for two parents with one infant and one preschooler in 2022 in Pima County (\$76,929).
- Between state fiscal years (SFYs) 2018 and 2022, with the exception of SFY 2019, there were about 2,000 children birth to age 5 and 1,500 families with children birth to age 5 receiving TANF in the region. The proportion of young children participating in TANF in the region has averaged about 5% and has been consistently higher than that of the state overall (average of about 2.8%) (Figure 16 & Figure 17).

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<sup>ix</sup> For more information on the Arizona 2022 Self-sufficiency standard, please see [https://womensgiving.org/wp-content/uploads/2022/12/AZ2022\\_SSS\\_Web.pdf](https://womensgiving.org/wp-content/uploads/2022/12/AZ2022_SSS_Web.pdf)



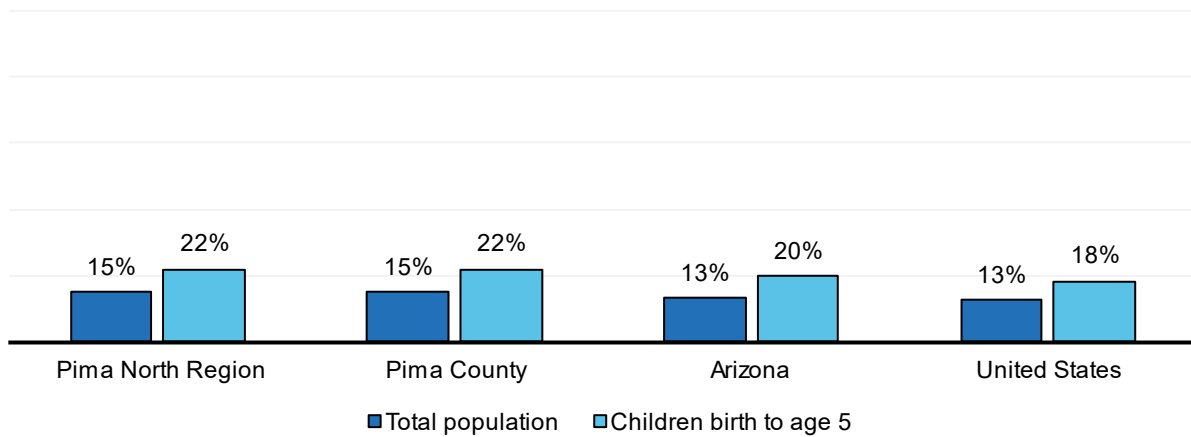
Figure 12. Median family income for families with children birth to age 17, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B19126

Note: Half of the families in the population are estimated to have annual incomes above the median value, and the other half have incomes below the median. The median family income for all families includes families without children birth to age 17.

Figure 13. Rates of poverty for persons of all ages and for children birth to age 5, 2017-2021 ACS

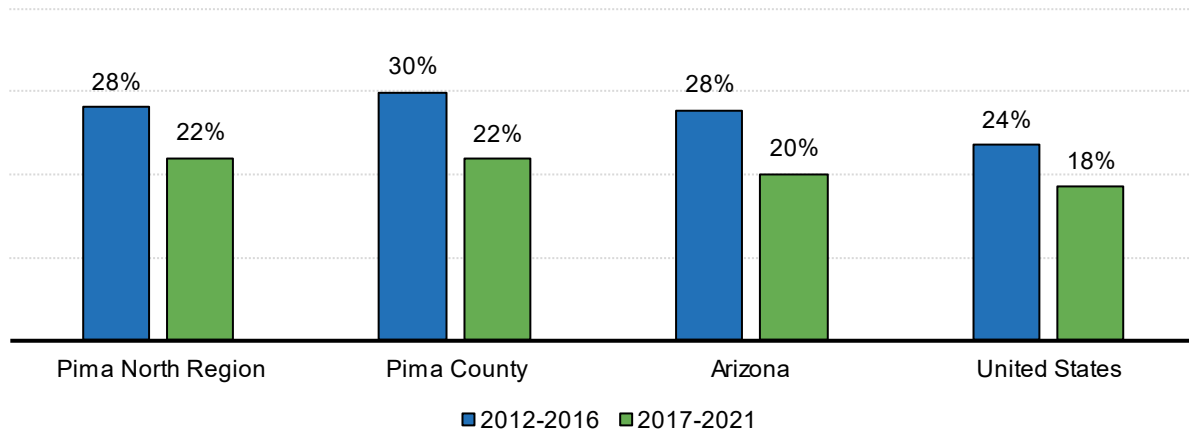


Source: U.S. Census Bureau. (2020). American Community Survey 5-year estimates 2017-2021, Table B17001

Note: This graph includes only persons whose poverty status can be determined. Adults who live in group settings such as dormitories or institutions are not included. Children who live with unrelated persons are not included. In 2021, the poverty threshold for a family of two adults and two children was \$27,479; for a single parent with one child, it was \$18,677.



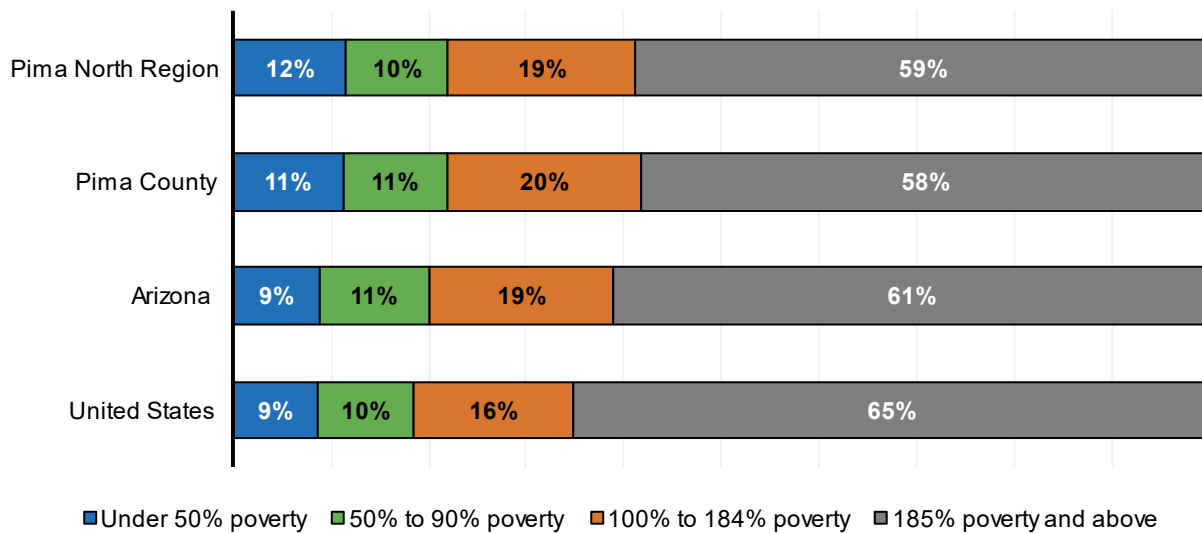
Figure 14. Rates of poverty for children birth to age 5, 2012-2016 and 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B17001. U.S. Census Bureau. (2017). American Community Survey 5-year estimates 2012-2016, Table B17001.

Note: This graph includes only persons whose poverty status can be determined. Adults who live in group settings such as dormitories or institutions are not included. Children who live with unrelated persons are not included. In 2021, the poverty threshold for a family of two adults and two children was \$27,479; for a single parent with one child, it was \$18,677.

Figure 15. Children birth to age 5 living at selected poverty thresholds, 2017-2021 ACS

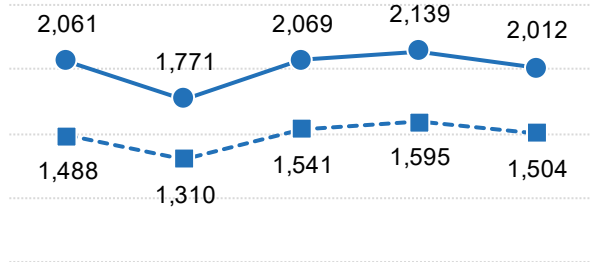


Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B17024

Note: The four percentages in each bar should sum to 100% but may not because of rounding. In 2021, the poverty threshold for a family of two adults and two children was \$27,479; for a single parent with one child, it was \$18,677. The 185% thresholds are \$50,836 and \$34,552, respectively.

Figure 16. Number of children birth to age 5 and families with children birth to age 5 receiving TANF, state fiscal years 2018 to 2022

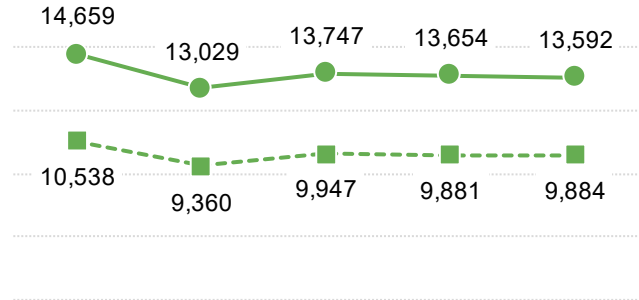
Pima North Region



SFY2018 SFY2019 SFY2020 SFY2021 SFY2022

--- Families with children (ages 0-5) participating in TANF  
 — Children (ages 0-5) participating in TANF

Arizona

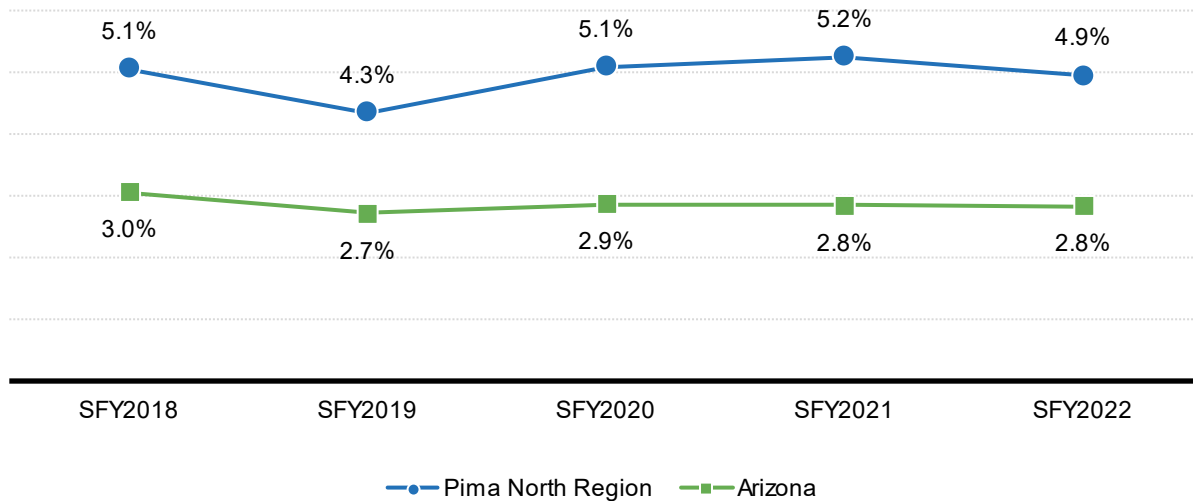


SFY2018 SFY2019 SFY2020 SFY2021 SFY2022

--- Families with children (ages 0-5) participating in TANF  
 — Children (ages 0-5) participating in TANF

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data.

Figure 17. Estimated percent of children birth to age 5 participating in TANF, state fiscal years 2018 to 2022



SFY2018 SFY2019 SFY2020 SFY2021 SFY2022

— Pima North Region — Arizona

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

## Food security

Many families struggle with consistent access to “enough food for an active, healthy life,” a problem known as food insecurity.<sup>111</sup> Food insecurity is linked with many aspects of child and parent well-being; it can be a major source of stress for parents and has been linked to health and behavioral problems for children, such as poorer parent-child attachment, decreased social skills and self-control and increased risk of depression.<sup>112, 113, 114, 115, 116, 117</sup>

The Supplemental Nutrition Assistance Program (SNAP; also referred to as “nutrition assistance” and “food stamps”),<sup>x</sup> is administered by the Arizona Department of Economic Security and aims to support working families who are unable to afford the food necessary to sustain their health with their income alone. Nationally, about one in every five children participates in SNAP, and families on average receive a benefit of up to \$2.61 per person for each meal.<sup>118</sup> The SNAP program has been shown to reduce hunger and improve access to healthy food options among those who utilize it.<sup>119</sup>

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC)<sup>xi</sup> is a federally funded program administered by the Arizona Department of Health Services aimed to support economically disadvantaged women who are pregnant, postpartum and/or breastfeeding, along with infants and young children. The program’s services include directing participants to health services, nutrition and breastfeeding education and supplemental funding for food. In Arizona, WIC provided an average monthly benefit of \$42 per month in 2022, lower than the national average of \$48 per month.<sup>120</sup>

School meals provide another important nutritional safety net for children and their families. The National School Lunch Program (NSLP),<sup>xii</sup> administered by the Arizona Department of Education (ADE) and funded by the United States Department of Agriculture (USDA), provides meals for students of low-income families at a reduced price. The Summer Food Service Program (SFSP),<sup>xiii</sup> also funded by the USDA and administered by ADE, works to keep all children birth to age 18 fed when school is out of session by providing free meals (breakfast, lunch, supper) and snacks at community sites. SFSP unites community sponsors like camps, faith-based organizations and schools with sites like parks, libraries, community centers and apartment complexes in high-need areas to distribute food.<sup>121</sup> In March 2020, in response to school closures due to the COVID-19 pandemic, the USDA issued waivers allowing year-round operation of SFSP to serve meals to children of all ages engaging in remote learning; these waivers remained in effect through June 2022 and led to increased meal service through SFSP compared to NSLP for many schools.<sup>122</sup> The Child and Adult Care Food Program (CACFP),<sup>xiv</sup> also funded by the USDA, gives reimbursements to participating child care centers, preschools, emergency centers and after-school programs for nutritious meals and snacks served to eligible children.

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<sup>x</sup> For more information see: <https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program> and <https://des.az.gov/na>

<sup>xi</sup> For more information see: <https://www.fns.usda.gov/wic> and <https://www.azdhs.gov/prevention/azwic/>

<sup>xii</sup> For more information see: <https://www.azed.gov/hns/nslp>

<sup>xiii</sup> For more information see: <https://www.azed.gov/hns/sfsp>

<sup>xiv</sup> For more information see: <https://www.azed.gov/hns/cacfp>

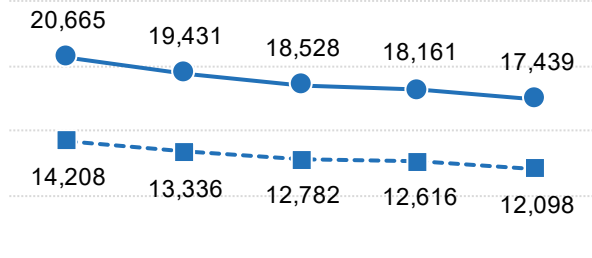
Eligible providers include for-profit child care centers serving at least 25% free or reduced-price lunch participants or any non-profit program.<sup>123</sup>

### ***How the Pima North Region is faring***

- Participation in SNAP by households with young children declined in the Pima North Region between SFY 2018 and SFY 2022, as did participation across the state. The number of young children birth to age 5 participating in SNAP also decreased during those years in both the region and state. The percentage of young children participating in SNAP was generally about 3 percentage points higher in the region than across the state during this period, with 43% of children birth to age 5 participating in the region in SFY 2022 compared to 40% across the state (Figure 18 & Figure 19).
- The number of children birth to age 4 enrolled in and participating in WIC in the Pima North Region and across the state declined between 2018 and 2021, with a slight uptick in 2022. There were 13,800 young children participating in WIC in the region in 2022 (Figure 20).
- WIC participation rates were high in 2022, with 97% of women, 98% of infants and 96% of children enrolled receiving benefits that year in the region, very similar to rates across the county and state (Figure 21).
- The number of lunches served through the NSLP, SFSP, and CACFP meal programs varied substantially between program years 2019-20 and 2021-22. After the change in school meal policy following the start of the COVID-19 pandemic, meal service through SFSP increased nearly sevenfold in Pima County between 2019-20 and 2020-21, while meal service through NSLP fell by 60%. In the 2021-22 school year, NSLP meal service increased, though it remained nowhere near pre-pandemic levels, while SFSP meal service continued to increase in the county, contrasting statewide declines (Figure 22).
- Compared to 2019-20, the number of lunches served through CACFP more than tripled in Pima County in 2021-22, indicating higher ongoing participation in CACFP following the onset of the pandemic. Uptake of CACFP in the region is notably high, with meals served in 2020-21 through CACFP exceeding meals served through NSLP (Figure 22).

Figure 18. Number of children birth to age 5 and households with children birth to age 5 participating in SNAP, state fiscal years 2018 to 2022

Pima North Region

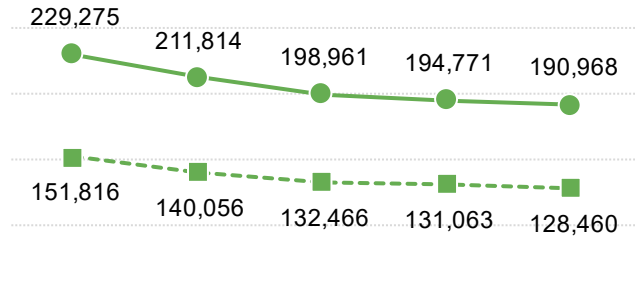


SFY2018 SFY2019 SFY2020 SFY2021 SFY2022

--- Families with children (ages 0-5) participating in SNAP

— Children (ages 0-5) participating in SNAP

Arizona



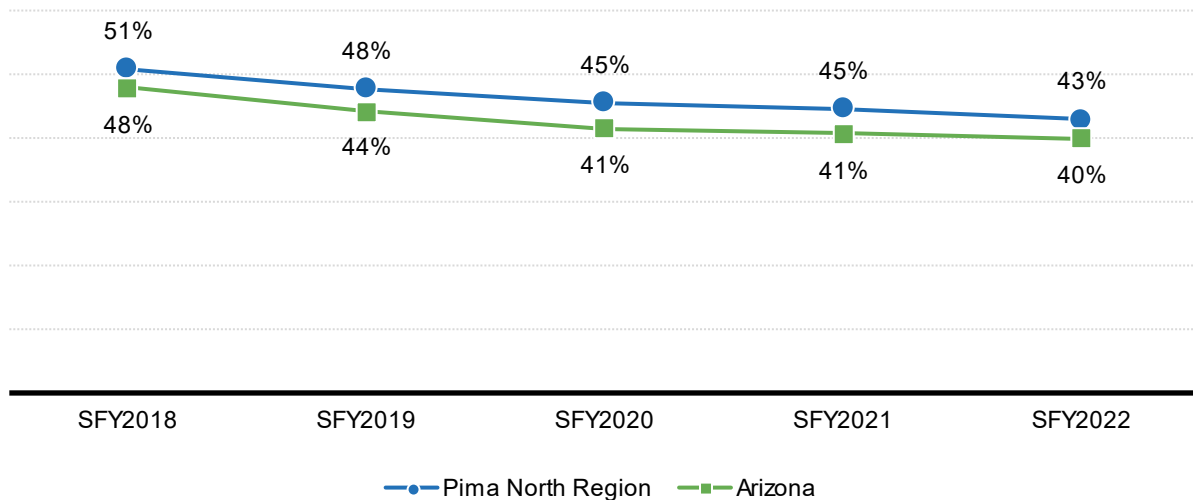
SFY2018 SFY2019 SFY2020 SFY2021 SFY2022

--- Families with children (ages 0-5) participating in SNAP

— Children (ages 0-5) participating in SNAP

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data.

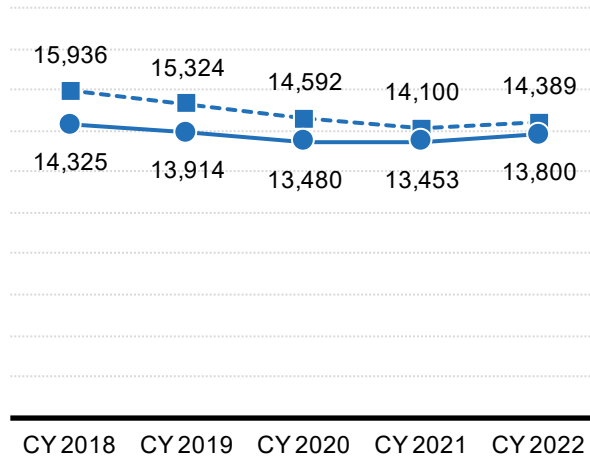
Figure 19. Estimated percent of children birth to age 5 participating in SNAP, state fiscal years 2018 to 2022



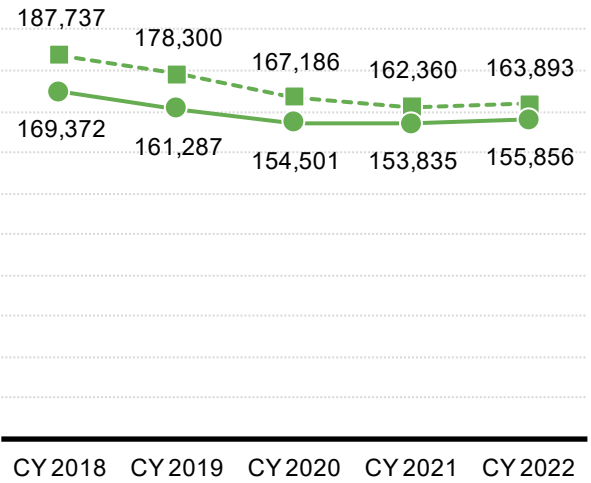
Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

Figure 20. Children birth to age 4 enrolled and participating in WIC, 2018 to 2022

Pima North Region



Arizona



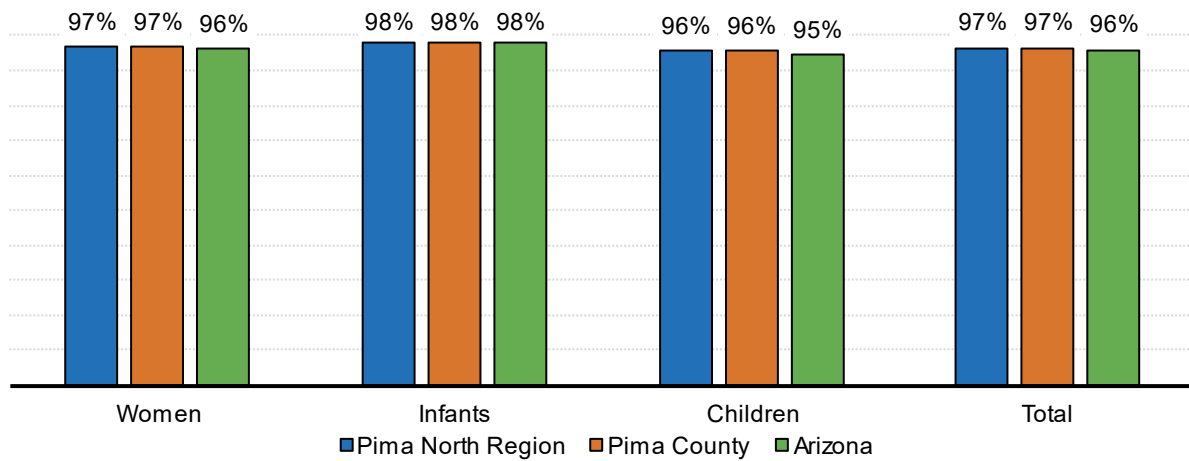
---■--- Enrolled    —●— Participating

---■--- Enrolled    —●— Participating

Source: Arizona Department of Health Services (2023). [WIC Dataset]. Unpublished data.

Note: Children are counted as 'participating' if they received benefits during the time period in question.

Figure 21. WIC participation rates by category, 2022



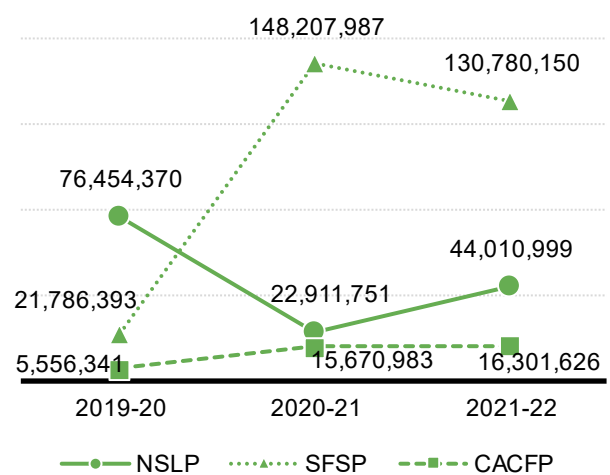
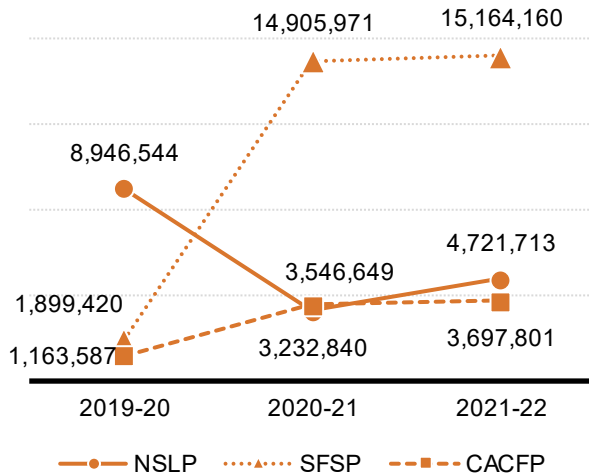
Source: Arizona Department of Health Services (2023). [WIC Dataset]. Unpublished data.

Note: Individuals are counted as 'participating' if they received benefits during the time period in question.

Figure 22. Trends in lunches served through school nutrition programs, 2019-20 to 2021-22

Pima County

Arizona



Source: Arizona Department of Education (2021). [Health and Nutrition Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Due to the COVID-19 pandemic, the USDA issued a substantial number of waivers for school nutrition programs to allow greater flexibility for schools to get meals to students in need. More information on the pandemic’s effect on school nutrition can be found on the ADE website: <https://www.azed.gov/hns/covid19>

## Employment

Unemployment and underemployment<sup>xv</sup> can impact families in ways that affect children’s health and well-being.<sup>124</sup> Unemployment can limit access to resources that support children’s physical and mental health, like health insurance, and can also contribute to family stress, conflict, homelessness and child abuse.<sup>125, 126</sup> Children with parents who have lost their jobs may also experience poorer school performance and behavioral issues, resulting in grade repetition, suspension or expulsion.<sup>127</sup>

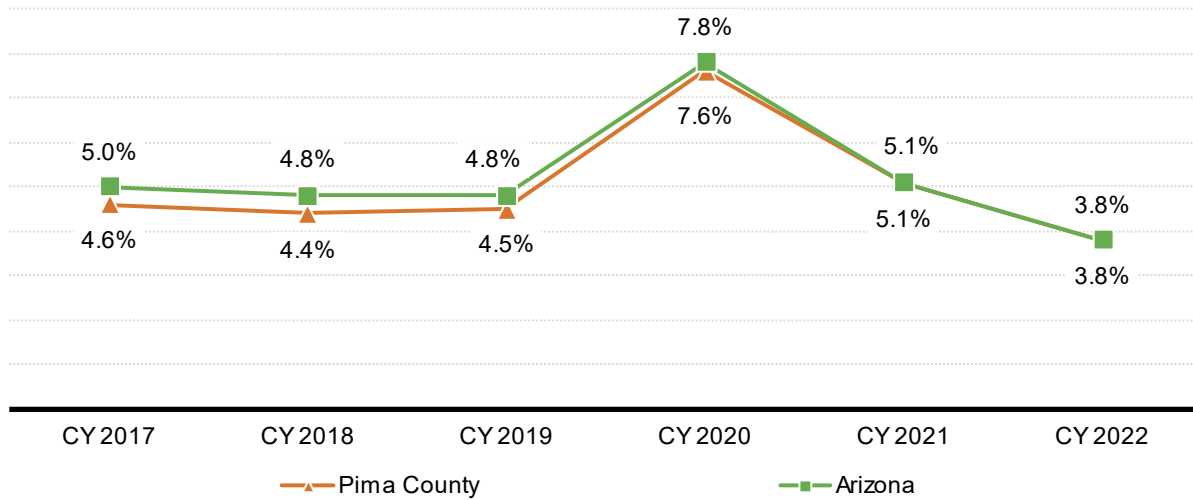
Education and employment support programs for parents and caregivers are important for increasing wages and improving the economic stability of families. “Two-generation” or “2Gen” approaches address the needs of both parents and children simultaneously through programs to support children and families together, such as a family literacy program that provides educational support to parents while enrolling children in free high-quality preschool.<sup>128, 129, 130</sup> These programs have the goal of decreasing the intergenerational effects of poverty by building parental capacity and protective factors within families.<sup>131, 132, 133</sup>

<sup>xv</sup> Underemployment means that someone works fewer hours than they would like or is in a job that does not require the skills or training that they have.

### How the Pima North Region is faring

- Unemployment rates in Pima County tracked with Arizona’s between 2017 and 2022 but tended to fall just below statewide rates before 2020. Despite the spike during the onset of the COVID-19 pandemic in 2020, unemployment rates fell to their lowest level in six years in 2022, with a 3.8% unemployment rate in Pima County and across Arizona (Figure 23).
- The labor force participation rate<sup>xvi</sup> in the Pima North Region (60%) is similar to that of the county (59%) and state (61%). An unemployment rate of 6% is shared by the region, county and state as well (Table 7 & Figure 24).
- An estimated 92% of young children in the Pima North Region live in families with at least one parent in the labor force, similar to the proportion across the state (90%). More than two-thirds (68%) of children birth to age 5 in the region live with all parents in the labor force, making it likely that these families need some form of child care (Table 8 & Figure 25).

Figure 23. Average annual unemployment rates (not seasonally adjusted), 2017 to 2022



Source: Arizona Commerce Authority (2021), Office of Economic Opportunity, Local Area Unemployment Survey (LAUS)

<sup>xvi</sup> The “labor force” is all persons who are working (employed) or looking for work (unemployed). The “labor force participation rate” is the fraction of the population who are in the labor force, whether employed or unemployed. Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The “unemployment rate” is the fraction of the civilian labor force which are unemployed.



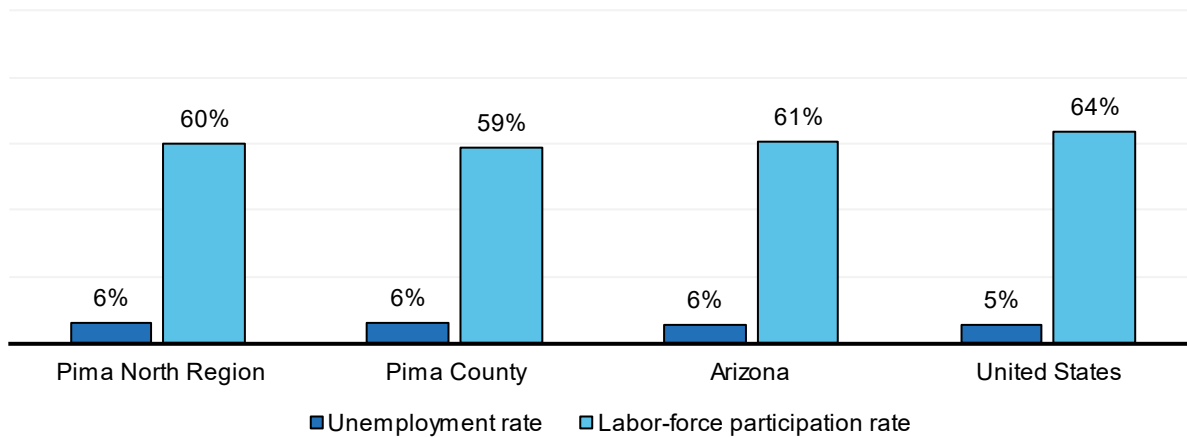
Table 7. Unemployment and labor-force participation for the population ages 16 and older, 2017-2021 ACS

Geography	Estimated working-age population (age 16 and older)	Unemployment rate	Labor-force participation rate	In the labor force and employed	In the labor force but unemployed	In armed forces	Not in the labor force
<b>Pima North Region</b>	<b>600,561</b>	<b>6%</b>	<b>60%</b>	<b>55%</b>	<b>4%</b>	<b>0.9%</b>	<b>40%</b>
Pima County	843,701	6%	59%	54%	4%	0.9%	41%
Arizona	5,650,624	6%	61%	57%	3%	0.4%	39%
United States	264,087,642	5%	64%	60%	3%	0.5%	36%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2022, Table B23025

Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The "labor force participation rate" is the fraction of the population who are in the labor force, whether employed or unemployed. The "unemployment rate" is the fraction of the civilian labor force which are unemployed. The last four percentages in each row (employed, unemployed, in armed forces, and not in the labor force) should sum to 100% but may not because of rounding.

Figure 24. Unemployment and labor-force participation for the population ages 16 and older, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B23025

Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The "labor force participation rate" is the fraction of the population who are in the labor force, whether employed or unemployed. The "unemployment rate" is the fraction of the civilian labor force which are unemployed.

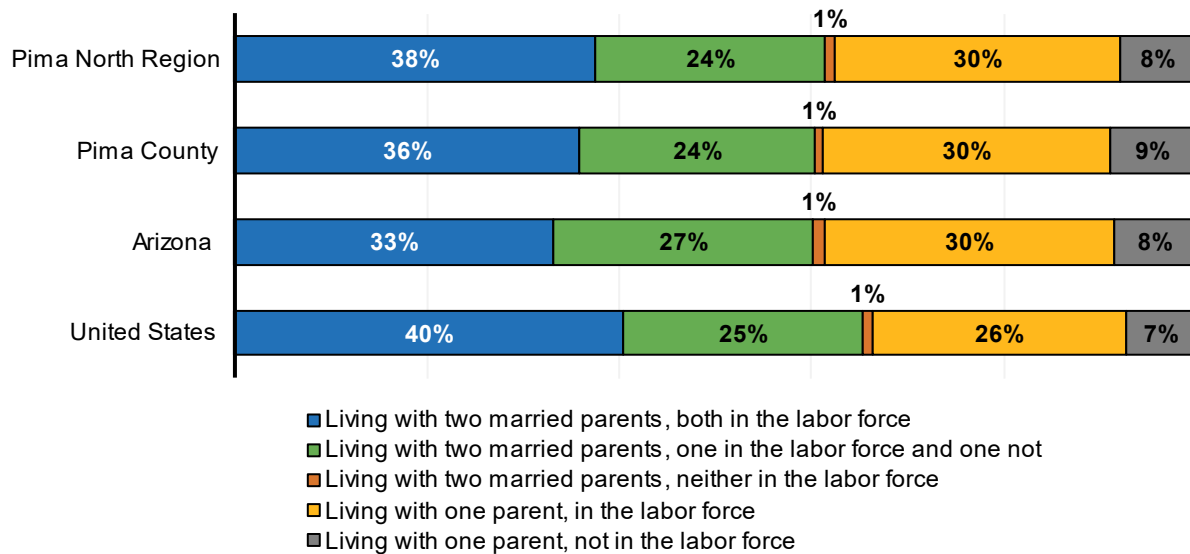
Table 8. Parents of children birth to age 5 who are or are not in the labor force, 2017-2021 ACS

Geography	Estimated number of children (birth to 5 years old) living with parent(s)	Living with two married parents, both in the labor force	Living with two married parents, one in the labor force and one not	Living with two married parents, neither in the labor force	Living with one parent, in the labor force	Living with one parent, not in the labor force
<b>Pima North Region</b>	<b>39,604</b>	<b>38%</b>	<b>24%</b>	<b>1%</b>	<b>30%</b>	<b>8%</b>
Pima County	63,108	36%	24%	1%	30%	9%
Arizona	473,732	33%	27%	1%	30%	8%
United States	22,399,131	40%	25%	1%	26%	7%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B23008

Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The term "parent" here includes step-parents. The five percentages in each row should sum to 100%, but may not because of rounding. Please note that due to the way the ACS asks about family relationships, children living with two unmarried, cohabitating parents are not counted as living with two parents (these children are counted in the 'one parent' category).

Figure 25. Parents of children birth to age 5 who are or are not in the labor force, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B23025

Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The term "parent" here includes stepparents. The five percentages in each row should sum to 100% but may not because of rounding. Please note that due to the way the ACS asks about family relationships, children living with two unmarried, cohabitating parents are not counted as living with two parents (these children are counted in the 'one parent' category).

## **Housing instability and internet access**

Housing instability can have harmful effects on the development of young children. 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>134, 135, 136</sup> High relative housing costs leave inadequate funds for other necessities, such as food and utilities.<sup>137</sup> This can negatively affect the physical, social-emotional and cognitive development of children, with severe forms of housing instability associated with poorer performance in school.<sup>138, 139</sup>

Another increasingly important utility in homes is reliable internet access. Access to broadband (high-speed) internet enables quick access to a far greater number of resources and information, telehealth options and other opportunities that can be critical for education and employment. Internet access has been deemed a “super determinant” of health because of its influence on more traditional social determinants of health such as education, employment, health care access and social connection.<sup>140</sup> Household access to computers and high-speed internet is also important for school-aged children who may need this technology for school assignments and projects, particularly during the later years of primary education and beyond.<sup>141</sup> Lack of access to reliable high-speed internet disproportionately occurs in rural areas and pockets of segregated urban areas, and this disparate access is known as the digital divide. Due to the importance of high-speed internet access, the federal government has instituted several funding initiatives to improve access to and the affordability of high-speed internet, including in Arizona.<sup>xvii</sup>

### ***How the Pima North Region is faring***

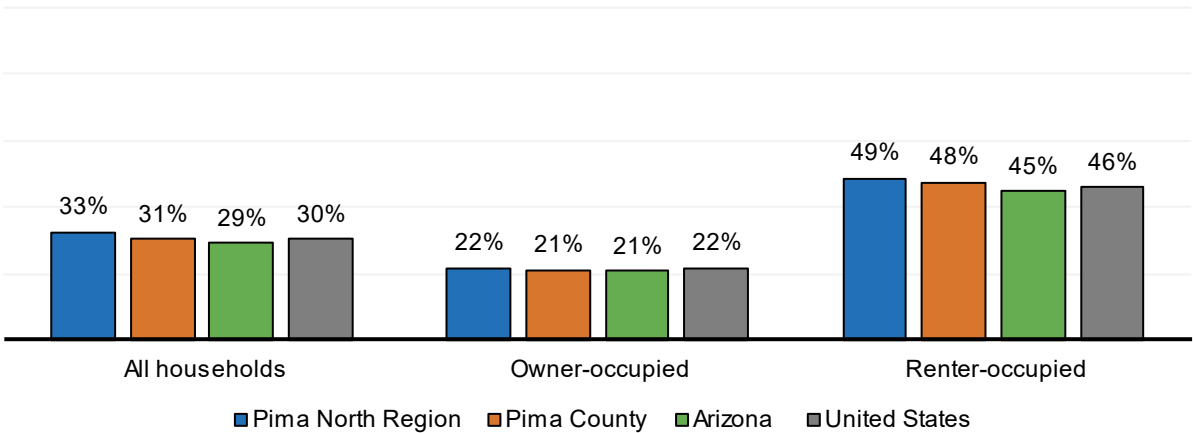
- Traditionally, housing has been deemed affordable for families if it costs less than 30% of annual household income.<sup>142</sup> One-third of households in the Pima North Region (33%) spend 30% or more of their income on housing, which is slightly higher than the proportion across the county (31%) and state (29%). Housing costs do differ by home ownership status, with fewer homeowners in the region (22%), county (21%) and state (21%) spending 30% or more of household income on housing, compared to 49% of renter-occupied households in the region, 48% in the county and 45% across the state (Figure 26).
- The McKinney-Vento Act definition of homelessness includes children living in shelters, transitional housing, campgrounds, motels, trailer parks and cars, as well as children whose families are temporarily living within another family’s household. Less than 2% of students enrolled in public and charter schools in the region and state experienced homelessness in the 2021-22 school year. However, the number of students experiencing homelessness in the region jumped from 661 students in 2020-21 to 1,065 students in 2021-22, a 61% increase in one year (Table 9).

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<sup>xvii</sup> For more information, please see <https://internetforall.gov/program/digital-equity-act-programs>

- Looking at households, 89% of households in the Pima North Region have both a computer (including smartphones) and broadband internet connectivity, similar to the county (89%) and state overall (88%) (Table 10).
- Looking at the population, almost all people (of all ages) (92%) in the region live in households with both a computer and internet connection. Children are more likely to live in a household with a computer and an internet connection, with 95% of those under age 18 with this access in the region (Figure 27 & Figure 28).

Figure 26. Percent of households spending 30% or more of household income on housing by home ownership status, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B25106

Table 9. Students experiencing homelessness (K-12) enrolled in public and charter schools, 2019-20 to 2021-22

Geography	Number of students experiencing homelessness			Percent of students who were experiencing homelessness		
	2019-20	2020-21	2021-22	2019-20	2020-21	2021-22
<b>Pima North Region</b>	<b>N/A</b>	<b>661</b>	<b>1,065</b>	<b>N/A</b>	<b>&lt;2%</b>	<b>&lt;2%</b>
Pima County	2,270	1,119	1,732	<2%	<2%	<2%
Arizona schools	12,931	8,542	11,161	<2%	<2%	<2%

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Regional data were not available for 2019-20 due to differences in how data were aggregated in prior RNA cycles. The McKinney-Vento Act provides funding and supports to ensure that children and youth experiencing homelessness have access to education. Under the McKinney-Vento Act, children are defined as homeless if they lack a “fixed, regular, and adequate nighttime address.” This includes children living in shelters, cars, transitional housing, campground, motels, and trailer parks, as well as children who are living ‘doubled up’ with another family due to loss of housing or economic hardship. More information can be found on the ADE website:

<https://www.azed.gov/homeless>

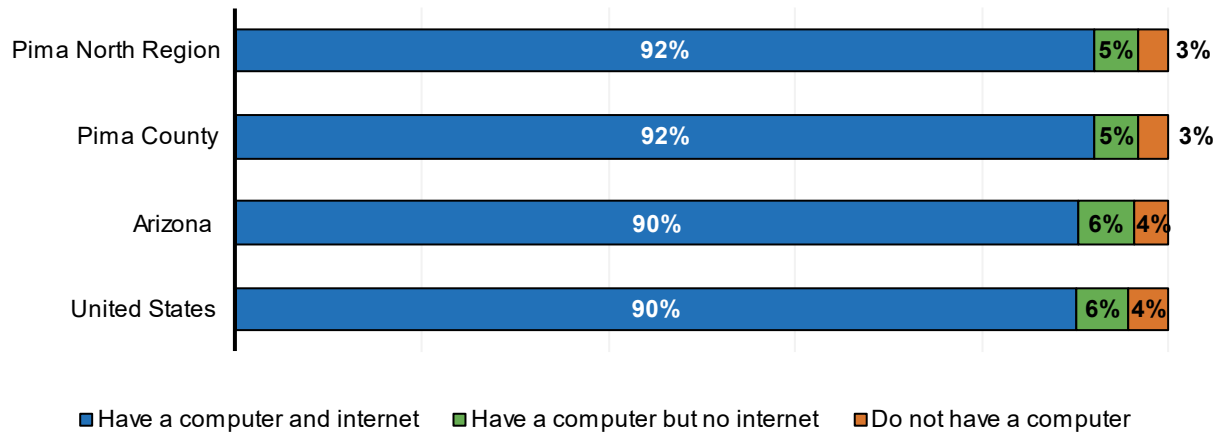
Table 10. Households with a computer and broadband internet connectivity, 2017-2021 ACS

Geography	Estimated number of households	Number and percent of households with a computer and broadband internet connectivity	
		Number	Percent
<b>Pima North Region</b>	<b>309,311</b>	<b>273,904</b>	<b>89%</b>
Pima County	417,483	369,996	89%
Arizona	2,683,557	2,350,265	88%
United States	124,010,992	106,957,995	86%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B28008.

Note: In this table, “computer” includes desktops, laptops, tablets and smartphones.

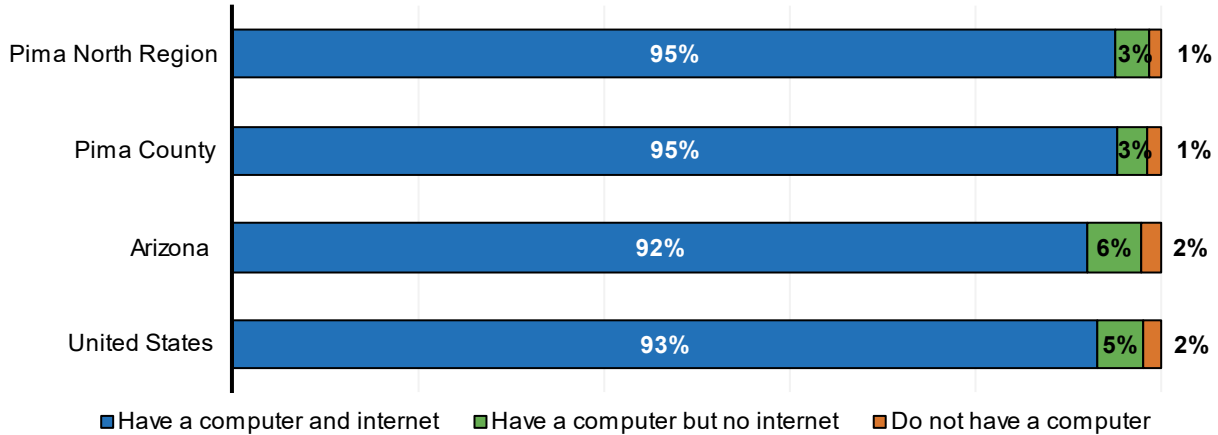
Figure 27. Persons of all ages in households with and without computers and internet connectivity, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B28005

Note: The three percentages in each bar should sum to 100%, but may not because of rounding.

Figure 28. Children birth to age 17 in households with and without computers and internet connectivity, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B28005

Note: The three percentages in each bar should sum to 100%, but may not because of rounding.

Additional data tables related to *Economic Circumstances* can be found in Appendix 1 of this report.



## **EDUCATIONAL INDICATORS**



# EDUCATIONAL INDICATORS

## Why it Matters

A community's K-12 education system can support positive outcomes for children, families and the overall well-being of the community. Individuals who have higher levels of education tend to live longer and healthier lives.<sup>143</sup> Graduating from high school, in particular, is associated with better health, financial stability and socio-emotional outcomes as well as a lower risk for incarceration compared to dropping out of high school.<sup>144, 145</sup> Children with parents that have attained higher levels of education are more likely to do well in school, such as score higher in reading, math and science in their first four years of school and attain higher levels of education themselves.<sup>146, 147, 148</sup> High-quality early learning experiences also set a strong foundation for children's learning in kindergarten, elementary school and beyond.<sup>149</sup> When children participate in high-quality early education, they are more likely to perform better in reading and math in later grades.<sup>150</sup> Given these lifetime and intergenerational impacts of educational attainment, it is critical to provide substantial support for early education and promote policies and programs that encourage the success of Arizona's children.

## What the Data Tell Us

### School attendance and absenteeism

School attendance is an important factor in predicting the academic performance and future health of children. Chronic absenteeism, defined as missing 10% of school days in a school year, predicts a student experiencing academic difficulties and even dropping out of school entirely.<sup>151</sup> Children who are part of a racial or ethnic minority group, have disabilities or other health conditions, or live in low-income families are at increased risk of absenteeism.<sup>152, 153</sup>

### *How the Pima North Region is faring*

- In the 2021-22 school year, 1,366 children were enrolled in preschool in the Pima North Region. Kindergarten through 3<sup>rd</sup> grade enrollments for the region were all much higher, ranging from a low of 6,480 in kindergarten to a high of 6,843 children enrolled in 3<sup>rd</sup> grade. For the K-3 grades, the Pima North students comprise 64% of the overall student population for the county, but they only make up 58% of preschoolers (Table 11).
- Across the state and Pima County, kindergarten through 3<sup>rd</sup> grade chronic absence rates more than tripled from 2019-20 (Arizona, 8%; Pima County, 10%) to 2021-22 (Arizona, 34%; Pima County, 38%). In the Pima North Region, chronic absence rates increased less drastically from 20% in the 2020-21 school year to 22% in the 2021-22 school year (data was not available at the region level for the 2019-20 school year) (Figure 29).

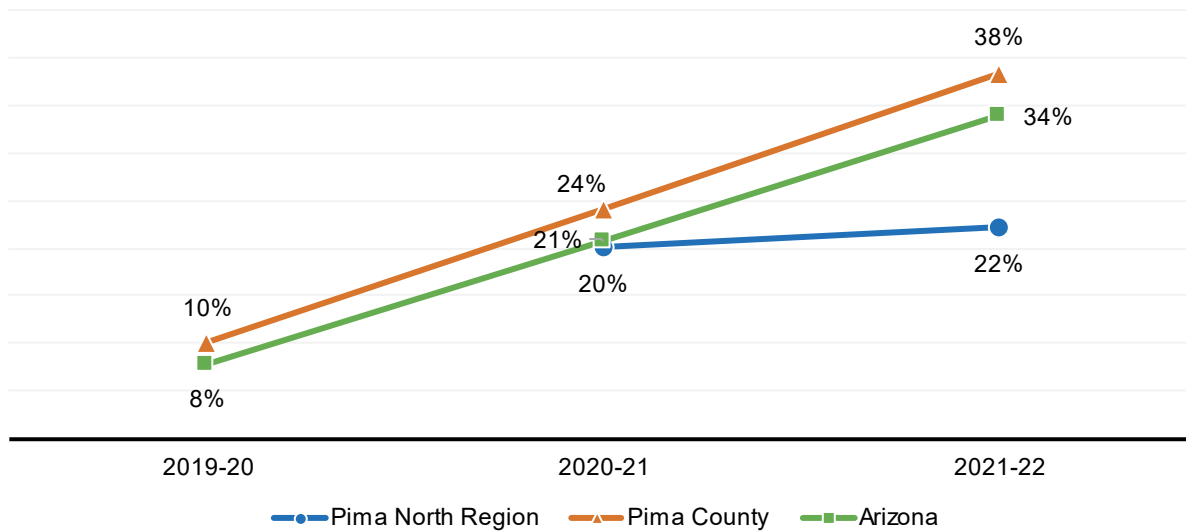


Table 11. Preschool to 3<sup>rd</sup> grade students enrolled in public and charter schools, 2021-22

Geography	Preschool	Kindergarten	1st Grade	2nd Grade	3rd Grade
<b>Pima North Region</b>	<b>1,366</b>	<b>6,480</b>	<b>6,483</b>	<b>6,792</b>	<b>6,843</b>
Pima County	2,324	10,061	10,025	10,544	10,686
Arizona schools	17,840	79,423	79,202	82,342	82,243

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Figure 29. Chronic absenteeism rates for kindergarten to 3<sup>rd</sup> grade students, 2019-20 to 2021-22



Source: Arizona Department of Education (2023). [Absenteeism Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Please note that school closures and transitions to distance learning substantially affected how attendance was tracked by schools in the spring of 2020. Regional data was not available in 2019-20 due to difference in how data were pulled in prior RNA cycles.

### Achievement on standardized testing

All Arizona public schools, including both district and charter schools (but not private schools), are required to administer state and federally mandated standardized tests. Between 2019 and 2022, the statewide English Language Arts (ELA) and Math assessment tool for 3<sup>rd</sup> through 8<sup>th</sup> graders in public schools was Arizona’s Statewide Achievement Assessment for English Language Arts and Math (AzM2), previously called Arizona’s Measurement of Educational Readiness to Inform Teaching

(AzMERIT).<sup>xviii, 154, 155</sup> The *Move on When Reading* policy, enacted by the Arizona legislature in 2010, states that a 3<sup>rd</sup> grade student shall not be promoted to 4<sup>th</sup> grade if their reading score falls far below the 3<sup>rd</sup> grade level, as established by the State Board of Education.<sup>xix, 156</sup>

These policies are intended to help identify struggling readers who may benefit from more targeted literacy interventions. Children's 3<sup>rd</sup> grade reading comprehension and proficiency skills can predict their future academic success, such as their likelihood of graduating high school and attending college.<sup>157</sup> Poor reading skills are associated with a six-fold increase in the likelihood of dropping out of high school in comparison to proficient readers.<sup>158</sup>

### ***How the Pima North Region is faring***

- In the 2021-22 school year, less than half (43%) of 3<sup>rd</sup> grade students in the Pima North Region were meeting or exceeding proficiency expectations (i.e., passing) for 3<sup>rd</sup> grade English Language Arts. While concerning, this is slightly higher than the proportion across the county (39%) and state (41%) (Table 12). In better news, passing rates did increase from the 2020-21 school year (39%) to the 2021-22 school year (43%) (Figure 30).
- Passing rates were similarly low for 3<sup>rd</sup> grade Math, with only 42% of students in the region meeting or exceeding proficiency expectations in the 2021-22 school year. This too had increased from the prior year (38%) and was higher than passing rates in the county (38%) and state (40%) (Table 13 & Figure 31).

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<sup>xviii</sup> In 2022, AzM2 was replaced by Arizona's Academic Standards Assessment (AASA).

<sup>xix</sup> Exceptions exist for students identified with or being evaluated for learning disabilities or reading impairments, English language learners and those who have demonstrated reading proficiency on alternate forms of assessment approved by the State Board of Education. Students who test in the 'far below' proficiency range can also be promoted to 4<sup>th</sup> grade if they complete summer school and then demonstrate reading at a proficient level. Given these exceptions, historically very few 3<sup>rd</sup> grade students (<1%) have been retained due to *Move on When Reading*. As of 2022, schools with early elementary grade students are now required to screen all kindergarten and first grade students for dyslexia and have at least one teacher who has complete ADE-approved trainings in reading instruction, intensifying instruction and understanding and recognizing dyslexia.

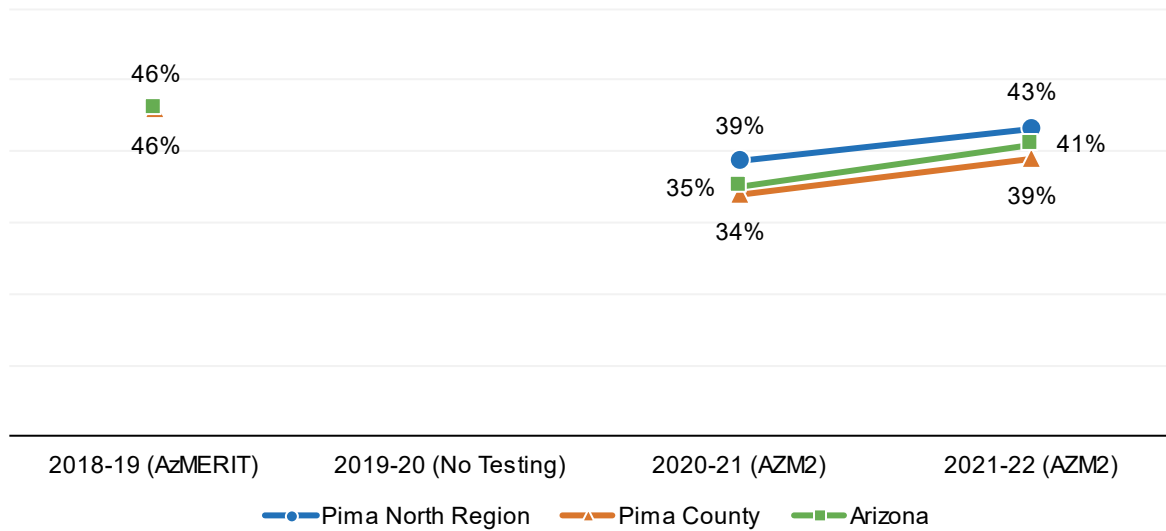
Table 12. Assessment results: 3rd Grade English Language Arts, 2021-22

Geography	Students Tested	Falls Far Below	Approaches	Meets	Exceeds	Passing
<b>Pima North Region</b>	<b>DS</b>	<b>45%</b>	<b>11%</b>	<b>27%</b>	<b>16%</b>	<b>43%</b>
Pima County	10,248	50%	11%	25%	14%	39%
Arizona schools	79,586	47%	12%	26%	15%	41%

Source: Arizona Department of Education (2023). [Assessment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: The number of students tested is suppressed at the regional level due to redaction requirements from the ADE data access process. Regional data includes charter schools that have physical locations in the region but may have district offices in another county (ADE assigns schools to counties based on the location of the district office).

Figure 30. Trends in passing rates for 3rd Grade English Language Arts assessments, 2021-22



Source: Arizona Department of Education (2023). [Assessment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Regional data were not available for 2018-19 due to differences in how data were pulled in prior RNA cycles.

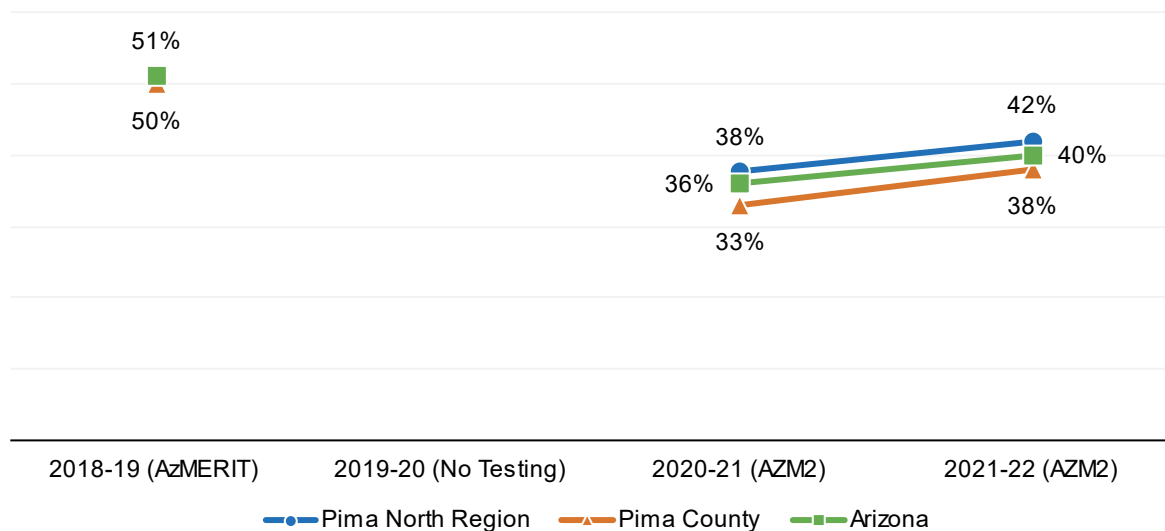
Table 13. Assessment results: 3rd Grade Math, 2021-22

Geography	Students Tested	Falls Far Below	Approaches	Meets	Exceeds	Passing
<b>Pima North Region</b>	<b>DS</b>	<b>31%</b>	<b>27%</b>	<b>30%</b>	<b>11%</b>	<b>42%</b>
Pima County	11,500	36%	26%	27%	11%	38%
Arizona schools	80,445	33%	27%	28%	12%	40%

Source: Arizona Department of Education (2023). [Assessment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: The number of students tested is suppressed at the regional level due to redaction requirements from the ADE data access process. Regional data includes charter schools that have physical locations in the region but may have district offices in another county (ADE assigns schools to counties based on the location of the district office).

Figure 31. Trends in passing rates for 3rd Grade Math assessments, 2018-19 to 2021-22



Source: Arizona Department of Education (2023). [Assessment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Regional data were not available for 2018-19 due to differences in how data were pulled in prior RNA cycles.

### Graduation rates and adult educational attainment

High school graduation and dropout rates within a region can provide insight into the assets within and challenges faced by a community and its future workforce. Adults who graduated from high school have higher rates of employment, higher incomes and better overall health compared to adults who dropped out of high school, even if they received a high school equivalency degree, such as the General Educational Development certificate (GED).<sup>159</sup> Maternal education is associated with an array of child

outcomes starting with infant health,<sup>160, 161, 162</sup> and both targeted and universal programs serving children from families with lower educational backgrounds can support child development.<sup>163, 164</sup>

In contrast to the U.S. as a whole, Arizona has a larger proportion of disconnected youth, defined as teenagers ages 16 to 19 who are neither attending school nor employed,<sup>xx</sup> which has been linked to negative physical and mental health outcomes and higher rates of unemployment.<sup>165</sup> Native youth, both nationally and in Arizona, are disproportionately disconnected and therefore particularly vulnerable to these negative outcomes and may need additional support.<sup>166</sup>

### ***How the Pima North Region is faring***

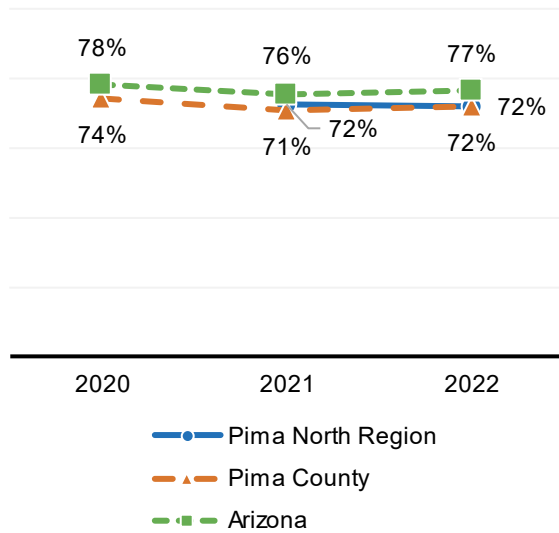
- In 2021 (the most recent year of data available for both rates), the four-year graduation rate for the Pima North Region was 72% and the five-year graduation rate was 74%. Both rates were lower than state four- and five-year graduation rates that year (76% and 79%, respectively) (Figure 32 & Table 14).
- The 7<sup>th</sup>-12<sup>th</sup> grade dropout rate for the region increased from 3% in 2019-20 to 5% in 2021-22. Both Pima County and Arizona also had increasing dropout rates during this time, though they were slightly higher in the county (4% to 7%) (Table 15).
- In the Pima North Region, 71% of adults ages 25 and older have more than a high-school education, a higher proportion than adults across the state (65%) (Figure 33).
- In 2021, 86% of births in the region were to mothers who had at least a high school diploma, GED or higher educational attainment, similar to 2020 (87%). This slight increase mirrors the trends in Pima County and Arizona (Table 16).

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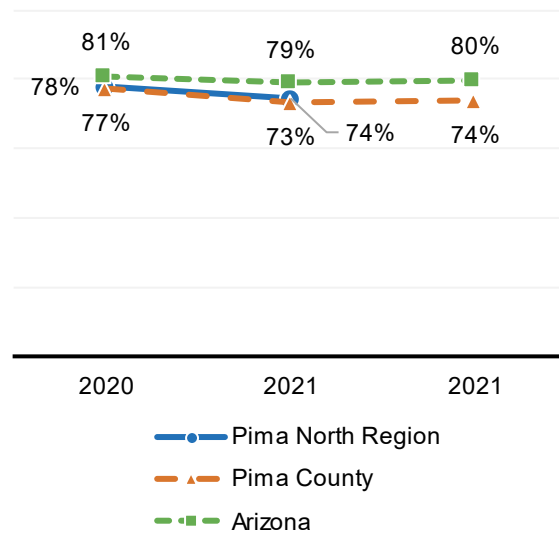
<sup>xx</sup> Age ranges used for 'disconnected youth' vary by source, with some estimates including both teenagers ages 16-19 and young adults ages 20-24 and others focusing on only teenagers or young adults.

Figure 32. Trends in 4-year and 5-year graduation rates, 2020 to 2022

4-year graduation rates



5-year graduation rates



Source: Arizona Department of Education (2023). [Graduation Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: Regional data were not available for 2020 4-year graduation rates, and 5-year graduation rates for 2022 had yet to be released at the time of the data pull for this report (December 2023). Differences between the region and county are due to the inclusion of charter schools with district offices located in another county in regional data.

Table 14. Trends in 4-year and 5-year graduation rates, 2020 to 2022

Geography	4-Year Graduation Rates			5-Year Graduation Rates		
	2020	2021	2022	2020	2021	2022
<b>Pima North Region</b>	<b>N/A</b>	<b>72%</b>	<b>72%</b>	<b>78%</b>	<b>74%</b>	<b>N/A</b>
Pima County	74%	71%	72%	77%	73%	74%
Arizona schools	78%	76%	77%	81%	79%	80%

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Regional data were not available for 2020 4-year graduation rates, and 5-year graduation rates for 2022 had yet to be released at the time of the data pull for this report (December 2023). The 5-year graduation rate reflects the percentage of students who graduated high school within 5 years of entry. See

<https://www.azed.gov/sites/default/files/2017/08/2018%2006%2001%20Graduation%20DO%20and%20Persistence%20Rate%20Tech%20Manual.pdf?id=598a34233217e10ce06647ff>

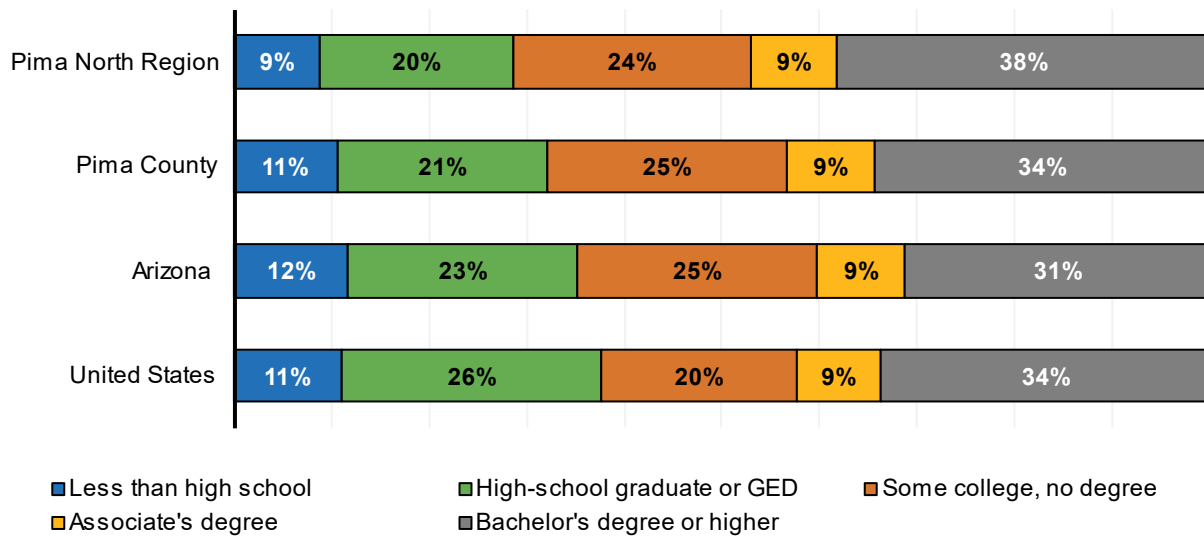
Table 15. 7th to 12th grade dropout rates, 2019-20 to 2021-22

Geography	Dropout Rate, 2019-20	Dropout Rate, 2020-21	Dropout Rate, 2021-22
<b>Pima North Region</b>	<b>3%</b>	<b>5%</b>	<b>5%</b>
Pima County	4%	6%	7%
Arizona Schools	3%	4%	5%

Source: Arizona Department of Education (2023). [Dropout Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Notes: Dropouts are defined by ADE as students who were enrolled in school at any time during the school year but were not enrolled at the end of the year and who did not transfer to another school, graduate, or die. Dropout rates are calculated by dividing the number of dropouts by the total enrollment. In many elementary districts, dropout rates reflect students who transferred out and were lost to follow-up.

Figure 33. Level of education for the adult population (ages 25 and older), 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table B15002

Note: The five percentages in each bar should sum to 100%, but may not because of rounding.

Table 16. Level of education of the mothers of babies born in 2020 and 2021

Geography	Calendar year	Number of births	Mother had less than a high-school education	Mother finished high school or had GED	Mother had more than a high-school education
<b>Pima North Region</b>	<b>2020</b>	<b>6,611</b>	<b>13%</b>	<b>26%</b>	<b>61%</b>
	<b>2021</b>	<b>6,555</b>	<b>12%</b>	<b>25%</b>	<b>61%</b>
Pima County	2020	10,035	14%	27%	58%
	2021	9,970	13%	27%	59%
Arizona	2020	76,781	15%	27%	57%
	2021	77,857	14%	27%	58%

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this table. Please note that maternal education is unknown for a small number of births so totals may not sum to 100%.

Additional data tables related to *Educational Indicators* can be found in Appendix 1 of this report.





# EARLY LEARNING

# EARLY LEARNING

## Why it Matters

Early childhood is a pivotal time for building crucial physical, cognitive and social-emotional skills.<sup>167,</sup>  
<sup>168</sup> Early experiences are important for healthy brain development and set the stage for lifelong learning and well-being.<sup>169, 170, 171</sup> Just as rich, stimulating environments can promote healthy development, early negative experiences can also have lasting effects.<sup>172, 173</sup> However, considering the major COVID-19 pandemic-related challenges experienced by many Arizona families, it is important to remember that predicted short- and long-term effects of adverse experiences are not inevitable.<sup>174, 175</sup> Access to quality early care and learning environments can be a powerful protective factor for every child, and the effects can be particularly life-changing for children facing chronic stressors and for children with disabilities.<sup>176, 177</sup>

Quality early care and educational experiences help children develop into capable learners by supporting many crucial systems in the body.<sup>178</sup> In addition to promoting healthy brain development, positive and adverse experiences in the first few years of life can shape a child's immune functioning, ability to handle stress in a healthy way and capacity to learn and thrive.<sup>179</sup> Each of these factors contribute to being a skillful learner.<sup>180</sup>

## What the Data Tell Us

### Access to early care and education

Early childhood systems play a key role in supporting children, parents, caregivers and communities as a whole.<sup>181, 182</sup> Unfortunately, many Arizona families continue to face obstacles when seeking quality early care and education. Communities in both urban and rural areas of Arizona face a gap between the number of young children and licensed child care slots.<sup>183, 184, 185, 186</sup> According to the Center for American Progress, almost half of Arizonans (48%), including the majority of rural, low-income and Hispanic or Latino families, live in a “child care desert,” defined as areas where there are three times as many children as there are available child care opportunities.<sup>187, 188</sup>

Analyses by the Bipartisan Policy Center indicate that Arizona needed an additional 76,740 licensed or registered early care and education slots to have enough for all young children in working families in 2019.<sup>189</sup> Because the COVID-19 pandemic forced many child care centers and home-based providers to close either temporarily or permanently, care has been disrupted for many more families in Arizona and nationwide.<sup>190</sup> Disruptions to child care arrangements may have been especially burdensome for Hispanic and Latino households,<sup>191</sup> which is meaningful to Arizona given the high proportion of young children who are Hispanic or Latino compared to children nationwide. Parents and caregivers in Hispanic and Latino households were less likely to use paid leave or to simultaneously supervise their children while working – likely due to lower access to paid leave and telework options – and more likely to leave or lose their job as a result.<sup>192</sup>

Availability and cost are especially challenging for parents seeking care for infants and young children in Arizona. For example, a family with one infant and one preschooler can expect to pay about \$1,670 per month for a licensed child care provider.<sup>193</sup> This monthly cost exceeds what many Arizonans pay per month for housing, creating potential financial challenges that are further compounded for families with multiple children under the age of 6.<sup>xxi, 194, 195</sup> The Arizona Department of Economic Security (DES) provides child care assistance to financially eligible families, including specific funding for families involved with the Arizona Department of Child Safety (DCS).<sup>196</sup> However, families that are eligible to receive funding may not have access to child care services in their community that are licensed or that accept assistance payments, leaving them unable to utilize the funding.<sup>197, 198</sup>

### ***How the Pima North Region is faring***

- In the Pima North Region, 44% of children (ages 3 and 4) were estimated to be enrolled in preschool<sup>xxii</sup> or kindergarten, higher than the proportions in the county (41%) and state (36%). Preschool enrollment in the region increased slightly in recent years from 43% to 44% (Figure 34). In 2021, preschool enrollment in Arizona hit a 10-year low.<sup>199</sup>
- The vast majority of licensed child care capacity in the region is provided by child care centers (98%), with a small proportion provided by the 99 licensed family child care providers (2%). Given that there are about 27,000 children with all parents in the labor force in the region (see Table 8), according to the 2017-2021 American Community Survey (ACS), an availability of over 27,000 child care slots suggests that supply and demand for early care and education may be fairly well-matched at the regional level (Table 17).
- An area is labeled a child care desert if the ratio of children to child care slots is 3 to 1 or more. Looking collectively across all children birth to age 5, the Pima North Region does not meet the criteria of a child care desert, with a ratio of 1.5 children to each slot. However, for infant and 1-year old care, the situation is different. There are 3.1 times the number of 1-year-olds in the region as available slots for those children and 7.7 times the number of infants than infant child care slots. While this pattern is similar across the state, the relative availability of infant and 1-year-old child care is slightly better in the Pima North Region. There were 2,889 slots for infants and 1-year-olds in Arizona Department of Health Services (ADHS)-licensed child care providers in July 2023 in the region. Given that the 2020 Census estimated 12,697 children under age 2 in the region, this child care capacity suggests that parents of the youngest children in this region

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<sup>xxi</sup> In addition to the financial challenges faced by parents paying for child care, the early care and education workforce is one of the most underpaid fields in the country. Nationally, educators working with infants and toddlers are 7.7 times more likely to live in poverty compared to K-8 teachers. The median hourly wage for a child care worker in Arizona (\$11.97) is \$13.19 less per hour than what is considered a living wage for a single parent with 1 child (\$25.16). For more information on early care and education workforce wages visit <https://cscce.berkeley.edu/workforce-index-2020/the-early-educator-workforce/early-educator-pay-economic-insecurity-across-the-states/>

<sup>xxii</sup> The American Community Survey uses the terms nursery school and preschool interchangeably.

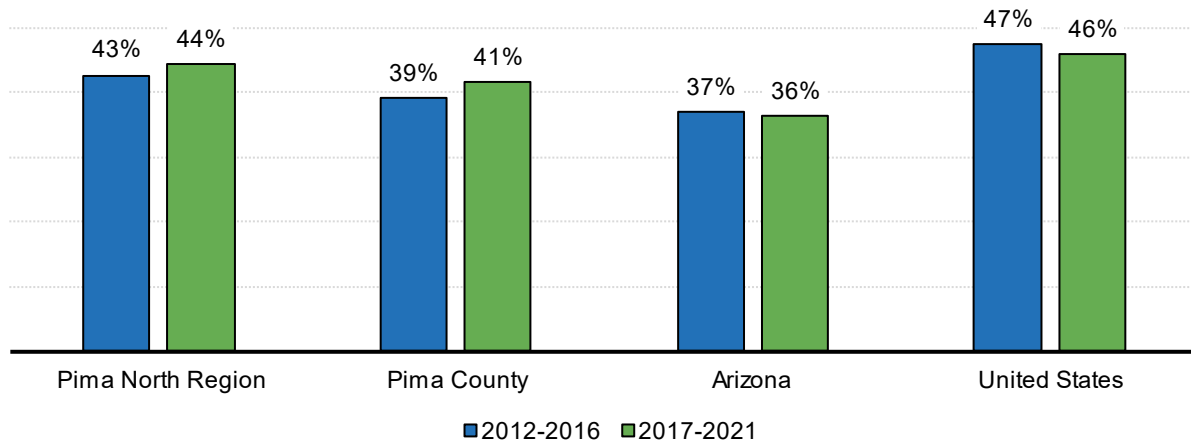
may face particular challenges in finding quality child care for their children (Table 18, Figure 35 & Table 3).

- Certified family homes in Pima County are the lowest priced type of care for young children in the region, at a median monthly cost of \$630 per month for infants through 5-year-olds. For other types of care, care for infants is the most expensive in the county and the state, with the median monthly cost for infant care in public schools (\$1,067) and licensed centers (\$1,050) the most expensive and slightly more costly than similar care across the state (\$1,011 and \$949, respectively) (Figure 36).
- Child care cost as a percentage of income is slightly elevated in Pima County compared to the state overall. In 2022, sending an infant to a licensed center in Pima County cost more than one-sixth (18%) of a family's income, compared to 15% for families across the state. The percentage of income spent on older children's care was lower in comparison in both the county and state (Figure 37).
- Median child care costs have also been increasing in the county and state since 2018. For example, the cost of care in the most available type of care in Pima County, licensed centers, increased 16% for one infant, 6% for one 1–2-year-old and 9% for one 3–5-year-old between 2018 and 2022. However, county-level increases in the cost of care during this time were notably smaller than those seen statewide for all ages and provider types (Table 19).
- The number of children eligible for and receiving DES child care assistance in the Pima North Region has generally mirrored the pattern seen across the state in recent years. The number of children receiving assistance was steadily increasing before the onset of the COVID-19 pandemic, peaking at 3,407 in 2019 then dropping in 2020. By 2022, the number of children receiving assistance in the region had rebounded to 3,074 (Figure 38). Also tracking with the COVID-19 pandemic, the proportion of eligible families not using DES child care assistance peaked in the region and state in 2020 (region, 17.5%; Arizona, 18.3%), declining substantially by 2022 (region, 7.2%; Arizona, 9.2%), though still higher than pre-pandemic levels (Figure 39).
- Children are automatically eligible for DES child care assistance when they are involved with DCS.<sup>xxiii</sup> For DCS-involved children, the number of children receiving assistance in the region has decreased in recent years, from a high of 1,821 young children in 2018 to 1,292 in 2022 with a notable drop in 2020, aligning with statewide trends (Figure 40).

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<sup>xxiii</sup> Children involved with DCS include children who have been removed by DCS and placed with a foster family or kinship caregiver as well as children who are residing with their own family but receiving services from DCS (such as in-home family support and counseling). Families of these children are not required to pay a co-pay for child care.

Figure 34. School enrollment for children ages 3 to 4, 2012-2016 and 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B14003. U.S. Census Bureau. (2017). American Community Survey 5-year estimates 2012-2016, Table B14003

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

Table 17. Number and Capacity of Early Care & Education Providers active in the National Data System for Child Care, May 2023

Geography	Total ECE Providers		Child care centers		Family child care providers		Nannies or individual providers	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
<b>Pima North Region</b>	<b>356</b>	<b>27,766</b>	<b>255</b>	<b>27,154</b>	<b>99</b>	<b>605</b>	<b>2</b>	<b>7</b>
Pima County	516	34,495	311	33,152	203	1,336	2	7
Arizona	2,454	211,860	1,933	208,407	516	3,435	5	18

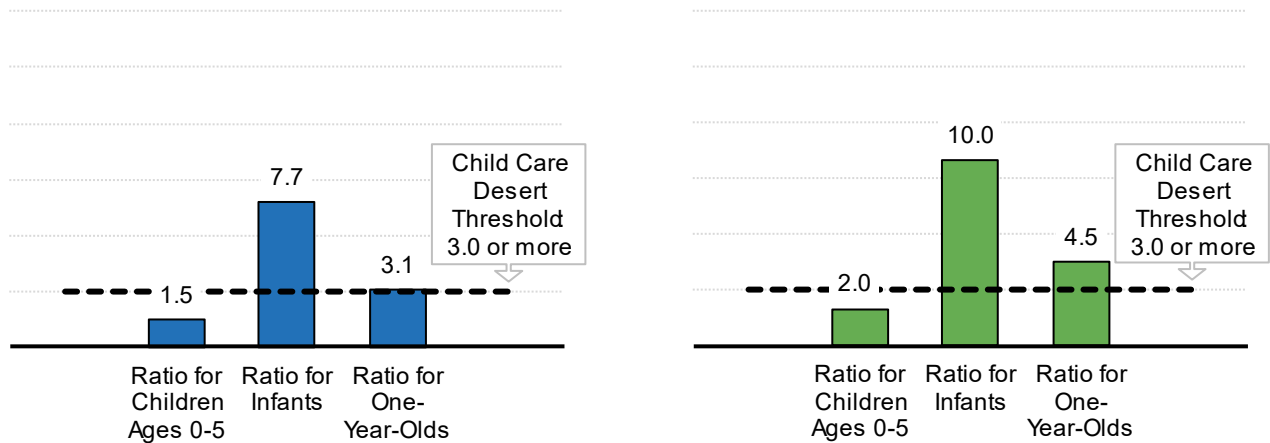
Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Note: Providers in this table are those who were active in the National Data System for Child Care NACCRRAware database as of May 2023. This database of child care providers includes most state-licensed child care providers in the state of Arizona, but the database does not include informal or unlicensed providers or providers who are licensed through military or tribal authorities. Please also note that not all school-based preschools or Head Start centers participate in this data system (whereas all center-based facilities are required to be licensed and thus will appear in the ADHS licensing dataset in Table 18).

Figure 35. Ratio of children to slots in ADHS-licensed child care facilities, July 2023

Pima North Region

Arizona



Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14. ADHS (2023). [Child Care Licensing Database]. Retrieved from <https://www.azdhs.gov/licensing/childcare-facilities/index.php#parents-databases> on 12 July 2023

Note: ADHS licenses most child care centers in the state of Arizona, except for those regulated by military or tribal authorities. While these licensed slots do not account for home-based care, as evidenced in Table 17, the majority of child care capacity in the region is in center-based care. Child care deserts are defined by the Center for American Progress as areas where there are more than three times as many children as available child care slots. To see a nationwide map of childcare supply, visit <https://childcaredeserts.org/>

Table 18. ADHS-licensed child care providers by age of child served, July 2023

Geography	Licensed Providers		Infants		1-year-olds		Number of providers licensed for 2-year-olds	Number of providers licensed for 3- to 5-year-olds
	Num	Capacity	Num.	Capacity	Num.	Capacity		
<b>Pima North Region</b>	<b>287</b>	<b>27,660</b>	<b>107</b>	<b>816</b>	<b>146</b>	<b>2,073</b>	<b>172</b>	<b>255</b>
Pima County	397	34,337	170	957	216	2,401	236	340
Arizona	2,344	246,369	822	7,474	1,136	17,323	1,217	2,175

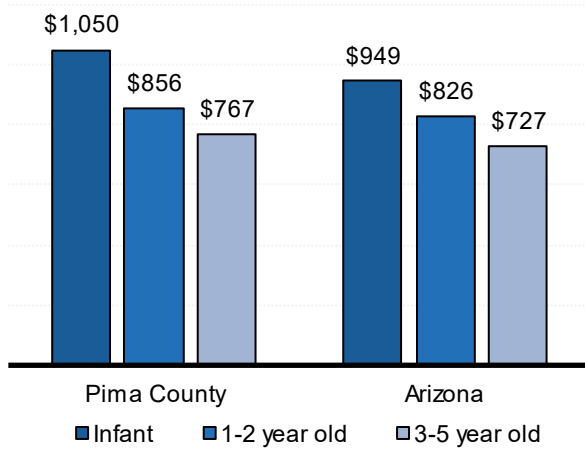
Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14. ADHS (2023). [Child Care Licensing Database]. Retrieved from <https://www.azdhs.gov/licensing/childcare-facilities/index.php#parents-databases> on 12 July 2023

Note: ADHS licenses most child care centers in the state of Arizona, except for those regulated by military or tribal authorities. While these licensed slots do not account for home-based care, as evidenced in Table 17, the majority of child care capacity in the region is in center-based care.

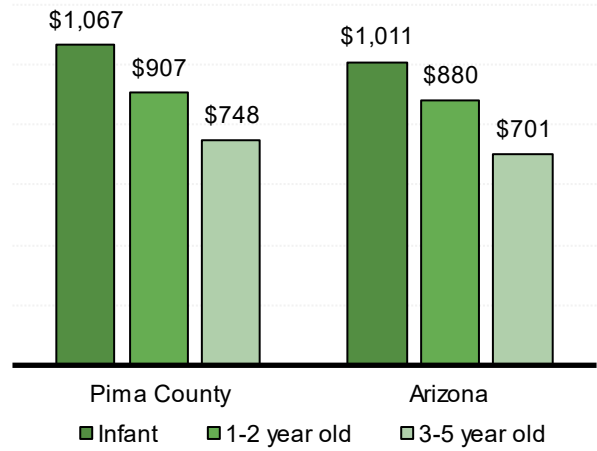


Figure 36. Median monthly charge for full-time child care, 2022

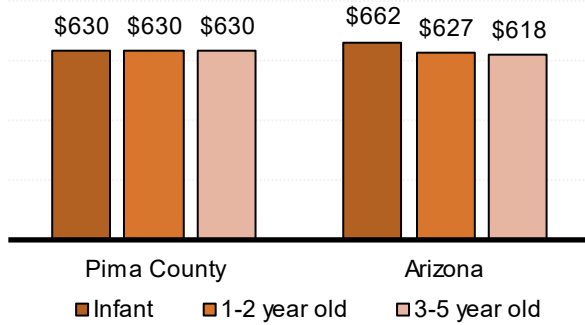
Licensed centers



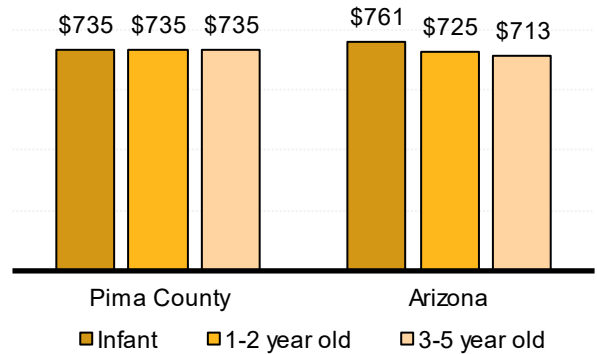
Public schools



Certified family homes



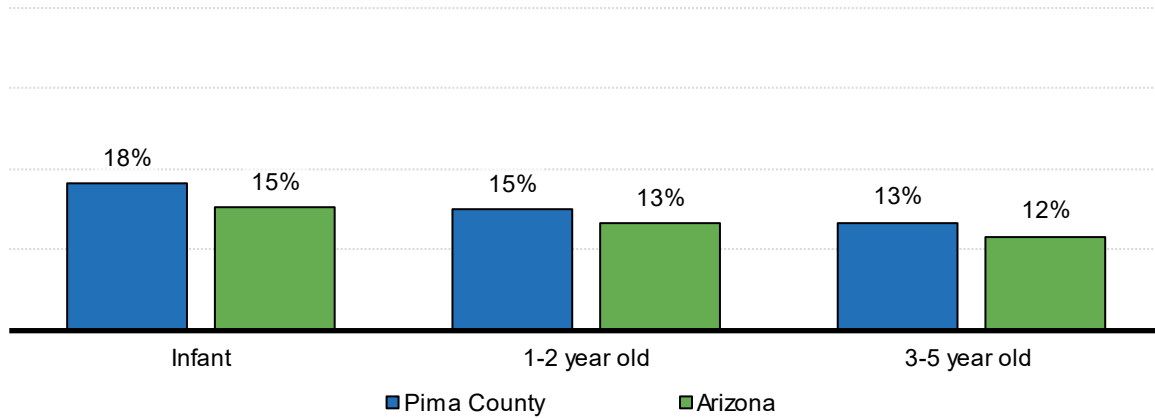
Small group homes



Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540>

Note: Median monthly charges are calculated by multiplying the daily median cost of care by 21 to approximate a full month of care.

Figure 37. Cost of center-based child care for one child, as a percentage of income, 2022



Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540>

Note: Annual costs of care are calculated by multiplying the median daily cost of care by 252 to approximate a full year of care. The U.S. Department of Health and Human Services Child Care and Development Fund (CCDF) Program sets a benchmark for affordable co-payments for child care at 7% of family income.

Table 19. Increase in median child care cost by provider type and child age, 2018 to 2022

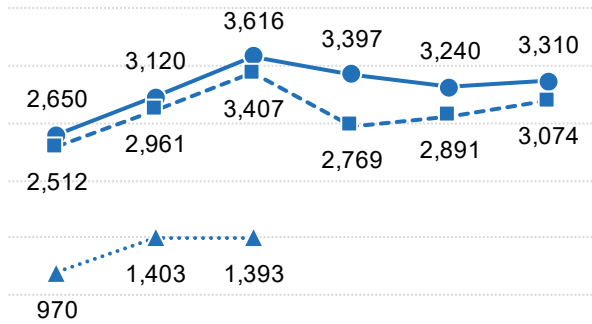
Geography	Certified family homes			Small group homes			Licensed centers		
	One infant	One 1 or 2 year old	One 3 to 5 year old	One infant	One 1 or 2 year old	One 3 to 5 year old	One infant	One 1 or 2 year old	One 3 to 5 year old
<b>Pima North Region</b>	<i>Regional data not available</i>								
Pima County	+17%	+17%	+17%	+17%	+25%	+25%	+16%	+6%	+9%
Arizona	+26%	+23%	+26%	+28%	+28%	+28%	+21%	+19%	+18%

Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540>



Figure 38. Children birth to age 5 eligible for, receiving, and on waitlist for DES child care assistance, 2017 to 2022

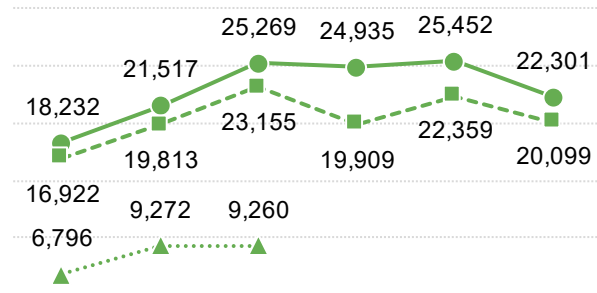
Pima North Region



CY2017 CY2018 CY2019 CY2020 CY2021 CY2022

- Children eligible for assistance
- -■- Children receiving assistance
- ...▲... Children on waitlist

Arizona



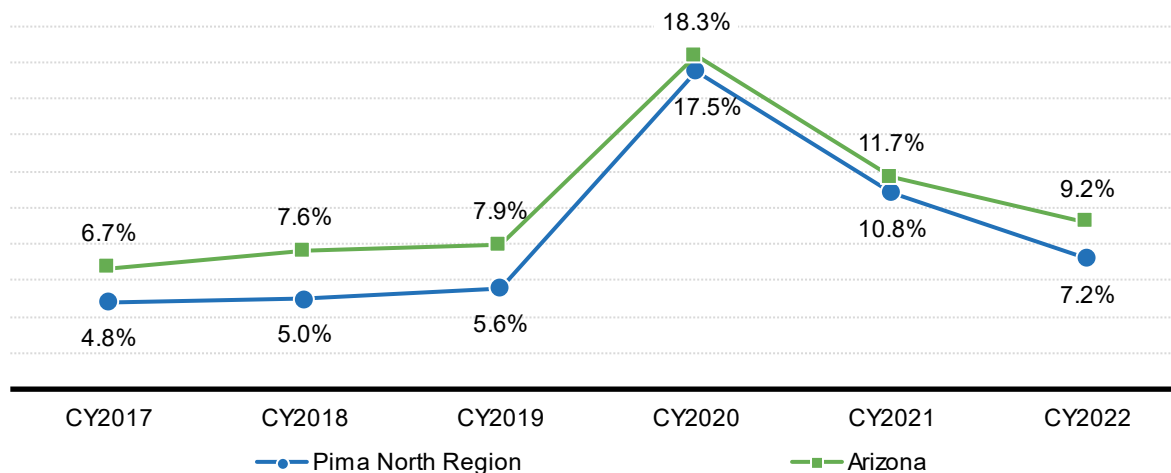
CY2017 CY2018 CY2019 CY2020 CY2021 CY2022

- Children eligible for assistance
- -■- Children receiving assistance
- ...▲... Children on waitlist

Sources: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

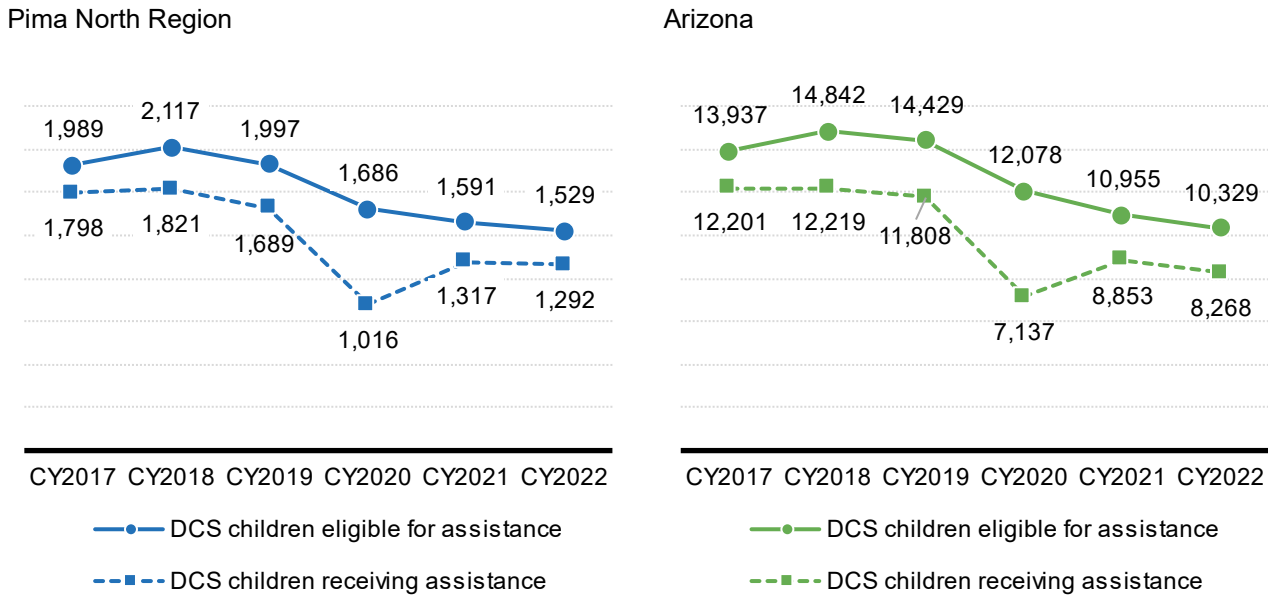
Note: The DES child care waitlist was suspended in June 2019, so there are no waitlist numbers for 2020 or beyond. DES child care assistance amounts vary based on a number of factors including the age of the child, the type of provider and the quality status of the provider. For more information, please see the current DES reimbursement rates for child care at [https://des.az.gov/sites/default/files/dl/CCA-1227A\\_1.pdf?time=1646262773961](https://des.az.gov/sites/default/files/dl/CCA-1227A_1.pdf?time=1646262773961)

Figure 39. Eligible families not using DES child care assistance, 2015 to 2020



Source: Arizona Department of Economic Security (2021). [Child Care Administration dataset]. Unpublished data.

Figure 40. DCS-involved children birth to age 5 eligible for and receiving for DES child care assistance, 2017 to 2022



Sources: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Note: The DES child care waitlist was suspended in June 2019, so there are no waitlist numbers for 2020 or beyond. DES child care assistance amounts vary based on a number of factors including the age of the child, the type of provider and the quality status of the provider. For more information, please see the current DES reimbursement rates for child care at [https://des.az.gov/sites/default/files/dl/CCA-1227A\\_1.pdf?time=1646262773961](https://des.az.gov/sites/default/files/dl/CCA-1227A_1.pdf?time=1646262773961)

## High quality early care and education

Children who begin their education in high-quality preschool programs tend to repeat grades less frequently, obtain higher scores on standardized tests, experience fewer behavior problems and are more likely to graduate from high school.<sup>200</sup> This provides 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>201, 202</sup> The key ingredients in positive early experiences include responsive relationships, core adaptive skills development, reduced sources of stress and appropriate nutrition – all things that quality early care and education are in a unique position to provide at the critical time to encourage optimal learning and well-being for years to come.<sup>203</sup> Early care and education shapes far more than a child’s future academic achievement, and an investment in early childhood can be one of the most productive investments a community can make.<sup>204</sup>

One way that the quality of early child care and education is measured in Arizona is through the Quality First program.<sup>205</sup> The program offers training and funding for participating schools and providers to improve the quality of the services they provide. The Quality First program also rates the quality of child care providers and preschools on a scale of one to five stars, with providers considered high quality when they have received a three-star rating or higher.<sup>206</sup> Quality First providers are supported by regional funding.

***How the Pima North Region is faring***

- The 196 Quality First child care providers in the Pima North Region enrolled 8,545 young children in state fiscal year (SFY) 2023. The majority (70%) of children in Quality First sites in the region were enrolled at a site with a 3-5-star rating, indicating a high-quality provider. An additional 23% were enrolled at a site that had not yet been given a star rating. This was similar to rates across the state, where 68% of children enrolled in Quality First sites were at a site with a 3-5-star rating (Table 20, Table 21 & Figure 41).
- More than one in eight (13%) children enrolled in a Quality First provider site in the region (1,118 of 8,545) were served by Quality First Scholarships in SFY 2023 (Table 21).
- In May 2023, 43 licensed or registered child care providers in the region were nationally accredited, representing 12% of providers in the region. These accredited providers had the capacity to serve 4,156 children, which represents 15% of child care capacity in the region (Table 22).
- DES defines quality environments as child care providers with a 3-, 4-, or 5-star Quality First rating, a national accreditation, or a Child Development Associate (CDA) credential for family child care providers. At the regional level in 2022, 73% of non-DCS-involved young children and 83% of DCS-involved children receiving DES child care assistance were enrolled in quality environments, higher proportions than across the state as a whole (68% non-DCS; 72% DCS) (Table 23).

Table 20. Quality First child care providers by funding source, state fiscal year 2023

Geography	Child care providers served	Regional Funding	DES Expansion	Buy-In
<b>Pima North Region</b>	<b>196</b>	<b>127</b>	<b>69</b>	<b>0</b>
Pima County	<i>County data not available</i>			
Arizona	1,434	1,045	384	5

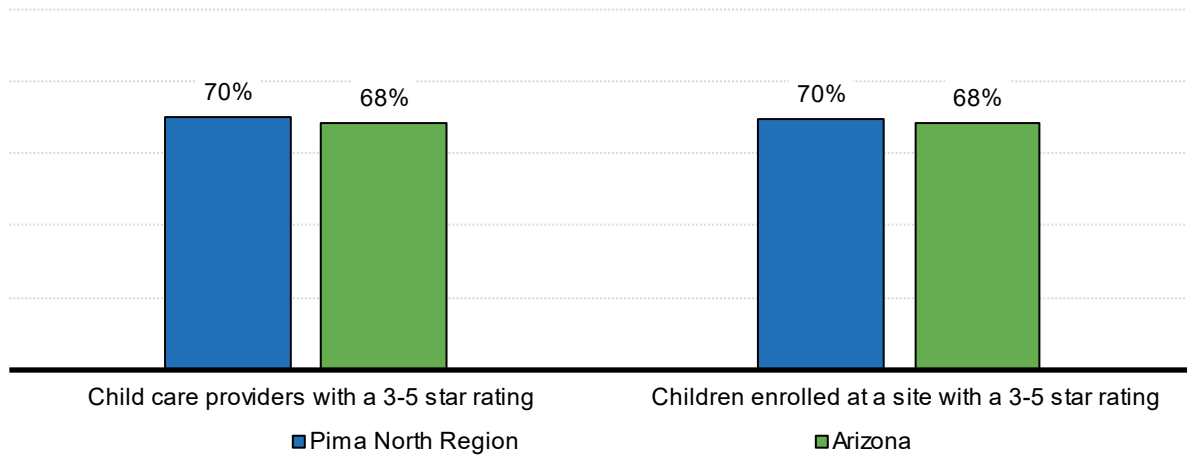
*Source: First Things First (2023). Quality First Summary Data. Unpublished data.*

Table 21. Children served by Quality First child care providers, state fiscal year 2023

Geography	Children enrolled at a Quality First provider site	Children enrolled at a Quality First provider site with a star rating	Children enrolled at a Quality First provider site with a 3-5 star rating	% of Children in a Quality-Level Setting (3-5 Stars)	Children served by Quality First Scholarships
<b>Pima North Region</b>	<b>8,545</b>	<b>6,621</b>	<b>5,953</b>	<b>70%</b>	<b>1,118</b>
Pima County	<i>County data not available</i>				
Arizona	70,837	54,155	48,379	68%	8,262

Source: First Things First (2023). Quality First Summary Data. Unpublished data.

Figure 41. Percent of Quality First programs with a 3-5 star-rating and percent of children enrolled in quality-level programs, state fiscal year 2023



Source: First Things First (2023). Quality First Summary Data. Unpublished data.

Note: Quality First considers providers with a 3-star rating and above to be 'quality level.' Percents are of total Quality First providers and children enrolled in Quality First sites.

Table 22. Number and licensed capacity of accredited child care providers, May 2023

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>Pima North Region</b>	<b>43</b>	<b>12%</b>	<b>4,156</b>	<b>15%</b>
Pima County	67	13%	5,091	15%
Arizona	224	9%	25,486	12%

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Note: This table includes only 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. The difference between the region and the county is due to providers in the Cocopah Tribe Region.

Table 23. Children receiving DES child care assistance who are enrolled in quality environments, 2022

Geography	Children ages 0-5 (non-DCS involved)			DCS-involved children ages 0-5		
	Received assistance	Enrolled in quality environment	Percent in quality environment	Received assistance	Enrolled in quality environment	Percent in quality environment
<b>Pima North Region</b>	<b>3,074</b>	<b>2,257</b>	<b>73%</b>	<b>1,292</b>	<b>1,068</b>	<b>83%</b>
Pima County	4,313	2,911	67%	1,771	1,365	77%
Arizona	20,099	13,619	68%	8,268	5,969	72%

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Note: Quality environments are defined by DES as child care providers with a 3-, 4-, or 5-star Quality First rating, a national accreditation, or a Child Development Associate (CDA) credential for family child care providers. DCS-involved means that DCS is involved with the child or their family. In other words, the child has been reported to DCS and determined to need some level of supervision while in their parents' home, or the child has been removed

### Young children with special needs

Timely intervention can improve the language, cognitive and socio-emotional developmental outcomes of young children who have, or are at risk for, developmental delays.<sup>207, 208</sup> Early intervention also reduces educational costs by decreasing the need for special education.<sup>209</sup> Ensuring that children have access to timely and adequate screening and intervention services from birth to age 5 can be key for preparing children for kindergarten.

In Arizona, the Arizona Early Intervention Program (AzEIP),<sup>xxiv</sup> the Division of Developmental Disabilities (DDD),<sup>xxv</sup> and the Arizona Department of Education (ADE) Early Childhood Special Education Program are designed to provide services to families with children who have special needs.<sup>xxvi</sup> AzEIP is a program under DES that provides early intervention and a variety of supportive services to Arizona children birth to age 2 with developmental delays or disabilities, as well as their families.<sup>210</sup> The goal of these services is to improve the learning and development of children and inform their family members of how they can best support their child.<sup>211</sup> DDD is a program under DES that provides supportive services to people of all ages with a qualifying developmental disability, including cerebral palsy, autism spectrum disorder, down syndrome, epilepsy and cognitive disabilities.<sup>212</sup> Children under the age of 6 that have been assessed by AzEIP to have a qualifying disability may also receive DDD services. At age 3, children with special needs transition from AzEIP services to their local education agency (LEA), usually a school district. Each Arizona school district is mandated to participate in Child Find<sup>xxvii</sup> and to provide preschool services to children with special needs either through their own schools or through agreements with other programs such as Head Start.

According to national research, insufficient funding and staffing of these programs are the greatest obstacles to identifying and providing resources for all children who would benefit from early intervention.<sup>213</sup> Arizona falls in the bottom 10 states in the nation for early intervention service provision.<sup>214</sup> Fewer children in Arizona are accessing critical early intervention services that can identify disabilities, provide parent-coaching and encourage optimal development at home.<sup>215</sup> This matters because, while early education discussions often center around pre-kindergarten for 4-year-olds, research continues to point to the impact of experiences during the first three years of life as being just as crucial for healthy brain and body development.<sup>216</sup> Positively, Arizona has taken steps toward improving funding for early intervention, including being one of 10 states to cross-reference Medicaid and Early Intervention data to maximize federal Medicaid matching of funds.<sup>217</sup>

### ***How the Pima North Region is faring***

- Children birth to age 2 are most frequently referred to AzEIP by physicians in both the Pima North Region and across the state, comprising more than half of referrals in federal fiscal years (FFY) 2021 and 2022. Public health and social service agency referrals have been consistently higher in the region than across the state in recent years, while parent and family referrals consistently made up a lower proportion in the region compared to the state (Figure 42).

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<sup>xxiv</sup> For more information on AzEIP (which is a division of the Department of Economic Security), visit <https://www.azdes.gov/azeip/>

<sup>xxv</sup> For more information on DDD (which is a division of the Department of Economic Security), visit <https://des.az.gov/services/disabilities/developmental-disabilities>

<sup>xxvi</sup> For more information on ADE's Early Childhood Special Education program, visit <http://www.azed.gov/ece/early-childhood-special-education/> and <http://www.azed.gov/special-education/az-find/>

<sup>xxvii</sup> The Arizona Child Find program is a component of the Individuals with Disabilities Education Act (IDEA) that requires states to identify and evaluate all children with disabilities (birth through age 21) to attempt to ensure that they receive the supports and services they need.

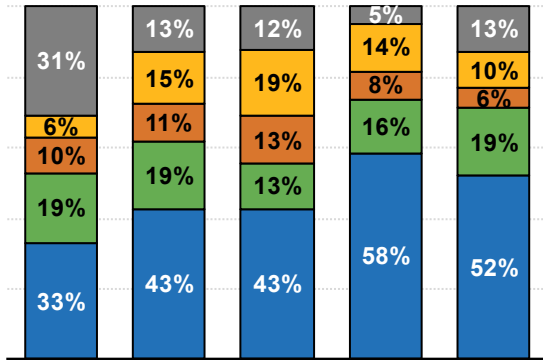
- About a quarter (27%) of children birth to age 2 referred to AzEIP in FFY 2022 were found eligible (10%) or received services (17%) in the Pima North Region, a smaller proportion than the 37.1% referred across the state who were found eligible (16.1%) or received services (21%). Among referred children in the region, a higher proportion (26%) were assessed and found to not have a qualifying developmental delay compared to children across the state (22%) (Figure 43).
- In the Pima North Region, the number of children birth to age 2 receiving services from AzEIP decreased between 2019 (n=426) and 2022 (n=355), mirroring the statewide trend (Figure 44).
- The Pima North Region and the state were serving a notably lower number of children through DDD services in SFYs 2019 to 2022 compared to SFY 2017 and 2018. Following a low of 186 young children served in SFY 2021, in SFY 2022, 234 children birth to age 5 received DDD services in the region. The annual pattern of children served in the region follows that of the state as a whole (Figure 45).
- Qualifying children may receive services from AzEIP and/or DDD, a number which can be used to estimate the total number of young children receiving early intervention services in a region. The total number of children birth to age 2 receiving AzEIP and/or DDD services<sup>xxviii</sup> decreased overall between SFY 2019 and 2022 in the region, similar to the overall decrease seen across the state. In SFY 2022, a total of 367 children birth to age 2 were receiving services from AzEIP and/or DDD in the Pima North Region. Based on 2020 Census population counts, about 1.9% of children birth to age 2 were receiving AzEIP and/or DDD services in the region, compared to 2.6% across the state in SFY 2022 (Figure 46 & Table 3).
- The number of preschoolers with disabilities served in LEAs has decreased in both the region and the state since SFY 2020. In SFY 2022, 566 preschoolers with disabilities were served in the Pima North Region, the lowest number served since SFY 2018 (n=752). Among those receiving services, 49% had a developmental delay, 35% had a speech or language impairment and 15% had a preschool severe delay (Figure 47 & Figure 48).
- The number of kindergarten through 3<sup>rd</sup> grade students enrolled in special education in public and charter schools in the Pima North Region has averaged about 3,500 between SFY 2018 and 2022. In SFY 2022, 43% of the 3,452 students (K-3<sup>rd</sup>) enrolled in special education in the region were diagnosed with a speech or language impairment, a larger proportion than students statewide (36%). An additional 25% were diagnosed with a developmental delay, 12% with a specific learning disability, 8% with autism and 12% with another disability (Figure 49 & Figure 50).

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<sup>xxviii</sup> Please note that this is a unique count of children receiving AzEIP services, DDD services, or both AzEIP and DDD.

Figure 42. Children birth to age 2 referred to AzEIP by referral source, federal fiscal years 2018 to 2022

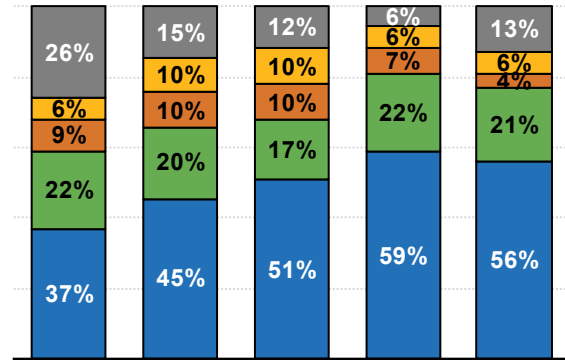
Pima North Region



FFY2018 FFY2019 FFY2020 FFY2021 FFY2022

- Other
- Public health/social service agency
- Hospital
- Parent/family
- Physician

Arizona



FFY2018 FFY2019 FFY2020 FFY2021 FFY2022

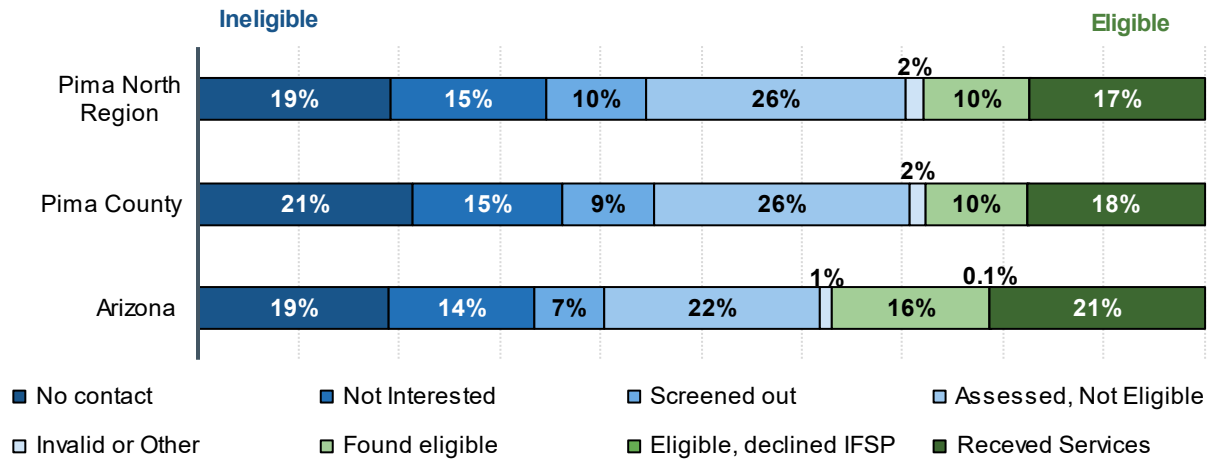
- Other
- Public health/social service agency
- Hospital
- Parent/family
- Physician

Sources: Arizona Department of Economic Security (2023). [Arizona Early Intervention Program dataset]. Unpublished data.

Note: Other referral sources include audiologists, child care or early learning programs, foster care or adoption agencies, homeless shelters or programs, public health facilities, schools, Department of Child Safety, or referrals without a recorded source. These referrals reflect unique children (duplicates have been removed). From FFY 2018 to FFY 2022, the largest number of “other” referrals in the region were from DCS, followed by public health facilities and early learning or child care programs.



Figure 43. Outcomes for children birth to age 2 referred to AzEIP, federal fiscal year 2022

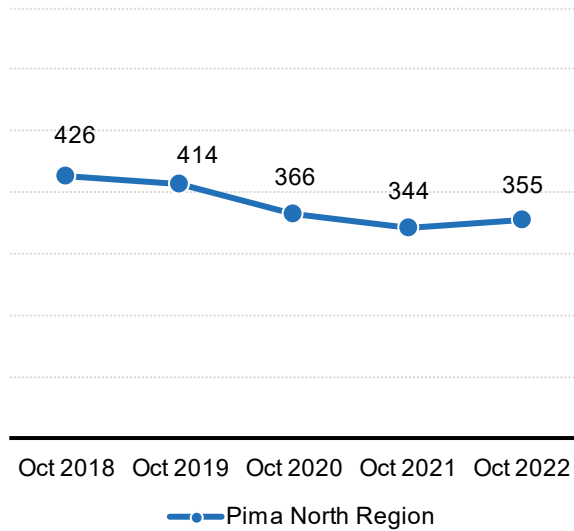


Sources: Arizona Department of Economic Security (2023). [Arizona Early Intervention Program dataset]. Unpublished data.

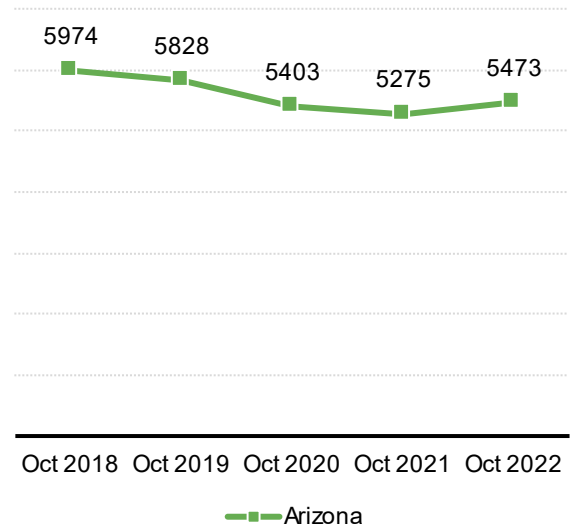
Note: These referral outcomes are recorded by AzEIP service providers. “No contact” means that a service coordinator made multiple attempts to contact a child’s family but was unsuccessful. “Not interested” indicates that when contacted the family of the child did not proceed with screening for eligibility. Children who are “screened out” were not suspected to have a qualifying developmental delay based on an initial developmental screening with a service coordinator; children who are “assessed, not eligible” are those with a formal evaluation who were found to not have a qualifying developmental delay. “Invalid or Other” refers to cases where the child was over-age (age 3 or older) or residing outside Arizona, the referral was a duplicate, the referral was for information-only, or the outcome was listed as “other.”

Figure 44. Children birth to age 2 receiving services from AzEIP as of October 1, 2018 to 2022

Pima North Region



Arizona

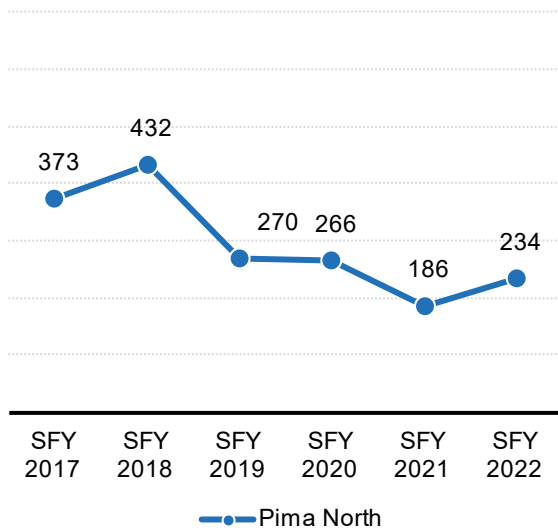


Sources: Arizona Department of Economic Security (2023). [Arizona Early Intervention Program dataset]. Unpublished data.

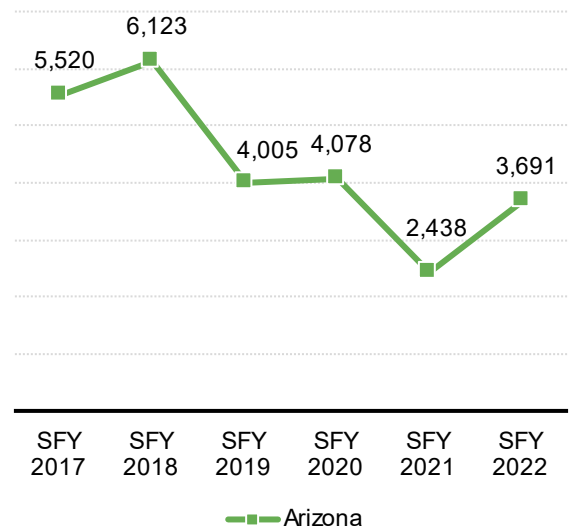
Note: These data reflect the Oct 1 snapshot of AzEIP services, not a cumulative total throughout the year.

Figure 45. Number of children (birth to age 5) receiving DDD services, state fiscal years 2017 to 2022

Pima North Region



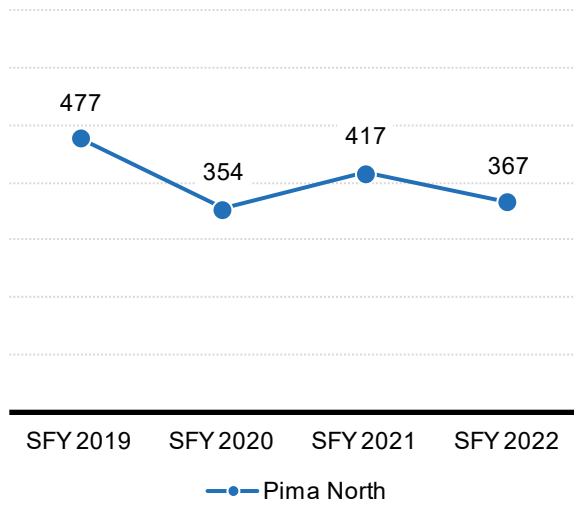
Arizona



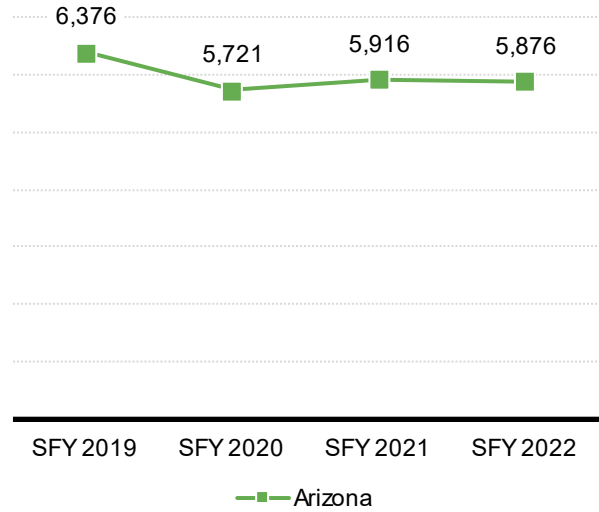
Sources: Arizona Department of Economic Security (2023). [Arizona Early Intervention Program dataset]. Unpublished data.

Figure 46. Number of children (birth to age 2) receiving AzEIP and/or DDD services, state fiscal years 2019 to 2022

Pima North Region



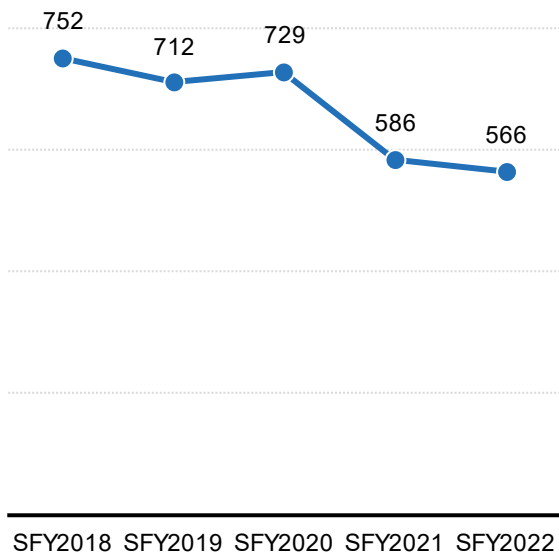
Arizona



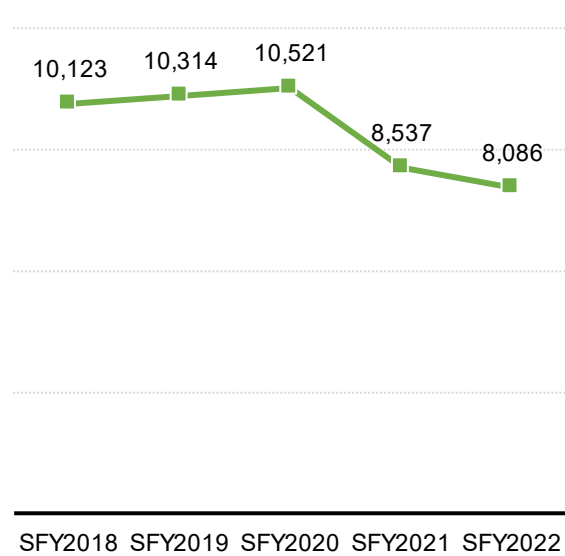
Sources: Arizona Department of Economic Security (2023). [Arizona Early Intervention Program dataset]. Unpublished data.

Figure 47. Trends in preschoolers with disabilities served by LEAs, state fiscal years 2018 to 2022

Pima North Region

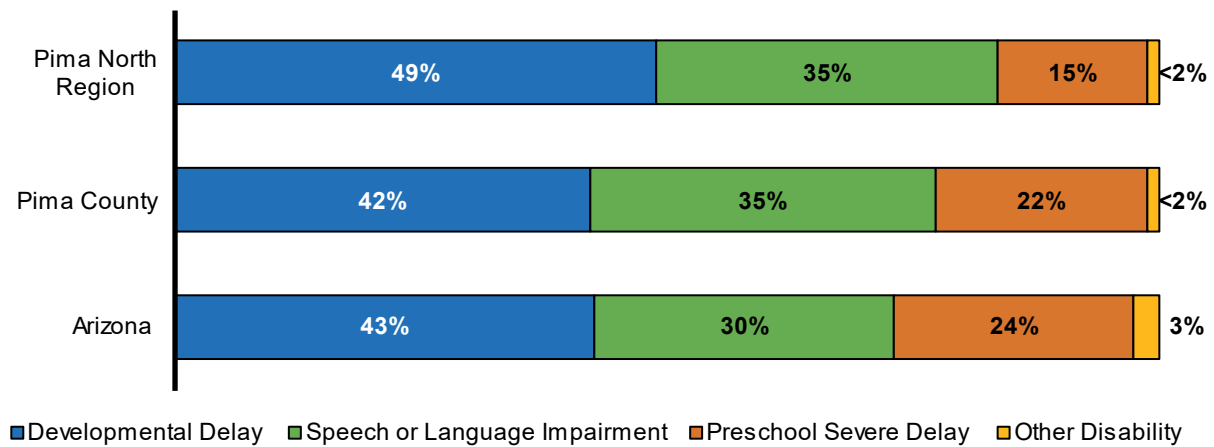


Arizona



Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Figure 48. Preschoolers with disabilities receiving services through LEAs by type of disability, state fiscal year 2022

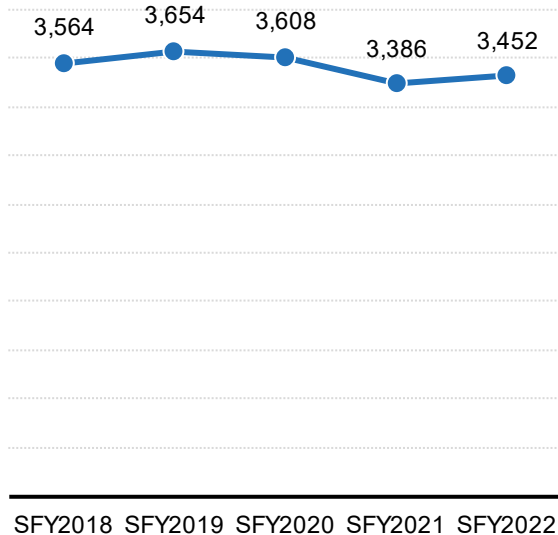


Source: Arizona Department of Education (2021). [Graduation Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

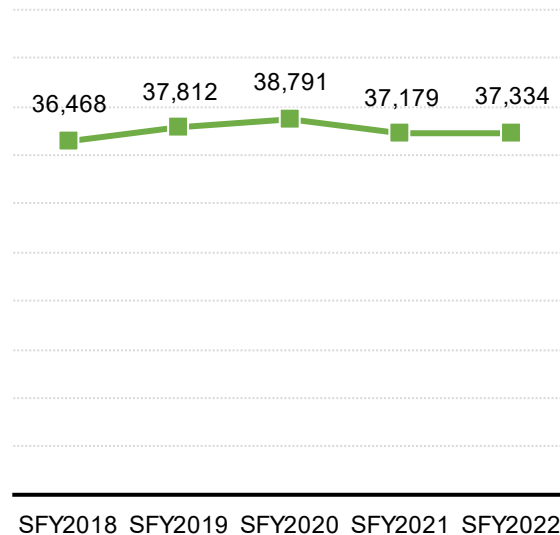
Note: The “Other Disability” includes children with hearing impairment, visual impairment, or deaf-blindness.

Figure 49. Kindergarten to 3rd grade students enrolled in special education in public and charter schools, state fiscal years 2018 to 2022

Pima North Region

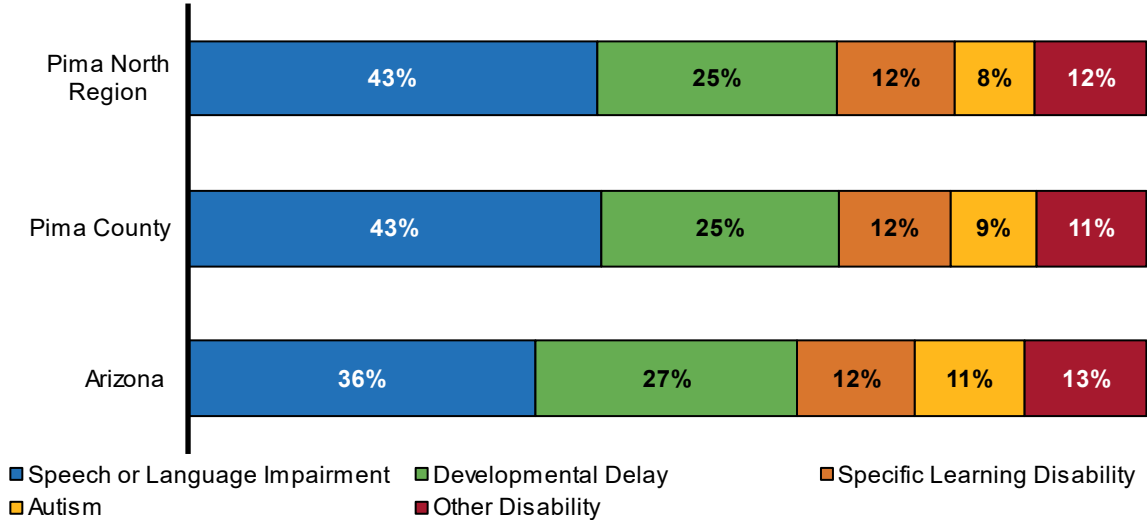


Arizona



Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Figure 50. Kindergarten to 3rd grade students enrolled in special education in public and charter schools by primary disability, state fiscal year 2022



Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: The “Other Disabilities” category includes children with emotional disturbance, deafness, deaf-blindness, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairments such as chronic medical conditions that affect a child’s ability to participate in the educational setting, traumatic brain injury, or visual impairment.

Additional data tables related to *Early Learning* can be found in Appendix 1 of this report.



# CHILD HEALTH

# CHILD HEALTH

## Why it Matters

The physical and mental health of both children and their caregivers are important for optimal child development and well-being. Early childhood health, and even maternal health before pregnancy, has lasting impacts on an individual's quality of life.<sup>218, 219</sup> Experiences during the prenatal and early childhood periods can result in lifelong impacts on immune functioning, brain development and risk for chronic diseases.<sup>220, 221</sup> Poor health in childhood can also result in lower educational attainment and socioeconomic status in adolescence, adulthood and even inter-generationally.<sup>222, 223</sup> Therefore, adequate access to preventive care and treatment services is vital to support a child's long-term health, development and success.<sup>224, 225, 226</sup>

## What the Data Tell Us

### Access to health services

Health insurance coverage is an important indicator of whether families can access, afford and utilize medical care. In Arizona, children up to age 19 can enroll in health insurance through the Arizona Health Care Cost Containment System (AHCCCS), Arizona's Medicaid program. Children whose families earn too much for AHCCCS but do not earn enough to afford private health insurance may also be enrolled in KidsCare, Arizona's Children's Health Insurance Program.<sup>xxix</sup> During the COVID-19 pandemic, uninsured rates declined due to federal policies prohibiting states from disenrolling people from Medicaid.<sup>227</sup> Despite these efforts, uninsured rates in the overall population are still high.<sup>228</sup> One primary reason for this is perceived cost, with more than two-thirds (69.6%) of uninsured U.S. adults citing their inability to pay for health insurance as the primary reason they were uninsured.<sup>229</sup> Families who qualify for low- or no-cost health insurance may not be aware that they qualify, or they may face administrative barriers to enrolling.<sup>230</sup>

A variety of health outcomes for both mothers and infants depend on access to quality health care and support before, during and after pregnancy. Early initiation of prenatal care reduces the risk of smoking during pregnancy, pregnancy complications,<sup>xxx</sup> premature births and maternal and infant mortality.<sup>231, 232, 233, 234, 235</sup> Poor access to maternal health care (e.g., hospitals with labor and delivery units, birth centers and obstetric health providers) is one factor that can contribute to these outcomes.<sup>236, 237, 238</sup> Black, Hispanic, American Indian and Alaska Native people experience a disproportionate lack of access to quality health care and support for their pregnancies.<sup>239, 240</sup> Lack of access to this care has

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<sup>xxix</sup> For more information on AHCCCS and KidsCare see: <https://www.azahcccs.gov/Members/GetCovered/Categories/KidsCare.html>

<sup>xxx</sup> One such complication is congenital syphilis, where untreated maternal syphilis is passed to the fetus and can lead to stillbirth or infant death. The number of babies born in Arizona with congenital syphilis increased more than 10-fold in the last 6 years, even though congenital syphilis can be prevented with adequate prenatal care. For more information, see:

<https://www.azdhs.gov/preparedness/epidemiology-disease-control/disease-integration-services/std-control/congenital-syphilis/index.php>

contributed to considerably higher rates of low birth weight births, preterm births and maternal and infant mortality compared to non-Hispanic White Americans.<sup>241, 242, 243</sup> Efforts to increase the number of women in Arizona with access to early prenatal care, such as expanding access to telehealth care and midwifery care, could improve the health outcomes of the state's mothers and babies, especially in counties with lower access to maternal health care services.<sup>244</sup>

### ***How the Pima North Region is faring***

- In the Pima North Region in 2017-2021, 8% of the population lacked health insurance coverage, less than the proportion across the state of Arizona overall (11%) (Table 24).
- Health insurance coverage for young children, specifically, was slightly higher than that of the overall population in the region in 2017-2021, with only 4% of children birth to age 5 not having health insurance, again smaller than the proportion seen across the state (7%). The proportion of young children without health insurance shrank by about half in the region and county in recent years, compared to a much smaller declines seen in the state and nation (Table 24 & Figure 51).
- In 2022, about half (48%) of births in the Pima North Region were paid for by AHCCCS or the Indian Health Service (IHS, which covers less than 1% of births in the region). This proportion has tracked closely with the state in recent years (Figure 52).
- Rates of timely prenatal care have increased in the Pima North Region in recent years. While the region consistently had a lower proportion of births to mothers who began prenatal care in the first trimester compared to Arizona between 2018 and 2022, the gap is closing (70% region, 71% state). The region also had a dramatic decline in the proportion of births to mothers with inadequate prenatal care between 2018 and 2022. The proportion of births to mothers with no prenatal care dropped from a high of 6.0% in 2018 to just 2.8% in 2022. After exceeding statewide trends for four years, in 2022 births with no prenatal care and fewer than 5 prenatal visits in the region (2.8% and 4.9%, respectively) more closely matched the state (2.3% and 4.7%, respectively) (Figure 53 & Figure 54).



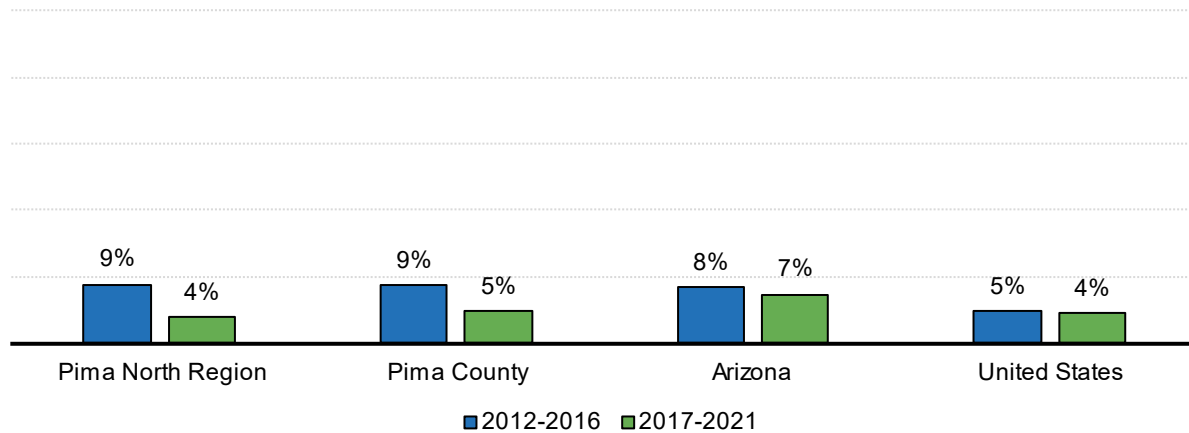
Table 24. Health insurance coverage, 2017-2021 ACS

Geography	Population without health insurance	% of the population without health insurance	Children birth to 5 without health insurance	% Children birth to 5 without health insurance
<b>Pima North Region</b>	<b>708,844</b>	<b>8%</b>	<b>41,419</b>	<b>4%</b>
Pima County	1,013,706	9%	66,203	5%
Arizona	6,976,512	11%	496,410	7%
United States	324,818,565	9%	23,365,564	4%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, 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" by the U.S. Census Bureau.

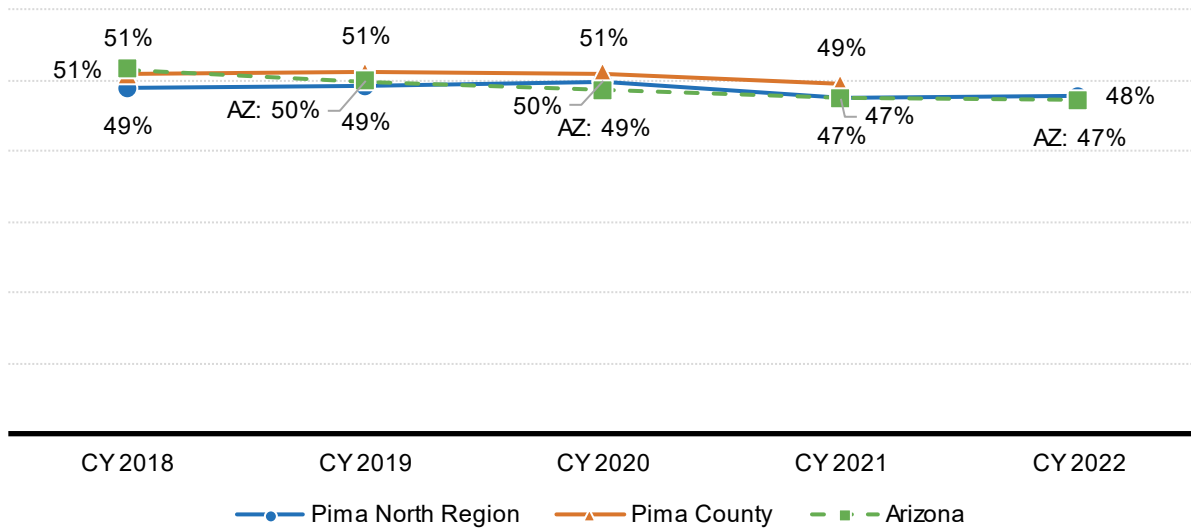
Figure 51. Children birth to age 5 without health insurance, 2012-2016 and 2017-2022 ACS



Source: U.S. Census Bureau. (2021). American Community Survey 5-year estimates 2012-2016 & 2017-2022, 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" by the U.S. Census Bureau.

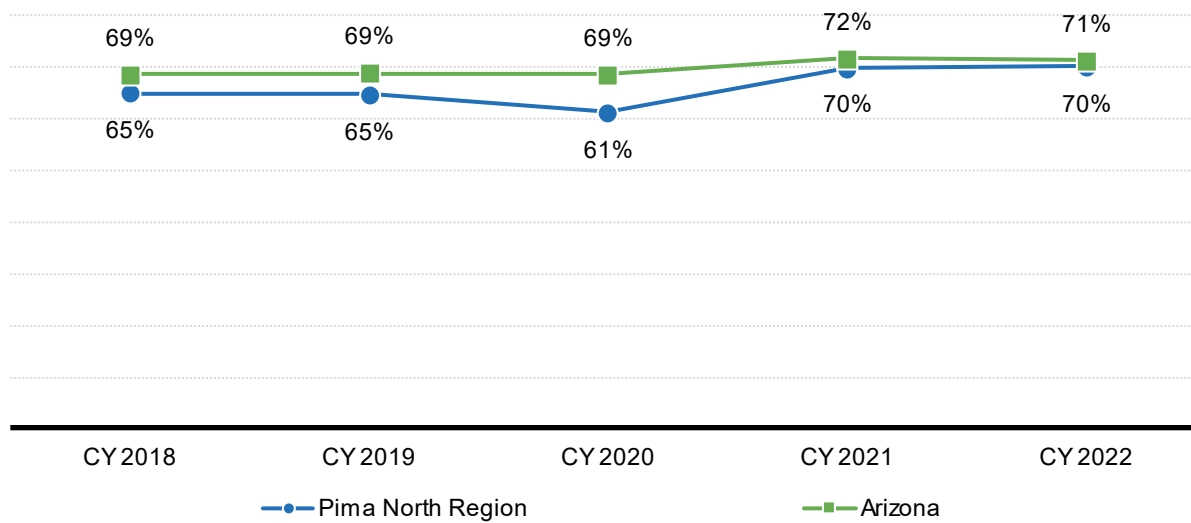
Figure 52. Births paid for by AHCCCS or IHS, 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: In the Pima North Region less than 1% of births in each year between 2018 and 2022 were paid for by IHS.

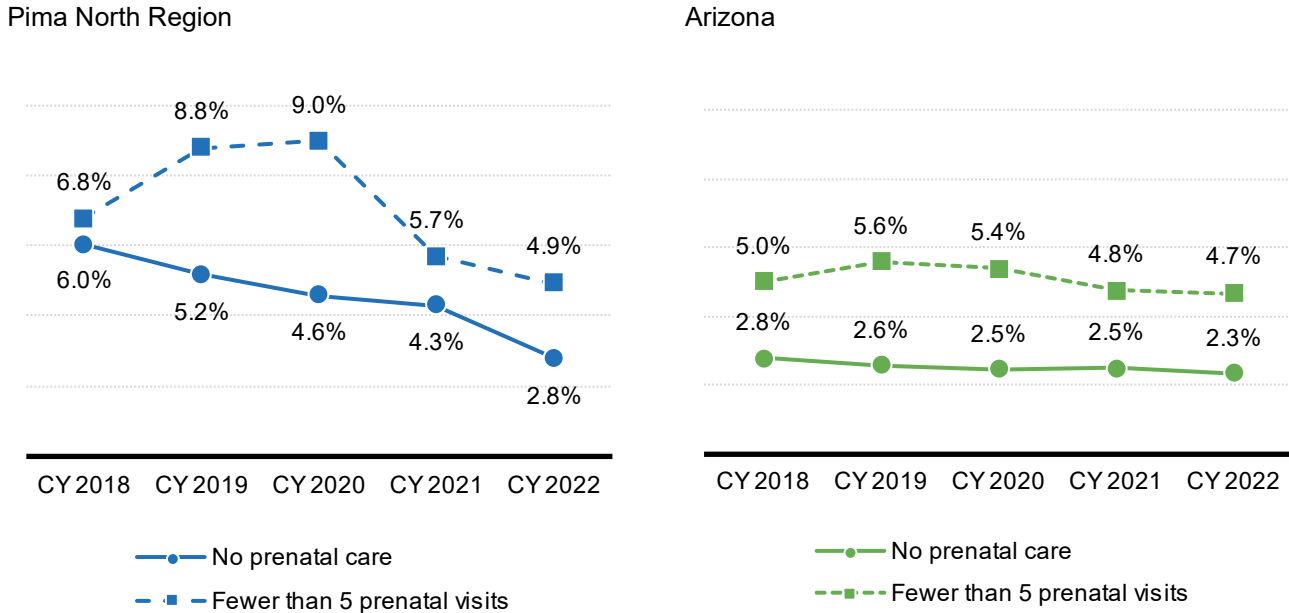
Figure 53. Births to mothers who began prenatal care in the first trimester, 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this figure.

Figure 54. Births to mothers with inadequate prenatal care, 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in these figures

### Maternal age and substance abuse

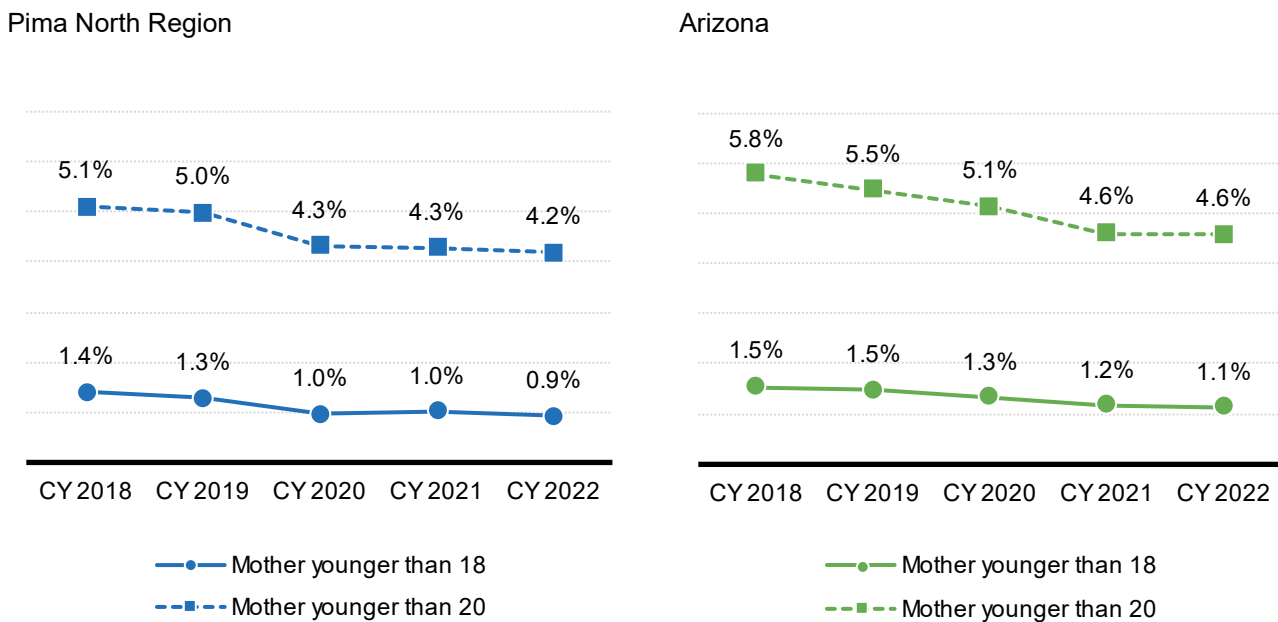
Infants’ immediate and long-term health can be influenced by maternal characteristics including age and substance use during or after pregnancy. For example, teenage parents often experience increased stress and hardship in comparison to older parents and other non-parent teenagers as they are less likely to complete high school or college and more likely to maintain a lower socioeconomic status and require public assistance to make ends meet.<sup>245, 246, 247, 248, 249</sup>

The use of substances during pregnancy can cause negative health complications for fetuses and babies. For example, babies born to mothers who smoked cigarettes during pregnancy are more likely to be born preterm, have low birth weight, die from sudden infant death syndrome (SIDS) and have weak lungs.<sup>250,251</sup> The use of opioids, whether prescribed or illicit, during pregnancy also poses health risks to developing fetuses including preterm birth, stillbirth and birth defects.<sup>252</sup> It may also cause infants to experience withdrawal symptoms after birth, which is referred to as neonatal abstinence syndrome (NAS). Symptoms of NAS include sleep problems, seizures, poor feeding, dehydration, loose stool, sweating, tremors and vomiting. However, suddenly stopping opioid use while pregnant is also dangerous for both mothers and their fetuses, so access to knowledgeable health care providers and appropriate treatment options are vital for protecting both maternal and fetal health.<sup>253</sup>

**How the Pima North Region is faring**

- The Pima North Region had an overall decline in the proportion of births to teenaged mothers between 2018 and 2022, a pattern similar to what was seen across the state. The proportion of births to mothers under age 20 fell from 5.1% in 2018 to 4.2% in 2022 in the region. The proportion of births to teen mothers in the region has tracked with but been consistently lower than those seen statewide from 2018 to 2021 (Figure 55).
- Conversely, the Pima North Region has consistently had a slightly higher proportion of births to mothers who smoked cigarettes while pregnant than the state as a whole. Fortunately, rates have declined between 2018 and 2022, decreasing in the region from 5.8% in 2018 to 3.8% in 2022. For the first time in 2022, the region met the Healthy People 2030 target of 4.3% or less (Figure 56).
- Between 2018 and 2022, 1,203 newborns in the region were hospitalized because of maternal drug use during pregnancy, with an average length of stay of 11 days (Table 25). This equates to 3.6 newborns hospitalized due to maternal drug use during pregnancy per 100 live births, slightly above the state rate of 3.3.

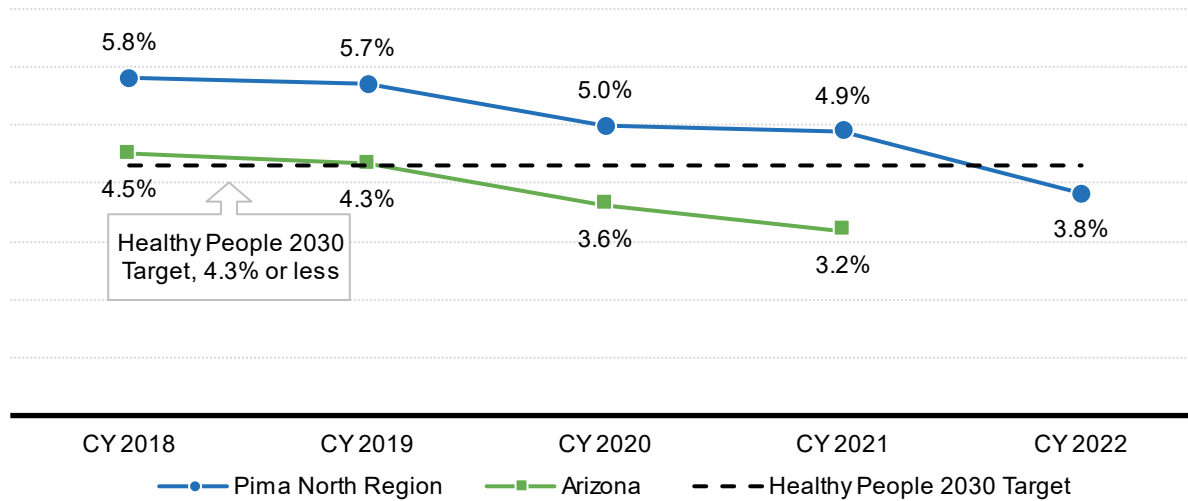
Figure 55. Births to teenaged mothers, 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this figure.

Figure 56. Births to mothers who smoked cigarettes during pregnancy, 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this figure. The Healthy People 2030 target for maternal use of tobacco during pregnancy was increased to 4.3% of females giving birth reporting smoking during pregnancy, or alternatively 95.7% of females reporting abstaining from smoking during pregnancy.

Table 25. Newborns hospitalized because of maternal drug use during pregnancy, 2018-2022 combined

Geography	Newborns hospitalized	Average length of stay (days)
<b>Pima North Region</b>	<b>1,203</b>	<b>11.0</b>
Pima County	1,851	11.1
Arizona	12,939	9.5

Source: Arizona Department of Health Services (2023). [Hospital Discharge dataset]. Unpublished data.

Note: Data on newborns hospitalizations were geocoded to FTF regions using the address provided by parents at the time of hospitalization; however, in cases where the address provided was not valid, hospitalizations could not be assigned to a region. County of residence is captured separately from addresses, meaning that counts in the county often exceed those seen in a particular region because they include all newborns regardless of address validity.

### Maternal health and well-being

A pregnant woman’s health and well-being are closely linked to infant and child health and development. Gestational diabetes (i.e., diabetes that only presents during the pregnancy) increases the likelihood of an infant having low blood sugar, being born preterm, being larger than average at birth, needing to be delivered through cesarean section and even developing type 2 diabetes and

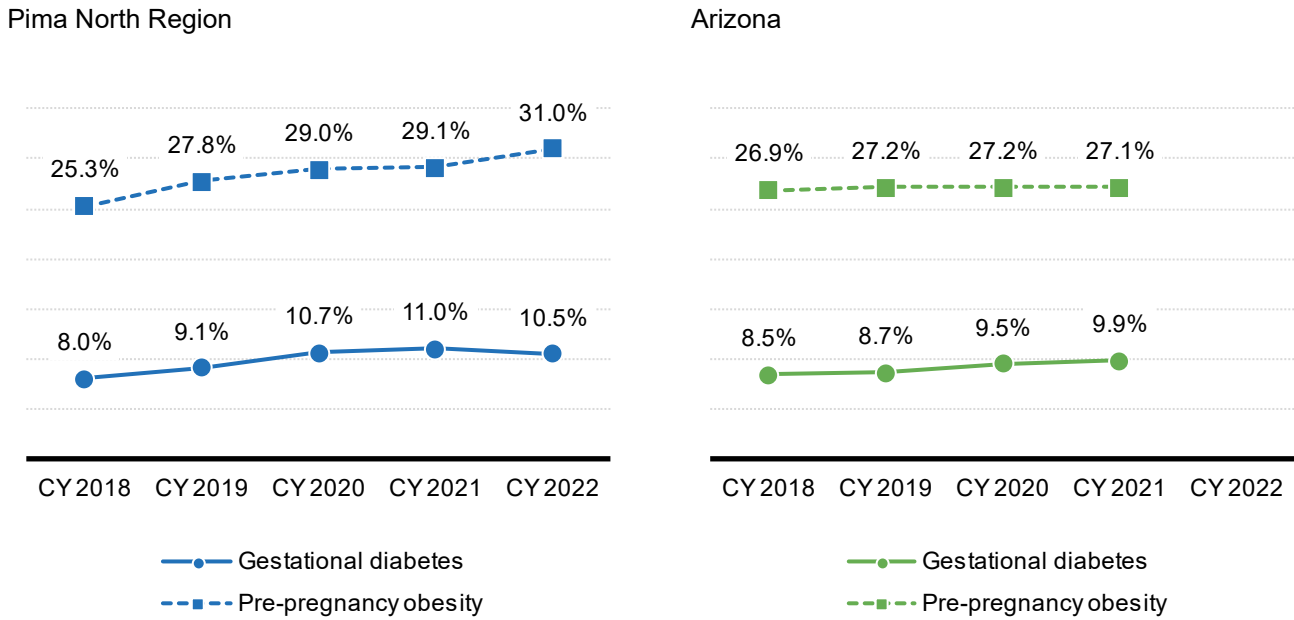
cardiovascular diseases later in life.<sup>254, 255</sup> Children of mothers categorized as having maternal obesity have increased risk of birth complications, asthma, diabetes, heart disease and neonatal and infant mortality.<sup>256, 257, 258</sup> A variety of social determinants of health have been linked to the development of diabetes and obesity, including low socioeconomic status, employment struggles, lack of health insurance and living in rural areas with fewer resources.<sup>259, 260, 261, 262</sup> Risks associated with these conditions can be reduced through increased access to maternal health care before, during and after childbirth as well as planning high-risk deliveries at hospital facilities with more resources and technical expertise.<sup>263, 264</sup>

Postpartum depression has a clear link to negative outcomes in infant health and development. Untreated postpartum depression can lead to infant sleeping, eating and behavioral problems, issues with maternal and infant bonding and infant developmental delays.<sup>265, 266</sup> Groups that have higher rates of postpartum depression include American Indian and Alaska Native mothers, mothers who are under age 19 and mothers who smoked during or after pregnancy.<sup>267</sup> The United States Preventive Services Task Force and the American Congress of Obstetricians and Gynecologists recommend assessing mothers' mental health both during pregnancy and after giving birth to facilitate early identification and intervention.<sup>268</sup> In 2022, AHCCCS implemented a policy requiring depression screenings during prenatal and postpartum visits as well as well-child visits within the first 6 months of an infant's life for all enrolled mothers in Arizona.<sup>269</sup> Mothers who screen positively for depression must be referred to a case manager or treatment services.<sup>270</sup> These screenings, as well as the ability to bill AHCCCS for the cost of screenings, will hopefully increase the likelihood that mothers experiencing postpartum depression are referred to appropriate mental health services.

### ***How the Pima North Region is faring***

- The proportion of births to mothers with gestational diabetes and pre-pregnancy obesity has generally increased since 2018. In 2022, 31% of births in the Pima North Region were to mothers with pre-pregnancy obesity and 10.5% were to mothers who had gestational diabetes. The region generally is higher than the state on the whole on the prevalence of these risk factors (Figure 57).
- More than one in 10 mothers in Arizona (13.7%) reported experiencing post-partum depression in 2020 according to the Pregnancy Risk Assessment Monitoring System.<sup>271</sup>

Figure 57. Births to mothers diagnosed with gestational diabetes or pre-pregnancy obesity, 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this figure. Data on gestational diabetes and pre-pregnancy obesity were not available for Arizona in 2022.

### Infant health

Infants who are born preterm or at a low birth weight have a higher possibility of short- and long-term health complications. Preterm birth is defined as birth at less than 37 weeks of gestation. Risks related to preterm births include respiratory, immune, neurological, vision, hearing and intestinal developmental issues.<sup>272</sup> Infants born preterm also have increased rates of mortality during their first 28 days to 1 year of life, longer hospitalization after birth, more health care costs and physical impairments.<sup>273, 274</sup> Preterm births are more likely among mothers who are under age 20, over the age of 35, low income, experience infections during pregnancy or engage in substance use.<sup>275</sup>

Low birth weight is defined as weighing less than 5 pounds and 8 ounces (2,500 grams) at birth. Babies born in this condition have a higher risk of infant mortality and long-term health problems such as diabetes, hypertension and cardiac disease.<sup>276, 277</sup> Low birth weight risk factors include low maternal weight during pregnancy, preterm birth, teen pregnancy, pregnancy over the age of 35, high blood pressure, diabetes, substance use and air pollution.<sup>278</sup>

Newborns are admitted into neonatal intensive care units (NICUs) in hospitals for numerous reasons that can vary across medical providers and have implications for the short- and long-term health of babies and families.<sup>279</sup> NICU stays can take a large emotional and financial toll on families, especially families living far from the hospital. Although NICU admissions may be an indicator of important health

concerns in newborns, including low birth weight, they can also be a site of family-based interventions that can positively impact infant development and parent-child relationships.<sup>280</sup>

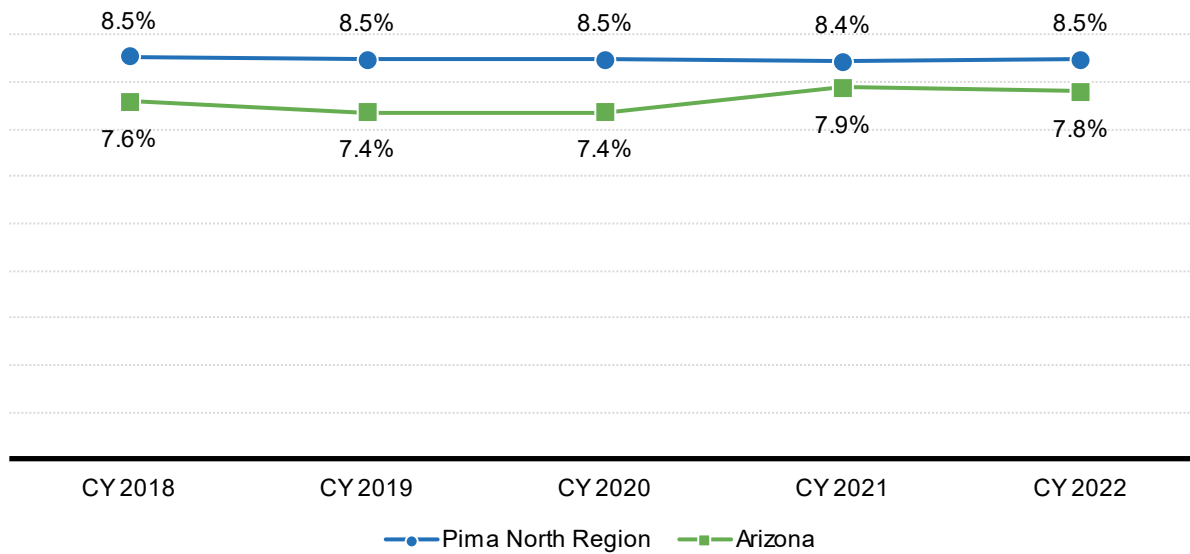
For parents who are able to breastfeed, the American Academy of Pediatrics recommends breastfeeding infants exclusively for the first 6 months after birth, followed by a combination of breastfeeding and other foods for up to 2 years or longer.<sup>281</sup> Breastfeeding offers a variety of benefits to infants due to the nutrition and antibodies that human breast milk provides. These benefits include lowering an infant's risk of type 1 diabetes, obesity, ear infections, SIDS, asthma and gastrointestinal infections.<sup>282</sup> Robust data on breastfeeding rates are only available for children served through the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program.

### ***How the Pima North Region is faring***

- The proportion of babies born at low birth weight in the Pima North Region has been consistently higher than across the state in recent years, with 8.5% of births considered low birth weight in the region and 7.8% across Arizona in 2022. In the region, this proportion has remained relatively stable since 2018 (8.5%) (Figure 58).
- The proportion of preterm births (less than 37 weeks gestation) was similar between the region and the state, with the region at 9.3% and the state 10.0% in 2021 (the most recent year that both data points are available). In 2022, the region (9.9%) did not meet the Healthy People 2030 target of 9.4% or fewer births before 37 weeks (Figure 59).
- Births with an admission to a NICU in the region remained above the rates seen across the state between 2018 and 2021. In 2021, 12.4% of births in the region had a NICU admission compared to 7.9% statewide (Figure 60).
- In the Pima North Region, rates of breastfeeding were slightly higher than those across the state between 2019 and 2022. In 2022, 84% of WIC-enrolled infants in the region were ever breastfed, compared to 79% statewide (Figure 61).

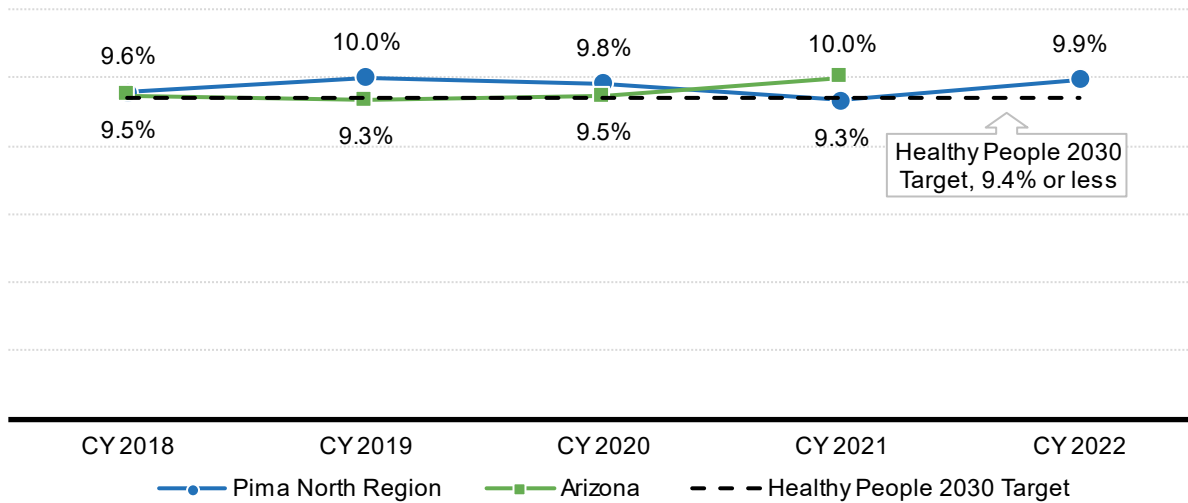


Figure 58. Low birth weight births (less than 2,500 grams), 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

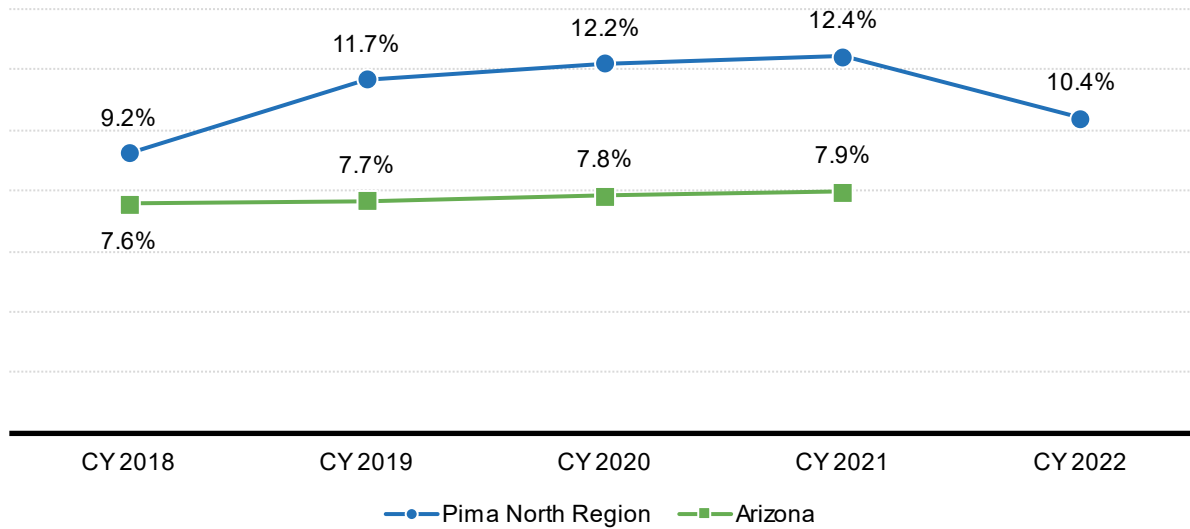
Figure 59. Preterm births (less than 37 weeks gestation), 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

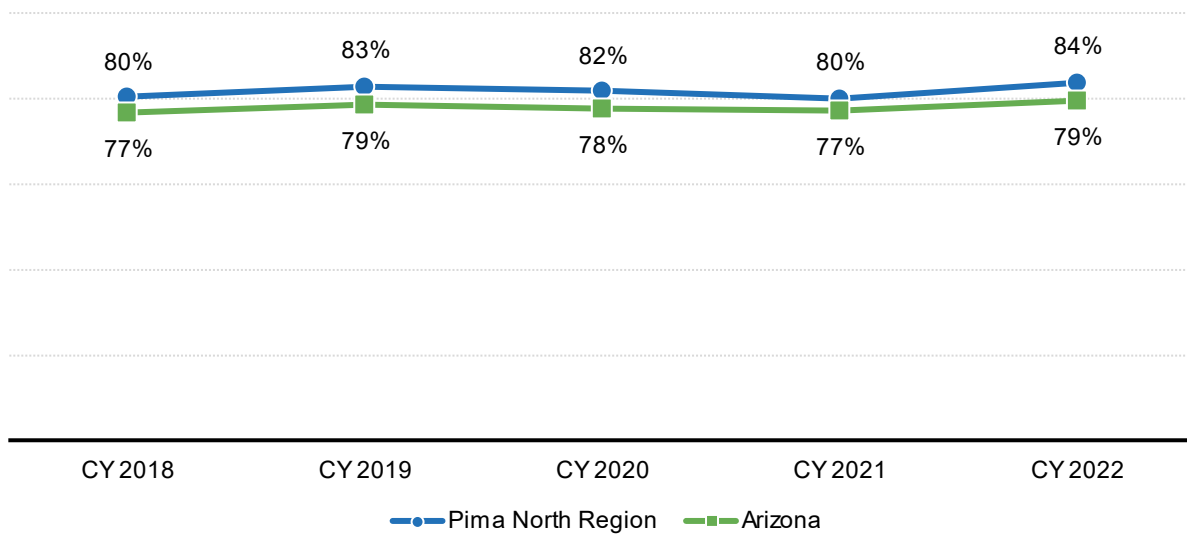
Note: Data on preterm births were not available for Arizona in 2022.

Figure 60. Births with a NICU admission, 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.  
 Note: Data on NICU admissions were not available for Arizona in 2022.

Figure 61. Percent of WIC-enrolled infants ever breastfed, 2018 to 2022



Source: Arizona Department of Health Services (2023). [WIC dataset]. Unpublished data.

## Childhood infectious disease and immunization

Immunization against preventable diseases protects both children and the surrounding community from potential illness and death. Immunization protects not only the vaccinated person but also individuals who are unable to be vaccinated, through “community immunity.”<sup>283</sup> In order to attend state-licensed child care programs and public or charter schools, children are required to receive specific vaccinations or obtain an official exemption, which can be requested for medical, personal or religious reasons.<sup>284</sup> Statewide and nationally, childhood immunization rates have been declining in recent years. The COVID-19 pandemic exacerbated disparities in health care access, including routine immunizations, that specifically impacted children who are Black, Hispanic, low-income, live in rural areas or lack health insurance.<sup>285</sup> National survey data from the Pew Research Center also show that declining childhood immunization rates, particularly for measles, mumps and rubella (MMR), can be linked to parents' shifting attitudes towards vaccines. While the majority of U.S. parents continue to express confidence in the value of childhood vaccination for MMR, a sizable proportion expressed concerns about the necessity of vaccines and showed declining support for vaccine requirements for children to attend public schools.<sup>286</sup>

Respiratory syncytial virus (RSV) and influenza (flu) are leading causes of serious illness in young children, and following the onset of the COVID-19 pandemic in 2020, recent flu and RSV seasons have been more severe nationwide.<sup>287, 288</sup> RSV is the most frequent cause of hospitalization in children under 1 year of age.<sup>289</sup> In 2023, two new preventative therapies for RSV were approved—a single-dose antibody medication for infants, and an adult immunization for pregnant people administered in the third trimester of pregnancy.<sup>290, 291</sup> These new treatments have the potential to prevent severe illness in infants and young children, but shortages of the antibody medication have led the Centers for Disease Control and Prevention (CDC) to recommend prioritizing access for the highest-risk infants. This includes infants under 6 months of age, those with underlying health conditions such as lung or heart disease and American Indian or Alaska Native infants under 8 months of age, as well as older American Indian or Alaska Native infants who live in remote areas with limited access to health care facilities.<sup>292</sup> The flu can also cause serious illness in young children under age 5, particularly for children birth to age 2, who are the most likely to be hospitalized with flu complications.<sup>293</sup> The American Academy of Pediatrics recommends that all children ages 6 months and older be vaccinated against influenza each year.<sup>294</sup>

### *How the Pima North Region is faring*

- Across all required immunizations, children in child care in the Pima North Region had higher vaccination rates (DTaP,<sup>xxxi</sup> 94.6%; Polio, 95.9%; MMR, 96.3%) than the state as a whole (DTaP, 90.6%; Polio, 92.2%; MMR, 93%) in the 2022-23 school year. The region and state both met the Healthy People 2030 DTaP immunization target of 90% or higher (Table 26).

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<sup>xxxi</sup> *The DTaP vaccine immunizes against Diphtheria, Tetanus and Pertussis.*

- Immunization exemptions among children in child care have climbed in the region in recent years, though they remain below rates seen statewide. In the 2022-23 school year, 4.0% of children in child care in the region filed a religious exemption and 1.9% were exempt from all vaccinations each year, compared to 5.7% and 4.0%, respectively, of children statewide. Exemptions driven by medical need have remained at or below 0.6% in the region and state (Figure 62).
- The Pima North Region also had higher kindergarten immunization rates in the 2022-23 school year (DTaP, 92.6%; Polio, 93.3%; MMR, 92.8%) compared to the state (DTaP, 89.6%; Polio, 90.3%; MMR, 89.9%). The region, county and state all failed to meet the Healthy People 2030 kindergarten MMR immunization target of 95% or higher (Table 27). Regional immunization rates are likely inadequate to assure community immunity of preventable infectious diseases. For example, 95% of children need to be vaccinated to create herd immunity in order to protect communities and achieve and maintain measles elimination.<sup>295</sup>
- The Pima North Region also had climbing rates of children in kindergarten receiving personal belief exemptions and exemptions from all required vaccinations in recent years. During the 2022-23 school year, 4.3% of children in kindergarten received a personal belief exemption in the region compared to 7.3% of children statewide, and 2.6% received exemptions from all required vaccines compared to 4.6% statewide (Figure 63).
- The patterns of confirmed and probable cases of RSV and influenza in young children birth to age 5 were generally similar in both the Pima North Region and state; RSV cases increased from 2020 to 2022, while influenza cases showed a marked decrease in 2021 followed by a steep increase in 2022. In 2022, there were 502 confirmed and probable cases of RSV and 140 cases of influenza in young children in the region, the highest numbers since 2019 (Figure 64).

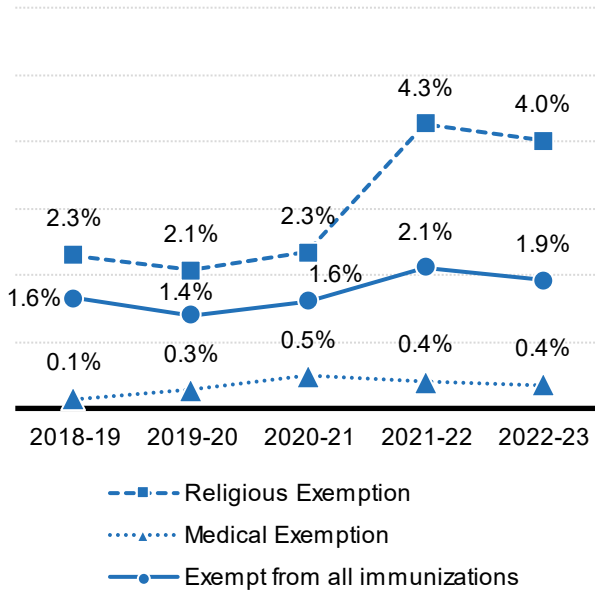
Table 26. Children in child care with selected required immunizations, 2022-23

Geography	Number Enrolled	DTaP	Polio	MMR	Religious exemption	Medical exemption	Exempt from every required vaccine
<b>Pima North Region</b>	<b>8,456</b>	<b>94.6%</b>	<b>95.9%</b>	<b>96.3%</b>	<b>4.0%</b>	<b>0.4%</b>	<b>1.9%</b>
Pima County	10,699	95.6%	96.6%	96.8%	2.3%	0.2%	1.7%
Arizona	70,690	90.6%	92.2%	93.0%	5.7%	0.2%	4.0%
Healthy People 2030 targets		90.0%					

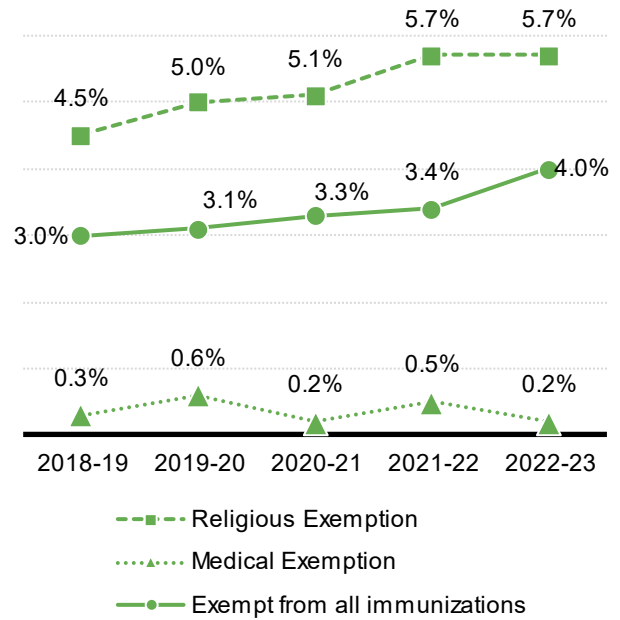
Source: Arizona Department of Health Services (2023). *Childcare Immunization Coverage, 2022-23 School Year*. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). *Childcare Immunization Coverage by County, 2022-23 School Year*. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Figure 62. Child care immunization exemption rates, 2018-19 to 2022-23

Pima North Region



Arizona



Source: Arizona Department of Health Services (2023). Childcare Immunization Coverage, 2018-19 to 2022-23 School Years. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). Childcare Immunization Coverage by County, 2018-19 through 2022-23 School Years. Retrieved from: <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

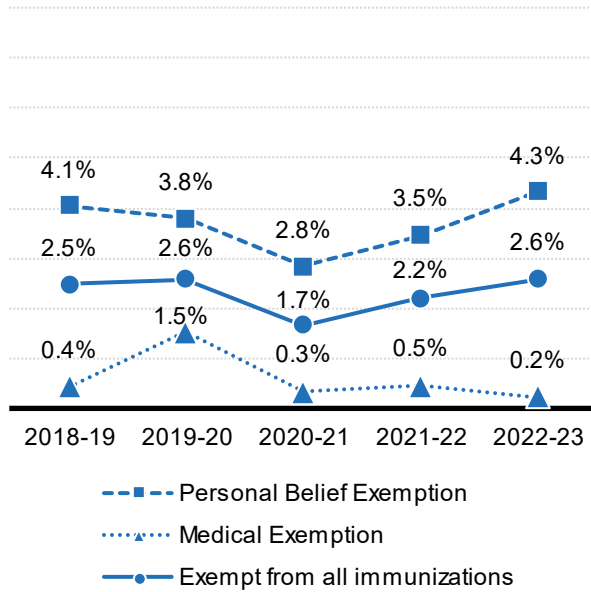
Table 27. Kindergarteners with selected required immunizations, 2022-23

Geography	Number Enrolled	DTaP	Polio	MMR	Personal belief exemption	Medical exemption	Exempt from every required vaccine
<b>Pima North Region</b>	<b>6,762</b>	<b>92.6%</b>	<b>93.3%</b>	<b>92.8%</b>	<b>4.3%</b>	<b>0.2%</b>	<b>2.6%</b>
Pima County	10,034	93.7%	94.2%	93.7%	3.4%	0.2%	2.2%
Arizona	78,937	89.6%	90.3%	89.9%	7.3%	0.2%	4.6%
Healthy People 2030 targets				95.0%			

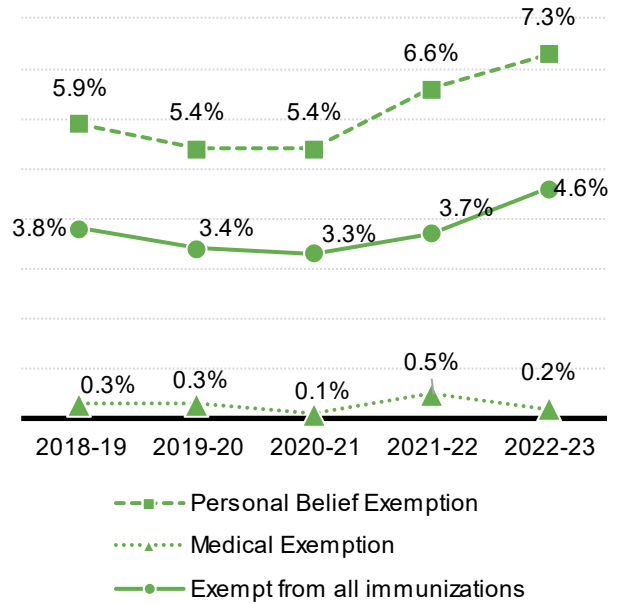
Source: Arizona Department of Health Services (2023). Kindergarten Immunization Coverage, 2022-23 School Year. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). Kindergarten Immunization Coverage by County, 2022-23 School Year. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Figure 63. Kindergarten immunization exemption rates, 2018-19 to 2022-23

Pima North Region

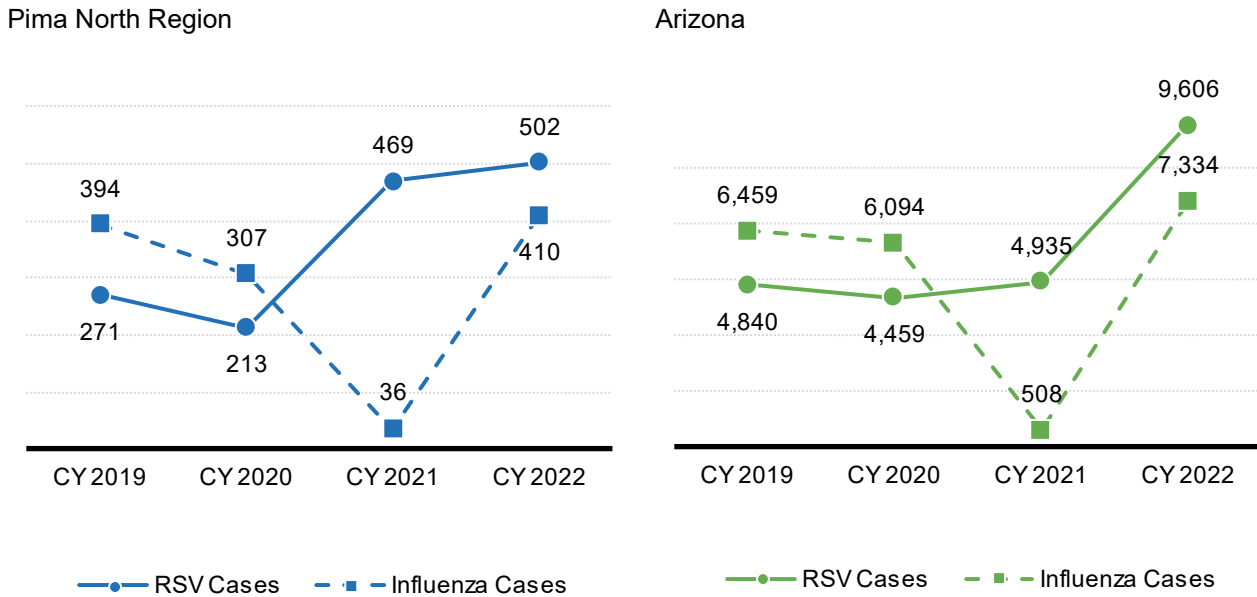


Arizona



Source: Arizona Department of Health Services (2023). Kindergarten Immunization Coverage, 2018-19 to 2022-23 School Years. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). Kindergarten Immunization Coverage by County, 2018-19 through 2022-23 School Years. Retrieved from: <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Figure 64. Confirmed and probable cases of infectious diseases in children birth to age 5, 2019 to 2022



Source: Arizona Department of Health Services (2023). [FTF VPD Flu RSV dataset]. Unpublished data.

### Infant and child hospitalization and mortality

Infant mortality refers to the death of infants under 1 year of age. Some of the most common causes of infant mortality in Arizona and the U.S. include congenital abnormalities, low birth weight, preterm birth, pregnancy complications, SIDS and unintentional injuries.<sup>296, 297, 298</sup> According to provisional CDC data, infant mortality increased between 2021 and 2022 by 3% nationally, 13% in Arizona for all infants, and 21% for American Indian or Alaska Native infants nationwide, the highest increase seen for any group.<sup>299</sup> In addition to increasing, the infant mortality rates for American Indian or Alaska Native (9.1 deaths per 1,000 live births) and Black infants (10.9) were also notably higher than White (4.5) or Hispanic (4.9) infants in 2022, racial disparities that have been linked to maternal care deserts, which are particularly prevalent on tribal lands.<sup>300</sup> This indicates a serious need to increase access to timely prenatal care, newborn screening and home visiting programs in rural and tribal areas to begin to reduce infant mortality rates.<sup>301</sup>

The leading cause of death for children birth to age 17 in the United States is unintentional injuries.<sup>302</sup> The most prevalent accidental injuries are car crashes, drowning, falls, suffocation, fires and poisoning.<sup>303</sup> Death from unintentional injuries is more common in children living in rural areas, as well as among American Indian and Alaska Native children.<sup>304, 305</sup> Increased awareness and safety precautions have helped reduce childhood deaths in the last decade, including child swimming lessons, proper infant sleeping position, installing smoke detectors, keeping medications out of reach, practicing gun safety and utilizing seatbelts and helmets.<sup>306</sup>

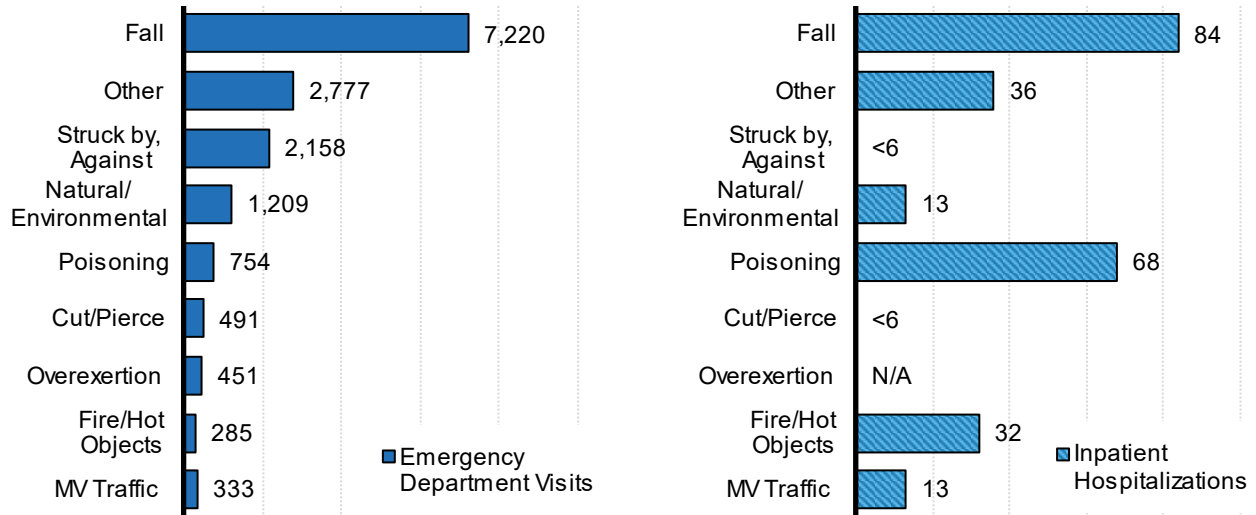
### *How the Pima North Region is faring*

- Falls were the most common unintentional injuries that led to emergency department visits for children under 5 in both the Pima North Region and the state between 2018 and 2022, followed by ‘other’ injuries or being ‘struck by or against’ an object or person. During those years, the region saw 7,220 emergency department visits due to falls, 2,777 for other reasons and 2,158 due to being struck (Figure 65).
- The pattern of injuries prompting inpatient hospitalizations was also the same for the region and state, with falls being most common, followed by poisoning and ‘other’ injuries. Between 2018-2022, 84 young children in the region were hospitalized due to falls, 68 for poisoning and 36 for other reasons. There were relatively fewer hospitalizations caused by motor vehicle traffic in the region compared to the state (Figure 65).
- Between 2019 and 2021, the infant mortality rate was just slightly higher in the Pima North Region (5.6 deaths per 1,000 live births) and county (5.6) compared to the state (5.4); none met the Healthy People 2030 target of 5.0 or less (Figure 66).
- Overall, 283 children birth to age 17 died in the region between 2018 and 2021. More than one in six deaths (18%) were due to accidents, followed by congenital malformations (14%), low birth weight (8%) and assault/homicide (6%). The region differs from the state in that assault/homicide is not a top-five cause of child death across the state, but self-harm/suicide is (Figure 67).

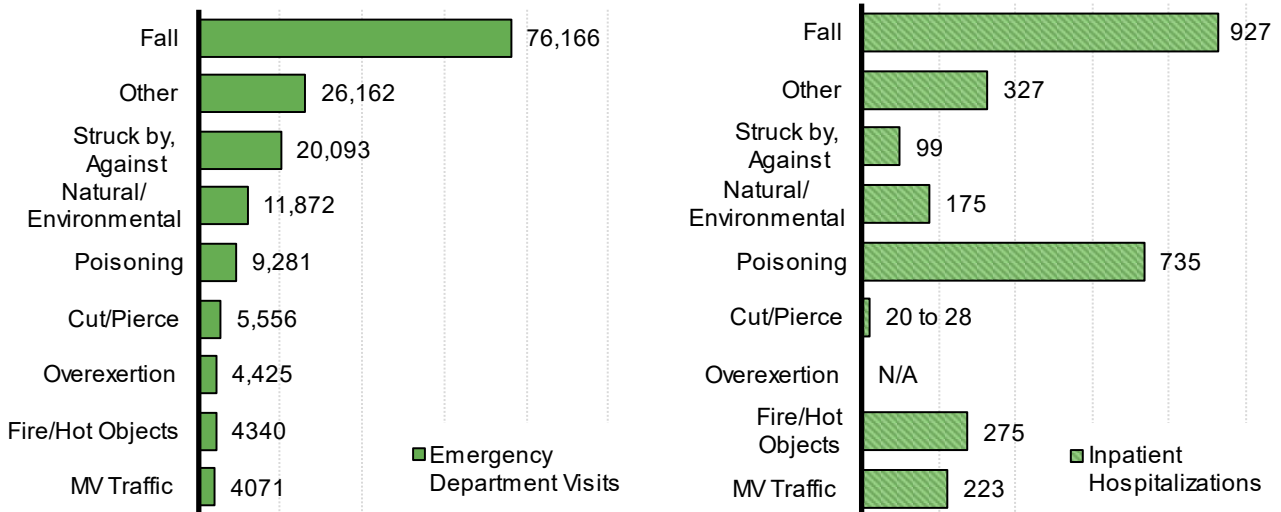


Figure 65. Non-fatal hospitalizations and emergency department visits due to unintentional injuries for children birth to age 4 by selected mechanism of injury, 2018-2022 combined

Pima North Region

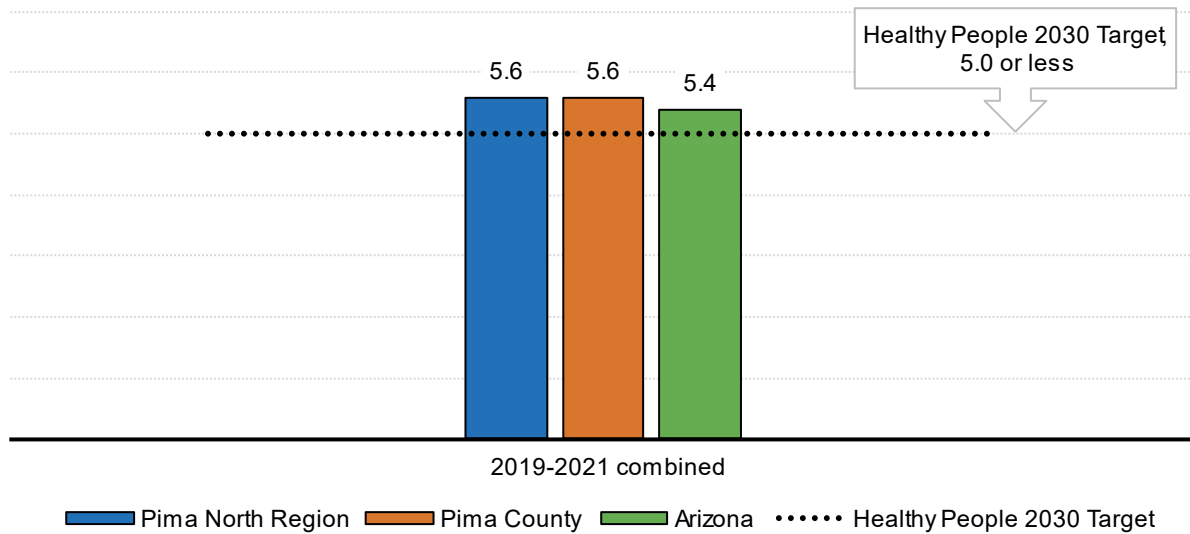


Arizona



Source: Arizona Department of Health Services (2023). [Hospital Discharge dataset]. Unpublished data.

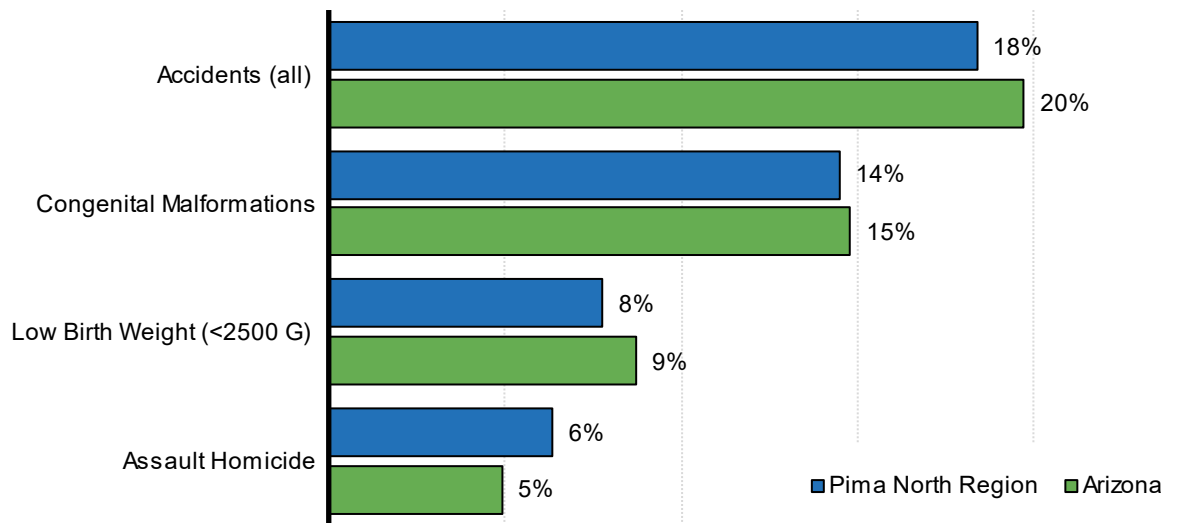
Figure 66. Infant mortality rates, 2019-2021 combined



Source: Arizona Department of Health Services (2023). [Vital Statistics Mortality Report dataset]. Unpublished data.

Note: The infant mortality rate is the number of infant (under age 1) deaths per 1,000 live births.

Figure 67. Leading causes of death for children birth to age 17, 2018-2021 combined



Source: Arizona Department of Health Services (2023). [Vital Statistics Mortality Report dataset]. Unpublished data.

Note: The leading causes of child death in Arizona are accidents (20%), congenital malformations (15%), low birthweight (9%), intentional self-harm/suicide (6%), and cancer/malignant neoplasms (5%). Causes of death in this figure are ordered by the leading causes of death in the region.

Additional data tables related to *Child Health* can be found in Appendix 1 of this report.



## **FAMILY SUPPORT AND LITERACY**

# FAMILY SUPPORT AND LITERACY

## Why it Matters

Children’s long-term well-being and success is tied to their relationships and experiences with their caregivers. Adverse childhood experiences (ACEs) refer to childhood experiences of abuse, neglect and other life events that can negatively impact children’s immediate and long-term well-being.<sup>xxxii,307</sup> ACEs have been associated with negative effects on development, educational achievement, future employment, mental health, drug and alcohol use and overall increased health care utilization.<sup>308, 309, 310</sup> ACEs are more prevalent among Arizona children with special health care needs and children living in poverty.<sup>311</sup>

Social, physical, academic and economic outcomes are positively influenced by healthy relationships and interactions with family members and caregivers during childhood.<sup>312, 313, 314, 315, 316</sup> An understanding of, and ability to utilize, positive parenting skills is an important protective factor that reduces the likelihood of abuse and neglect, leading to better childhood and long-term outcomes.<sup>317</sup> Positive Childhood Experiences (PCEs), including positive parent-child relationships and feelings of safety and support, have been shown to have positive long term impacts on mental and relational health.<sup>318</sup> Even if children have experienced multiple ACEs, if their families show high levels of resilience and connection (e.g., working together to solve problems, staying hopeful in difficult times and talking together about things that matter to their family) they show higher rates of flourishing, characterized by healthy social and emotional development and an open and engaged approach to learning.<sup>319</sup> These higher flourishing scores coupled with higher ACE scores point to the reality that childhood flourishing can, and does, exist amid adverse experiences and can potentially help mitigate their negative health effects.<sup>320</sup> Supporting families with the knowledge and skills to promote resilience and connection can therefore be critical for ensuring children’s long-term well-being.

## What the Data Tell Us

### Early literacy

Parents and families can play an important role in promoting early academic skills. When families read, sing and tell stories together, it can help young children develop reading and writing fluency as well as their capacity for reading comprehension.<sup>321, 322, 323</sup> Literacy practices at home have also been found to increase children’s motivation to learn.<sup>324</sup> These early literacy skills are important because they are linked to durable outcomes including elementary school performance and overall educational achievement.<sup>325</sup>

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<sup>xxxii</sup> ACEs include eight categories of traumatic or stressful life events experienced before the age of 18 years. The eight 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.

Some families may face challenges to implementing literacy practices with their young children, especially when they are low-resourced. Barriers include being unfamiliar with child development benchmarks, having limited free time to spend with children and lower access to books in the home.<sup>326</sup> Community programs, family resource centers, home visitation and larger-scale initiatives can help caregivers implement home-based literacy practices to improve children’s reading scores. Recognizing the influence caregivers can have, the American Academy of Pediatrics suggests that pediatricians provide information to families about the benefits of early literacy practices. Doctor’s offices and other community locations are also places where initiatives like Read on Arizona and Reach Out & Read may provide books and other materials that families can bring home.<sup>327</sup>

### **Substance use disorders**

Parental substance use has major implications for children’s health and well-being. Children of parents with substance use disorders are frequently referred to child welfare services due to neglect or abuse and face a higher risk of later mental health and behavioral health issues, including developing substance use disorders themselves.<sup>328, 329</sup> Access to treatment for substance use disorders and supports for parents and families grappling with these issues can help ameliorate the short and long-term impacts on young children.<sup>330, 331</sup>

### ***How the Pima North Region is faring***

- The number of non-fatal opioid-related overdoses in Pima County more than doubled from 2017 (n=300) to 2021 (n=621), compared to an overall decrease during those years across the state. Opioid-related deaths in the county also doubled during this time, from 176 in 2017 to 348 in 2021, following a similar statewide trend (Figure 68). To help address opioid addiction, the state of Arizona has made three resources available in recent years; the Opioid Assistance and Referral<sup>xxxiii</sup> line launched in 2018, no cost availability of naloxone (also called Narcan, a medication that rapidly reverses opioid overdose) to many organizations across the state through the Arizona Department of Health Services (ADHS)<sup>xxxiv</sup> and access to naloxone without a prescription at pharmacies.

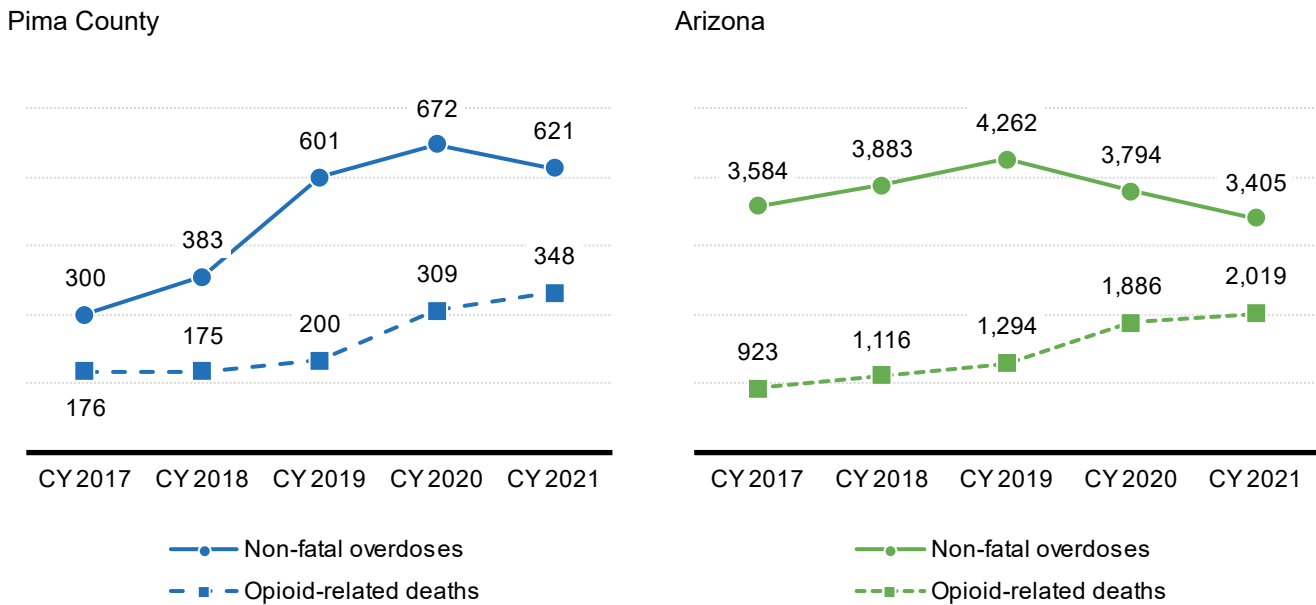
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<sup>xxxiii</sup> For more information, please see <https://www.azdhs.gov/oarline/>

<sup>xxxiv</sup> For more information, please see <https://www.azdhs.gov/opioid/index.php#naloxone>



Figure 68. Number of non-fatal overdoses with opioids or opiates contributing to the overdose and opioid-related deaths, 2017 to 2021



Source: Arizona Department of Health Services (2021). [Opioid-related vital statistics dataset]. Unpublished data.

### Child removals

In situations where the harm in remaining with their family is determined to be too great to a child, they may be removed from their home, either temporarily or permanently. Since 2014, the number of children removed from their home by the Arizona Department of Child Safety (DCS) was nearly cut in half, from 12,162 children (birth to age 17) in 2014 to 6,689 in 2022.<sup>332, 333, 334</sup> This major reduction in removals is tied to multiple intentional efforts by DCS over the past decade to improve Arizona’s child welfare system and safely reduce the number of children in foster care.<sup>335, 336, 337</sup>

One notable effort was the work to better define instances of neglect and reduce unnecessary investigations of families. After a 2015 review found that DCS hotline staff lacked clear guidelines for determining cases of neglect, DCS provided coaching for hotline staff and developed an improved decision-making protocol with clearer guidance. This resulted in screened-in cases declining from 70% to 55%.<sup>338</sup>

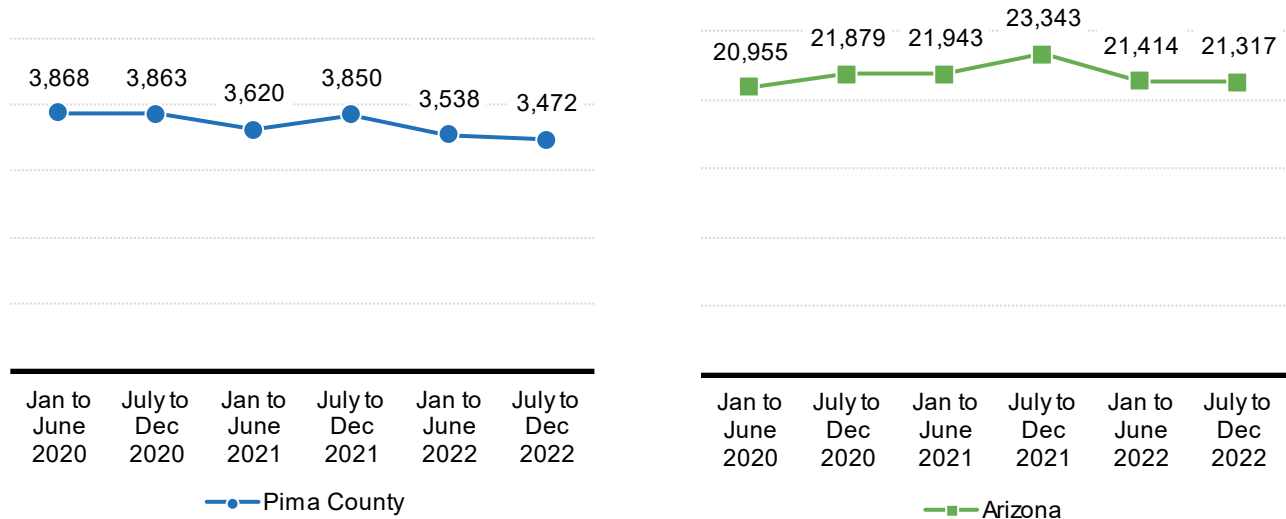
In March 2022, Arizona also passed legislation (SB 1050) which created a stricter definition of ‘neglect,’ reducing the risk that children are separated from their families simply for living in poverty.<sup>339, 340</sup> Despite removals declining, Black and American Indian children continue to be overrepresented in the DCS system. Addressing this disproportionality of Black and American Indian children in the DCS system is another area of targeted effort by the agency. In June 2023, Mathematica published the Arizona Department of Child Safety Next Event Study, which aimed to identify disparities in DCS engagement and provide recommendations to further reduce unnecessary investigations and

removals.<sup>341</sup> DCS has developed several strategic initiatives to reduce these disparities, including implementing standardized training for staff and increasing involvement of family and community members in decision-making processes.<sup>342</sup>

***How Pima North Region is faring***

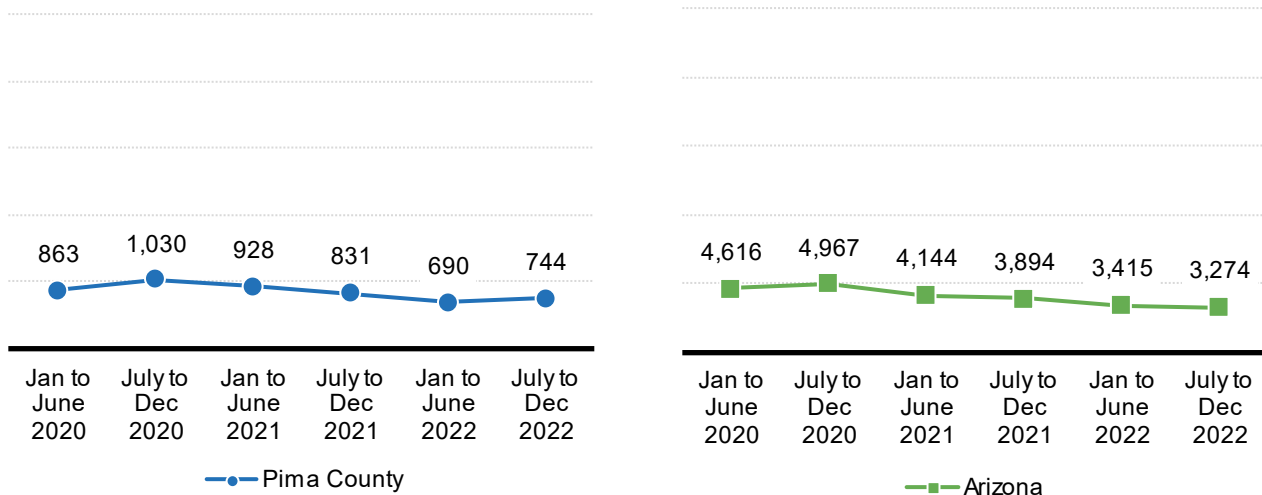
- The number of child abuse and neglect reports assigned for investigation by DCS in Pima County showed an overall decline between the first half of 2020 (n=3,868) and the second half of 2022 (n=3,472), contrary to an overall increase seen across the state during that period (Figure 69).
- The number of children under 18 removed by DCS in Pima County and Arizona peaked in the second half of 2020, followed by an overall decline. Between July and December 2022, a total of 744 children birth to age 17 were removed by DCS in Pima County. Neglect was the most common type of substantiated maltreatment during this period in both the county (69%) and state (71%), followed by physical abuse (27% and 24%, respectively) and sexual abuse (4% and 5%, respectively) (Figure 70 & Figure 71).

Figure 69. Child abuse and neglect reports (for children birth to age 17) assigned for investigation by DCS, Jan 2020 to Dec 2022



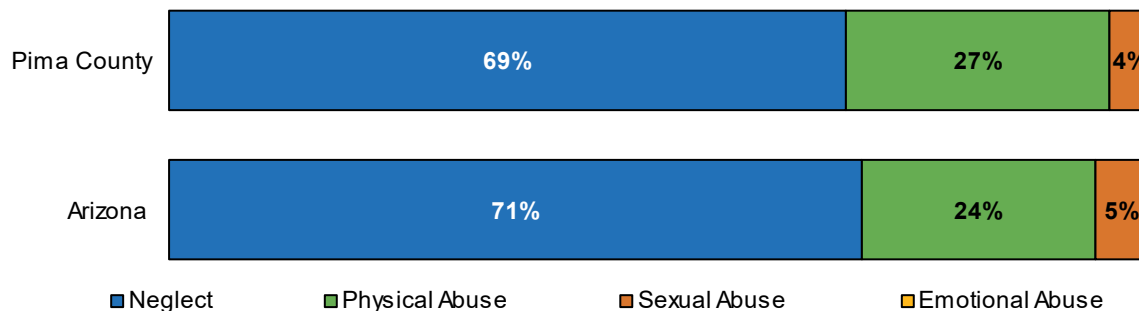
Source: Department of Child Safety (2023). Semiannual child welfare reports, Sept 2020 to March 2023. Retrieved from <https://dcs.az.gov/reports>

Figure 70. Children birth to age 17 removed by DCS, Jan 2020 to Dec 2022



Source: Department of Child Safety (2023). Semiannual child welfare report, March 2023. Retrieved from <https://dcs.az.gov/reports>

Figure 71. Substantiated maltreatment reports by type for children birth to age 17, July-Dec 2022



Source: Department of Child Safety (2023). Semiannual child welfare report, March 2023. Retrieved from <https://dcs.az.gov/reports>

Note: Statewide, 0.1% of substantiated maltreatment reports (fewer than 5 in the given time period) were due to emotional abuse.

### Foster care

The Family First Prevention Services Act, signed into federal law on February 9, 2018, aims to ensure children are placed in the least restrictive, most family-like setting appropriate to their unique needs when foster care is needed. One effect of the Family First Prevention Services Act has been an increased focus on kinship placements, which are placements of children with relatives or close family friends.<sup>343</sup> In recent years, the number of unlicensed kinship homes has even exceeded the number of foster homes in the state. This increase is likely related to several changes at DCS, including efforts to reduce barriers



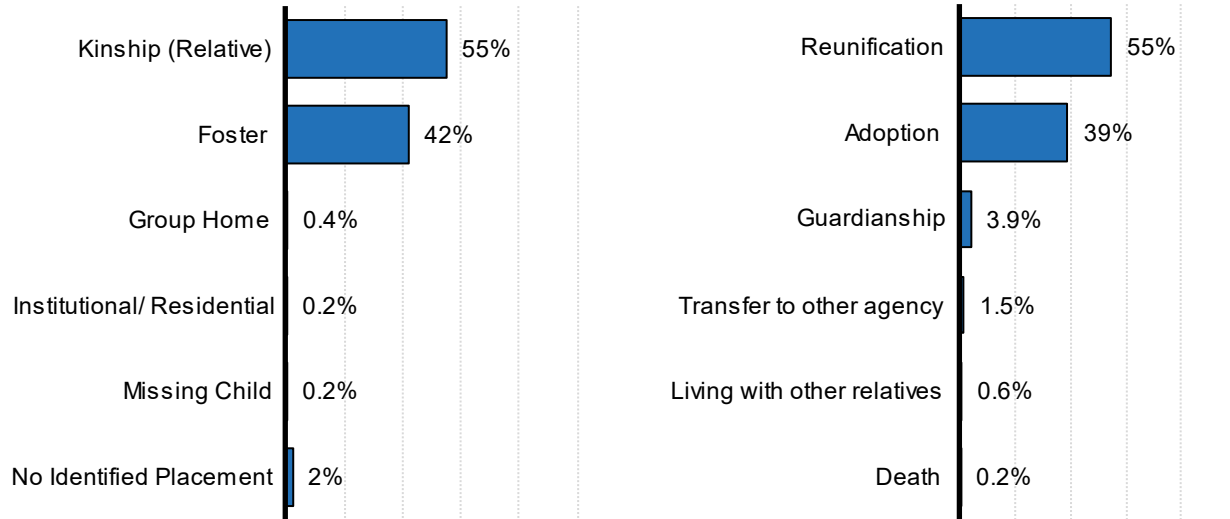
to licensure (e.g., waiving some fingerprint clearance card requirements) and funds to assist kinship caregivers with meeting licensing requirements (e.g., purchasing car seats). Additionally, an increase in the monthly kinship stipend (from \$75/month to \$300/month) for unlicensed kinship homes can help support relatives, such as grandparents, who are caring for children even if they are not currently able to pursue becoming a licensed foster home.<sup>344</sup>

### ***How Arizona is faring***

- In the last six months of 2022, more than half (55%) of young children birth to age 5 placed in out-of-home care by DCS across Arizona were able to remain with family through a kinship placement. Children in DCS custody most often exited out-of-home care to be reunified with their parents (55%) or adopted (39%) (Figure 72).
- The number of licensed kinship foster homes in Arizona steadily declined between January 2018 and June 2022, though there was an uptick again in the latter half of 2022. Generally, fewer than one in five kinship homes are licensed, and the number of unlicensed kinship homes increased slightly overall during the same period and exceeded the number of community foster homes during the most intense years of the pandemic (Figure 73).

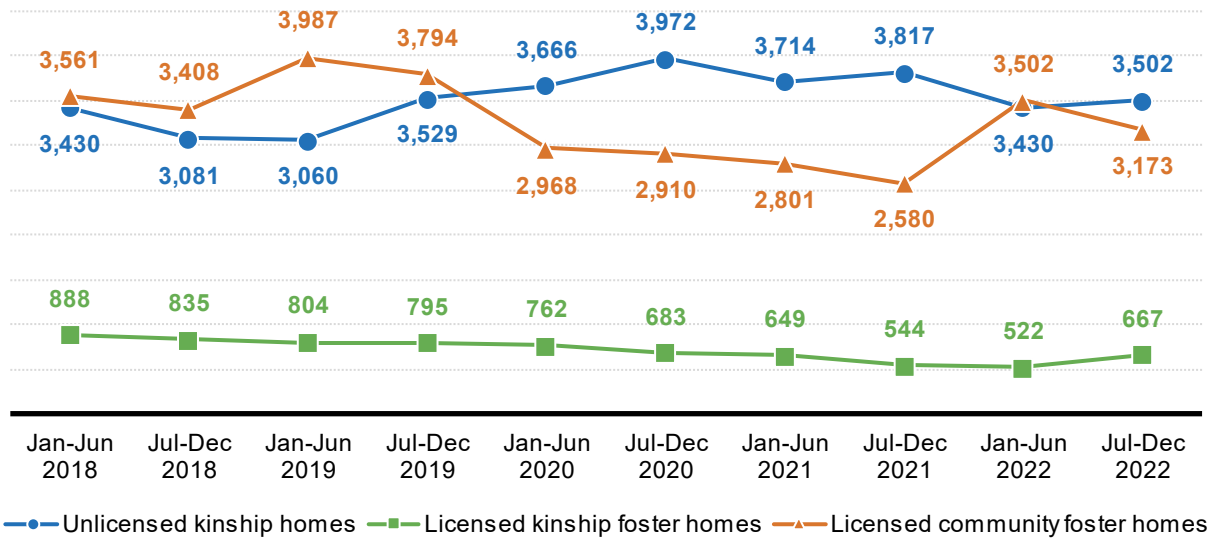
Figure 72. Types of placement and outcomes for children birth to age 5 in DCS custody in Arizona, July-Dec 2022

Placement type for children ages 0-5 in DCS custody    Case outcome for children 0-5 exiting out-of-home care



Source: Department of Child Safety (2023). Semiannual child welfare report, March 2023. Retrieved from <https://dcs.az.gov/reports>

Figure 73. Licensed foster homes and unlicensed kinship homes in Arizona, Jan 2018 to Dec 2022



Source: Department of Child Safety (2023). Semiannual child welfare reports, Sept 2018 to March 2023. Retrieved from <https://dcs.az.gov/reports>

Additional data tables related to *Family Support and Literacy* can be found in Appendix 1 of this report.

# APPENDIX 1: ADDITIONAL DATA TABLES

## Population Characteristics

Table 28. Population projections for children birth to age 4, 2030 to 2060

Geography	Population ages 0-4, 2020 Census	Population ages 0-4, 2030 (projected)	Population ages 0-4, 2040 (projected)	Population ages 0-4, 2050 (projected)	Population ages 0-4, 2060 (projected)
<b>Pima North Region</b>	<b>33,553</b>	<i>Regional data not available</i>			
Pima County	51,065	55,915	61,278	60,553	61,561
Arizona	392,370	459,822	499,925	497,031	525,849

Source: Arizona Office of Economic Opportunity (2022). Arizona Population Projections: 2022 to 2060, Medium Series

Table 29. Race and ethnicity of the population of all ages, 2020 Census

Geography	Estimated population (all ages)	Hispanic or Latino	White, not Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Two or more races
<b>Pima North Region</b>	<b>731,668</b>	<b>30%</b>	<b>61%</b>	<b>6%</b>	<b>4%</b>	<b>6%</b>	<b>15%</b>
Pima County	1,043,433	36%	55%	5%	5%	5%	17%
Arizona	7,151,502	31%	57%	6%	6%	5%	14%
United States	331,449,281	19%	62%	14%	3%	8%	10%

Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), P6, P7, P8, P9, P12, P12A-W.

Note: The six percentages in each row may sum to more or less than 100% because (a) persons reporting Hispanic ethnicity are counted twice if their race is Black, American Indian, Asian, Pacific Islander, or any combination of two or more races, (b) persons reporting any other race are not counted here unless they have Hispanic ethnicity, and (c) rounding.

Table 30. Race and ethnicity of children birth to age 4

Geography	Estimated number of children (birth to 4 years old)	Hispanic or Latino	White, not Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Two or more races
<b>Pima North Region</b>	<b>33,553</b>	<b>46%</b>	<b>44%</b>	<b>11%</b>	<b>6%</b>	<b>8%</b>	<b>25%</b>
Pima County	51,065	51%	38%	9%	7%	7%	26%
Arizona	392,370	44%	42%	10%	8%	7%	21%
United States	18,400,235	25%	54%	18%	4%	9%	16%

Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), P6, P7, P8, P9, P12, P12A-W.

Note: The six percentages in each row may sum to more or less than 100% because (a) children reporting Hispanic ethnicity are counted twice if their race is Black, American Indian, Asian, Pacific Islander, or any combination of two or more races, (b) children reporting any other race are not counted here unless they have Hispanic ethnicity, and (c) rounding.

Table 31. Race and ethnicity for the mothers of babies born in 2020 and 2021

Geography	Calendar year	Number of births	Mother was non-Hispanic White	Mother was Hispanic or Latina	Mother was Black or African American	Mother was American Indian or Alaska Native	Mother was Asian or Pacific Islander
<b>Pima North Region</b>	<b>2020</b>	<b>6,611</b>	<b>45%</b>	<b>43%</b>	<b>6%</b>	<b>2%</b>	<b>4%</b>
	<b>2021</b>	<b>6,555</b>	<b>45%</b>	<b>43%</b>	<b>5%</b>	<b>2%</b>	<b>4%</b>
Pima County	2020	10,035	39%	50%	5%	4%	3%
	2021	9,970	39%	50%	5%	3%	3%
Arizona	2020	76,781	43%	41%	6%	5%	4%
	2021	77,857	43%	41%	6%	5%	4%

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: The five percentages in each row should sum to 100%, but may not because of rounding. Mothers who report more than one race or ethnicity are assigned to the one which is smaller. Mothers of twins are counted twice in this table.

Table 32. Children birth to age 5 living with parents who are foreign-born, 2017-2021 ACS

Geography	Estimated number of children (birth to 5 years old) living with one or two parents	Number and percent living with one or two foreign-born parents	
		Number	Percent
<b>Pima North Region</b>	<b>39,604</b>	<b>7,800</b>	<b>20%</b>
Pima County	63,108	13,091	21%
Arizona	473,732	115,267	24%
United States	22,399,131	5,504,770	25%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B05009

Note: The term "parent" here includes stepparents.

Table 33. Language spoken at home (by persons ages 5 and older), 2017-2021 ACS

Geography	Estimated population (age 5 and older)	Speak only English at home	Speak Spanish at home	Speak languages other than English or Spanish at home
				Percent
<b>Pima North Region</b>	<b>684,974</b>	<b>77%</b>	<b>17%</b>	<b>5%</b>
Pima County	979,353	73%	23%	5%
Arizona	6,666,597	73%	20%	6%
United States	310,302,360	78%	13%	8%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table C16001

Note: The three percentages in each row may not sum to 100% because of rounding. The American Community Survey (ACS) no longer specifies the proportion of the population who speak Native North American languages for geographies smaller than the state. In Arizona, Navajo and other Native American languages (including Apache, Hopi, and O'odham) are the most commonly spoken (2%), following English (73%) and Spanish (20%).

Table 34. English-language proficiency (for persons ages 5 and older), 2017-2021 ACS

Geography	Estimated population (age 5 and older)	Speak only English at home	Speak another language at home, and speak English very well	Speak another language at home, and do not speak English very well
<b>Pima North Region</b>	<b>684,974</b>	<b>77%</b>	<b>17%</b>	<b>6%</b>
Pima County	979,353	73%	20%	8%
Arizona	6,666,597	73%	18%	8%
United States	310,302,360	78%	13%	8%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table C16001

Note: The three percentages in each row should sum to 100%, but may not because of rounding.

Table 35. Limited-English-speaking households, 2017-2021 ACS

Geography	Estimated number of households	Number and percent of limited-English-speaking households	
<b>Pima North Region</b>	<b>309,311</b>	<b>9,729</b>	<b>3%</b>
Pima County	417,483	15,983	4%
Arizona	2,683,557	99,159	4%
United States	124,010,992	5,241,326	4%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table C16002

Note: A "limited-English-speaking" household is one in which no one over the age of 13 speaks English very well.

Table 36. Grandchildren birth to age 5 living in a grandparent's household, 2020 Census

Geography	Estimated number of children (birth to 5 years old) living in households	Number and percent living in their grandparent's household	
<b>Pima North Region</b>	<b>40,788</b>	<b>4,556</b>	<b>11%</b>
Pima County	62,466	8,191	13%
Arizona	480,744	64,792	13%
United States	22,401,565	2,520,305	11%

Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P14, PCT11.

Note: This table includes all children (under 6 years old) living in a household headed by a grandparent, regardless of whether the grandparent is responsible for them, or whether the child's parent lives in the same household.

## Economic Circumstances

Table 37. Median annual family income, 2017-2021 ACS

Geography	Median annual income for all families	Median annual income for all families with children under 18 years old	Median annual income for married-couple families with children under 18 years old	Median annual income for single-male-headed families with children under 18 years old	Median annual income for single-female-headed families with children under 18 years old
Pima County	\$75,200	\$69,000	\$97,500	\$42,800	\$31,300
Arizona	\$78,800	\$75,100	\$100,000	\$49,100	\$35,000
United States	\$85,000	\$82,800	\$110,000	\$50,900	\$32,600

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B19126

Note: Half of the families in the population are estimated to have incomes above the median value, and the other half have incomes below the median.

Table 38. Children birth to age 5 living at selected poverty thresholds, 2017-2021 ACS

Geography	Estimated number of children (birth to 5 years old) who live with parents or other relatives	Percent of children under 50% of the poverty level	Percent of children between 50% and 99% of the poverty level	Percent of children between 100% and 184% of the poverty level	Percent of children at or above 185% of the poverty level
<b>Pima North Region</b>	<b>40,503</b>	<b>12%</b>	<b>10%</b>	<b>19%</b>	<b>59%</b>
Pima County	64,916	11%	11%	20%	58%
Arizona	486,513	9%	11%	19%	61%
United States	22,940,195	9%	10%	16%	65%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B17024

Note: The four percentages in each row should sum to 100%, but may not because of rounding. In 2021, the poverty threshold for a family of two adults and two children was \$27,479; for a single parent with one child, it was \$18,677. The 185% thresholds are \$50,836 and \$34,552, respectively.

Table 39. Families with children birth to age 5 receiving TANF, state fiscal years 2018 to 2022

Geography	Households with one or more children (ages 0-5)	Number of families with children (ages 0-5) participating in TANF					Percent of households with young children (ages 0-5) participating in TANF in SFY 2022
		SFY 2018	SFY 2019	SFY 2020	SFY 2021	SFY 2022	
<b>Pima North Region</b>	<b>30,352</b>	<b>1,488</b>	<b>1,310</b>	<b>1,541</b>	<b>1,595</b>	<b>1,504</b>	<b>5%</b>
Pima County	45,676	2,531	2,214	2,445	2,480	2,336	5%
Arizona	345,601	10,538	9,360	9,947	9,881	9,884	3%

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

Table 40. Children birth to age 5 receiving TANF, state fiscal years 2018 to 2022

Geography	Number of young children (ages 0-5) in the population	Number of young children (ages 0-5) participating in TANF					Percent of young children (ages 0-5) participating in TANF in SFY 2022
		SFY 2018	SFY 2019	SFY 2020	SFY 2021	SFY 2022	
<b>Pima North Region</b>	<b>40,788</b>	<b>2,061</b>	<b>1,771</b>	<b>2,069</b>	<b>2,139</b>	<b>2,012</b>	<b>5%</b>
Pima County	62,466	3,529	3,019	3,289	3,332	3,140	5%
Arizona	480,744	14,659	13,029	13,747	13,654	13,592	3%

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

Table 41. Families participating in SNAP, state fiscal years 2018 to 2022

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 SFY 2022
		SFY 2018	SFY 2019	SFY 2020	SFY 2021	SFY 2022	
<b>Pima North Region</b>	<b>30,352</b>	<b>14,208</b>	<b>13,336</b>	<b>12,782</b>	<b>12,616</b>	<b>12,098</b>	<b>40%</b>
Pima County	45,676	22,598	21,104	20,190	19,863	19,286	42%
Arizona	345,601	151,816	140,056	132,466	131,063	128,460	37%

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.



Table 42. Children participating in SNAP, state fiscal years 2018 to 2022

Geography	Number of young children (ages 0-5) in the population	Number of children (0-5) participating in SNAP					Percent of young children (0-5) participating in SNAP in SFY 2022
		SFY 2018	SFY 2019	SFY 2020	SFY 2021	SFY 2022	
<b>Pima North Region</b>	<b>40,788</b>	<b>20,665</b>	<b>19,431</b>	<b>18,528</b>	<b>18,161</b>	<b>17,439</b>	<b>43%</b>
Pima County	62,466	33,131	30,963	29,439	28,743	27,912	45%
Arizona	480,744	229,275	211,814	198,961	194,771	190,968	40%

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

Table 43. Women enrolled in WIC, 2018 to 2022

Geography	Enrolled Women, 2018	Enrolled Women, 2019	Enrolled Women, 2020	Enrolled Women, 2021	Enrolled Women, 2022
<b>Pima North Region</b>	<b>6,434</b>	<b>6,175</b>	<b>5,585</b>	<b>5,233</b>	<b>5,441</b>
Pima County	9,960	9,473	8,767	8,311	8,616
Arizona	72,098	68,312	63,111	59,588	60,866

Source: Arizona Department of Health Services (2023). [WIC Dataset]. Unpublished data.

Note: Enrolled women include both pregnant and breastfeeding women.

Table 44. Women participating in WIC, 2018 to 2022

Geography	Participating Women, 2018	Participating Women, 2019	Participating Women, 2020	Participating Women, 2021	Participating Women, 2022
<b>Pima North Region</b>	<b>5,993</b>	<b>5,791</b>	<b>5,239</b>	<b>5,035</b>	<b>5,264</b>
Pima County	9,296	8,921	8,271	7,988	8,347
Arizona	67,687	64,225	59,477	56,953	58,456

Source: Arizona Department of Health Services (2023). [WIC Dataset]. Unpublished data.

Note: Participating women include both pregnant and breastfeeding women. Women are counted as 'participating' if they received benefits during the time period in question.

Table 45. Children birth to age 4 enrolled in WIC, 2018 to 2022

Geography	Enrolled infants and children, 2018	Enrolled infants and children, 2019	Enrolled infants and children, 2020	Enrolled infants and children, 2021	Enrolled infants and children, 2022
<b>Pima North Region</b>	<b>15,936</b>	<b>15,324</b>	<b>14,592</b>	<b>14,100</b>	<b>14,389</b>
Pima County	17,417	16,981	17,085	16,923	17,310
Arizona	187,737	178,300	167,186	162,360	163,893

Source: Arizona Department of Health Services (2021). [WIC Dataset]. Unpublished data.

Table 46. Children birth to age 4 participating in WIC, 2018 to 2022

Geography	Participating infants and children, 2018	Participating infants and children, 2019	Participating infants and children, 2020	Participating infants and children, 2021	Participating infants and children, 2022
<b>Pima North Region</b>	<b>14,325</b>	<b>13,914</b>	<b>13,480</b>	<b>13,453</b>	<b>13,800</b>
Pima County	15,463	15,240	15,748	16,098	16,540
Arizona	169,372	161,287	154,501	153,835	155,856

Source: Arizona Department of Health Services (2021). [WIC Dataset]. Unpublished data.

Note: Children are counted as 'participating' if they received benefits during the time period in question.

Table 47. Persons of all ages in households with and without computers and internet connectivity, 2017-2021 ACS

Geography	Estimated number of persons (all ages) living in households	Have a computer and internet	Have a computer but no internet	Do not have a computer
<b>Pima North Region</b>	<b>700,228</b>	<b>92%</b>	<b>5%</b>	<b>3%</b>
Pima County	1,006,680	92%	5%	3%
Arizona	6,930,677	90%	6%	4%
United States	321,899,278	90%	6%	4%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B28005

Note: The three percentages in each row should sum to 100%, but may not because of rounding.

Table 48. Children birth to age 17 in households with and without computers and internet connectivity, 2017-2021

Geography	Estimated number of children (ages 0-17) living in households	Have a computer and internet	Have a computer but no internet	Do not have a computer
<b>Pima North Region</b>	<b>133,869</b>	<b>95%</b>	<b>3%</b>	<b>1%</b>
Pima County	214,695	95%	3%	1%
Arizona	1,611,069	92%	6%	2%
United States	74,041,861	93%	5%	2%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B28005

Note: The three percentages in each row should sum to 100%, but may not because of rounding.

## Educational Indicators

Table 49. Migrant students (grades PS-12) enrolled in public and charter schools, 2019-20 to 2021-22

Geography	Number of migrant students			Percent of students who were migrant students		
	2019-20	2020-21	2021-22	2019-20	2020-21	2021-22
<b>Pima North Region Schools</b>	<i>Regional data not available</i>					
Pima County	82	99	102	<2%	<2%	<2%
Arizona Schools	4,498	3,598	6,280	<2%	<2%	<2%

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Migrant students are those students participating in the Arizona Migrant Education Program, a federally-funded, state-run program that provides supplemental services to the children of migrant farmworkers.

Table 50. Kindergarten to 3rd grade students with chronic absences, 2019-20 to 2021-22

Geography	K-3 Students with chronic absences			Percent of K-3 students with chronic absences		
	2019-20	2020-21	2021-22	2019-20	2020-21	2021-22
<b>Pima North Region Schools</b>	<b>N/A</b>	<b>4,612</b>	<b>9,264</b>	<b>N/A</b>	<b>20%</b>	<b>22%</b>
Pima County	4,199	8,060	14,698	10%	24%	38%
Arizona	25,382	56,547	100,955	8%	21%	34%

Source: Arizona Department of Education (2023). [Absenteeism Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Students are considered chronically absent if they miss more than 10% of the school days in a school year. This table includes children who are absent due to chronic illness. Regional data were not available for 2019-20 due to difference in how data were pulled in the prior RNA cycle.

Table 51. 4-year and 5-year graduation rates, 2022

Geography	4-Year senior cohort (2022)	4-Year graduates (2022)	4-Year graduation rate (2022)	5-Year graduates (2022)	5-Year graduation rate (2022)
<b>Pima North Region</b>	<b>8,246</b>	<b>5,925</b>	<b>72%</b>	<b>N/A</b>	<b>N/A</b>
Pima County	11,950	8,605	72%	9,491	74%
Arizona Schools	89,404	67,692	76%	71,277	79%

Source: Arizona Department of Education (2023). [Graduation Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: The 2022 4-year senior cohort is the number of students who are expected to graduate in 2022 given the number of students who entered school 4 years prior. At the time data for this report were accessed from ADE, 2022 5-year graduation rates had not yet been released, so no regional estimates are available.

## Early Learning

Table 52. School enrollment for children ages 3 to 4, 2017-2021 ACS

Geography	Estimated number of children (3 or 4 years old)	Number and percent enrolled in school	
		Number	Percent
<b>Pima North Region</b>	<b>14,181</b>	<b>6,303</b>	<b>44%</b>
Pima County	22,717	9,425	41%
Arizona	176,033	63,974	36%
United States	8,100,136	3,719,992	46%

Source: U.S. Census Bureau. (2023). American Community Survey 5-year estimates 2017-2021, Table B14003

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

Table 53. Quality First Programs, state fiscal year 2023

Geography	Child care providers served	Child care providers with a 3-5 star rating	Percent of child care providers with a 3-5 star rating
<b>Pima North Region</b>	<b>196</b>	<b>137</b>	<b>69.9%</b>
Pima County	N/A	N/A	N/A
Arizona	1,434	982	68%

Source: First Things First (2023). Quality First Summary Data. Unpublished data.

Table 54. Median monthly charge for full-time center-based child care, 2022

Geography	Licensed centers			Public schools		
	One infant	One 1 or 2 year old	One 3 to 5 year old	One infant	One 1 or 2 year old	One 3 to 5 year old
<b>Pima North Region</b>	<i>Regional data not available</i>					
Pima County	\$1,050	\$856	\$767	\$1,067	\$907	\$748
Arizona	\$949	\$826	\$727	\$1,011	\$880	\$701

Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540>

Table 55. Median monthly charge for full-time home-based child care, 2022

Geography	Certified family homes			Small group homes		
	One infant	One 1 or 2 year old	One 3 to 5 year old	One infant	One 1 or 2 year old	One 3 to 5 year old
<b>Pima North Region</b>	<i>Regional data not available</i>					
Pima County	\$630	\$630	\$630	\$735	\$735	\$735
Arizona	\$662	\$627	\$618	\$761	\$725	\$713

Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540>

Table 56. Cost of center-based child care as a percentage of income, 2022

Geography	Median family income	Cost for an infant	Cost for a 1 to 2 year old child	Cost for a 3 to 5 year old child
<b>Pima North Region</b>	<i>Regional data not available</i>			
Pima County	\$69,000	18%	15%	13%
Arizona	\$75,000	15%	13%	12%

Sources: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540> & U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B19126.

Note: Annual costs of care are calculated by multiplying the median daily cost of care by 252 to approximate a full year of care, then dividing by the median income for families with children under the age of 18 in the region. The U.S. Department of Health and Human Services Child Care and Development Fund (CCDF) Program sets a benchmark for affordable co-payments for child care at 7% of family income.

Table 57. Children receiving DES child care assistance, 2017 to 2022

Geography	Number of children receiving assistance						Percent of eligible children receiving assistance					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022
<b>Pima North Region</b>	<b>2,512</b>	<b>2,961</b>	<b>3,407</b>	<b>2,769</b>	<b>2,891</b>	<b>3,074</b>	<b>95%</b>	<b>95%</b>	<b>94%</b>	<b>82%</b>	<b>89%</b>	<b>93%</b>
Pima County	3,602	4,285	4,877	3,960	4,145	4,313	95%	92%	94%	82%	89%	92%
Arizona	16,922	19,813	23,155	19,909	22,359	20,099	93%	92%	92%	80%	88%	90%

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Table 58. DCS-involved children receiving DES child care assistance, 2017 to 2022

Geography	Number of DCS children receiving assistance						Percent of DCS eligible children receiving assistance					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022
<b>Pima North Region</b>	<b>1,798</b>	<b>1,821</b>	<b>1,689</b>	<b>1,016</b>	<b>1,317</b>	<b>1,292</b>	<b>90%</b>	<b>86%</b>	<b>85%</b>	<b>60%</b>	<b>83%</b>	<b>84%</b>
Pima County	2,584	2,629	2,419	1,467	1,851	1,771	89%	86%	85%	61%	83%	83%
Arizona	12,201	12,219	11,808	7,137	8,853	8,268	88%	82%	82%	59%	81%	80%

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Table 59. Eligible families not using DES child care assistance, 2017 to 2022

Geography	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022
<b>Pima North Region</b>	<b>4.8%</b>	<b>5%</b>	<b>5.6%</b>	<b>17.5%</b>	<b>10.8%</b>	<b>7.2%</b>
Pima County	4.7%	5.1%	5.9%	17%	10.8%	7.6%
Arizona	6.7%	7.6%	7.9%	18.3%	11.7%	9.2%

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Table 60. Number of children birth to age 5 receiving DDD services, state fiscal years 2019 to 2022

Geography	SFY 2019	SFY 2020	SFY 2021	SFY 2022	Percent change from 2019 to 2022
<b>Pima North Region</b>	<b>270</b>	<b>266</b>	<b>186</b>	<b>234</b>	<b>-13%</b>
Pima County	592	699	413	419	-11%
Arizona	4,005	4,078	2,438	3,691	-8%

Source: Arizona Department of Economic Security (2023). [Division of Developmental Disabilities dataset]. Unpublished data.



Table 61. Number of children birth to age 2 receiving AzEIP and/or DDD services, state fiscal years 2019 to 2022

Geography	Number of children ages 0-2 receiving services from AzEIP and/or DDD				Population ages 0-2 (Census 2020)	Estimated percent of children (ages 0-2) receiving AzEIP and/or DDD services, SFY 2022
	FY 2019	FY 2020	FY 2021	FY 2022		
<b>Pima North Region</b>	<b>477</b>	<b>354</b>	<b>417</b>	<b>367</b>	<b>19,428</b>	<b>1.9%</b>
Pima County	750	565	678	590	29,364	2.0%
Arizona	6,376	5,721	5,916	5,876	225,737	2.6%

Source: Arizona Department of Economic Security (2023). [AzEIP dataset]. Unpublished data.

Table 62. Preschoolers with disabilities receiving services through LEAs, state fiscal years 2018 to 2022

Geography	Preschoolers enrolled in special education				
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
<b>Pima North Region</b>	<b>752</b>	<b>712</b>	<b>729</b>	<b>586</b>	<b>566</b>
Pima County	1,263	1,278	1,313	1,074	983
Arizona	10,123	10,314	10,521	8,537	8,086

Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Table 63. Preschoolers with disabilities receiving services through LEAs by type of disability, 2019-20

Geography	Total Preschoolers	Developmental Delay	Speech or Language Impairment	Preschool Severe Delay	Other Disability
<b>Pima North Region Schools</b>	<b>DS</b>	<b>49%</b>	<b>35%</b>	<b>15%</b>	<b>&lt;2%</b>
Pima County Schools	DS	42%	35%	22%	<2%
Arizona	8,086	43%	30%	24%	3%

Source: Arizona Department of Education (2021). [Graduation Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Table 64. Kindergarten to 3rd grade students enrolled in special education in public and charter schools, state fiscal years 2018 to 2022

Geography	K-3rd grade students enrolled in special education				
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
<b>Pima North Region</b>	<b>3,564</b>	<b>3,654</b>	<b>3,608</b>	<b>3,386</b>	<b>3,452</b>
Pima County	5,353	5,516	5,482	5,540	5,525
Arizona	36,468	37,812	38,791	37,179	37,334

Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Table 65. Kindergarten to 3rd grade students enrolled in special education in public and charter schools by primary disability, state fiscal year 2022

Geography	Total K-3rd grade students	Speech or Language Impairment	Developmental Delay	Specific Learning Disability	Autism	Other Disability
<b>Pima North Region Schools</b>	<b>3,452</b>	<b>43%</b>	<b>25%</b>	<b>12%</b>	<b>8%</b>	<b>12%</b>
Pima County Schools	5525	43%	25%	12%	9%	11%
Arizona Schools	37,334	36%	27%	12%	11%	13%

Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: The “Other Disabilities” category includes children with emotional disturbance, deafness, deaf-blindness, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairments such as chronic medical conditions that affect a child’s ability to participate in the educational setting, traumatic brain injury, or visual impairment.

## Child Health

Table 66. Prenatal care for the mothers of babies born in 2020 and 2021

Geography	Calendar year	Number of births	Mother had no prenatal care	Mother had fewer than five prenatal visits	Mother began prenatal care in the first trimester
<b>Pima North Region</b>	<b>2020</b>	<b>6,611</b>	<b>5%</b>	<b>9%</b>	<b>61.3%</b>
	<b>2021</b>	<b>6,555</b>	<b>4%</b>	<b>6%</b>	<b>69.9%</b>
Pima County	2020	10,035	5%	9%	61.6%
	2021	9,970	5%	6%	68.8%
Arizona	2020	76,781	2%	5%	68.8%
	2021	77,857	2%	5%	71.7%

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this table.

Table 67. Selected characteristics of mothers giving birth, 2020 to 2021

Geography	Calendar year	Number of births	Mother was younger than 18	Mother was younger than 20	Mother smoked cigarettes during pregnancy
<b>Pima North Region</b>	<b>2020</b>	<b>6,611</b>	<b>1%</b>	<b>4%</b>	<b>5.0%</b>
	<b>2021</b>	<b>6,555</b>	<b>1%</b>	<b>4%</b>	<b>4.9%</b>
Pima County	2020	10,035	1%	5%	4.4%
	2021	9,970	1%	5%	4.2%
Arizona	2020	76,781	1.3%	5.1%	3.6%
	2021	77,857	1.2%	4.6%	3.2%
Healthy People 2030 target					4.3%

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this table. The Healthy People 2030 target for maternal use of tobacco during pregnancy is 95.7% of females reporting abstaining from smoking during pregnancy.

Table 68. Births to mothers with gestational diabetes or pre-pregnancy obesity, 2020 to 2021

Geography	Calendar year	Number of births	Mother had gestational diabetes	Mother had pre-pregnancy obesity
Pima North Region	2020	6,611	10.7%	29%
	2021	6,555	11.0%	29%
Pima County	2020	10,035	10.8%	28%
	2021	9,970	11.5%	27%
Arizona	2020	76,781	9.5%	27%
	2021	77,857	9.9%	27%

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this table.

Table 69. Selected birth outcomes, 2020 to 2021

Geography	Calendar year	Number of births	Baby weighed less than 2500 grams	Baby was preterm (less than 37 weeks)	Baby was admitted to a NICU
Pima North Region	2020	6,611	8.5%	9.8%	12%
	2021	6,555	8.3%	9.3%	12%
Pima County	2020	10,035	8.2%	9.6%	12%
	2021	9,970	8.5%	9.7%	12%
Arizona	2020	76,781	7.4%	9.5%	7.8%
	2021	77,857	7.9%	10.0%	7.9%
Healthy People 2030 targets			9.4%		

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Table 70. WIC-enrolled infants ever breastfed, 2022

Geography	Infants for whom breastfeeding status is determined	Infants ever breastfed	Percent of infants ever breastfed
<b>Pima North Region</b>	<b>2,831</b>	<b>2,371</b>	<b>84%</b>
Pima County	4,494	3,767	84%
Arizona	31,612	25,103	79%

Source: Arizona Department of Health Services (2023). [WIC dataset]. Unpublished data.

Table 71. Percent of WIC-enrolled infants ever breastfed, 2018 to 2022

Geography	Breastfeeding rate, 2018	Breastfeeding rate, 2019	Breastfeeding rate, 2020	Breastfeeding rate, 2021	Breastfeeding rate, 2022
<b>Pima North Region</b>	<b>80%</b>	<b>83%</b>	<b>82%</b>	<b>80%</b>	<b>84%</b>
Pima County	80%	83%	81%	81%	84%
Arizona	77%	79%	78%	77%	79%

Source: Arizona Department of Health Services (2023). [WIC Dataset]. Unpublished data.

Table 72. Child care immunization exemption rates, 2018-19 to 2022-23

Geography	Children in child care with religious exemptions					Children in child care exempt from all vaccines				
	2018-19	2019-20	2020-21	2021-22	2022-23	2018-19	2019-20	2020-21	2021-22	2022-23
<b>Pima North Region</b>	<b>2.3%</b>	<b>2.1%</b>	<b>2.3%</b>	<b>4.3%</b>	<b>4.0%</b>	<b>1.6%</b>	<b>1.4%</b>	<b>1.6%</b>	<b>2.1%</b>	<b>1.9%</b>
Pima County	2.1%	1.9%	2.1%	2.5%	2.3%	1.5%	1.3%	1.5%	1.9%	1.7%
Arizona	4.5%	5.0%	5.1%	5.7%	5.7%	3.0%	3.1%	3.3%	3.4%	4.0%

Source: Arizona Department of Health Services (2023). Childcare Immunization Coverage, 2018-19 to 2022-23 School Years. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). Childcare Immunization Coverage by County, 2018-19 through 2022-23 School Years. Retrieved from: <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Table 73. Kindergarten immunization exemption rates, 2018-19 to 2022-23

Geography	Kindergarteners with personal belief exemptions					Kindergarteners exempt from all vaccines				
	2018-19	2019-20	2020-21	2021-22	2022-23	2018-19	2019-20	2020-21	2021-22	2022-23
<b>Pima North Region</b>	<b>4.1%</b>	<b>3.8%</b>	<b>2.8%</b>	<b>3.5%</b>	<b>4.3%</b>	<b>2.5%</b>	<b>2.6%</b>	<b>1.7%</b>	<b>2.2%</b>	<b>2.6%</b>
Pima County	3.2%	3.1%	2.6%	3.3%	3.4%	2.1%	2.1%	1.5%	1.9%	2.2%
Arizona	5.9%	5.4%	5.4%	6.6%	7.3%	3.8%	3.4%	3.3%	3.7%	4.6%

Source: Arizona Department of Health Services (2023). *Childcare Immunization Coverage, 2018-19 to 2022-23 School Years*. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). *Childcare Immunization Coverage by County, 2018-19 through 2022-23 School Years*. Retrieved from: <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Table 74. Non-fatal hospitalizations and emergency department visits due to unintentional injuries for children birth to age 5, 2018-2022 combined

Geography	Non-fatal inpatient hospitalizations for unintentional injuries	Non-fatal emergency department visits for unintentional injuries
<b>Pima North Region</b>	<b>255</b>	<b>15,597</b>
Pima County	431	23,727
Arizona	2,811	160,742

Source: Arizona Department of Health Services (2023). [Hospital Discharge dataset]. Unpublished data.

Note: Data on hospitalizations were geocoded to FTF regions using the address provided by parents or caregivers at the time of hospitalization; however, in cases where the address provided was not valid, hospitalizations could not be assigned to a region. County of residence is captured separately from addresses, meaning that counts in the county often exceed those seen in a particular region because they include all hospitalizations regardless of address validity.

## Family Support & Literacy

Table 75. Number of deaths with opiates or opioids contributing, 2018-2021 combined

Geography	Number of deaths with opiates or opioids contributing, 2018-2021
<b>Pima North Region</b>	<b>794</b>
Pima County	1,031
Arizona	6,315

Source: Arizona Department of Health Services (2023). [Vital Statistics dataset]. Unpublished data.

Note: About 35% of overdose deaths statewide were missing address information and thus could not be geocoded to an FTF region, but county assignments were available from death certificates.

Table 76. Substantiated maltreatment reports by type for children birth to age 17, July-Dec 2022

Geography	Total substantiated maltreatment reports	Neglect	Physical abuse	Sexual abuse	Emotional abuse
<b>Pima North Region</b>	<i>Regional data not available</i>				
Pima County	74	69%	27%	4%	0%
Arizona	676	71%	24%	5%	0.1%

Source: Department of Child Safety (2023). Semiannual child welfare report, March 2023. Retrieved from <https://dcs.az.gov/reports>

Table 77. Children birth to age 17 removed by the Department of Child Services (DCS), Jan 2020 to Dec 2022

Geography	Children removed (Jan 2020-Jun 2020)	Children removed (Jul 2020-Dec 2020)	Children removed (Jan 2021-Jun 2021)	Children removed (Jul 2021-Dec 2021)	Children removed (Jan 2022-Jun 2022)	Children removed (Jul 2022-Dec 2022)
<b>Pima North Region</b>	<i>Regional data not available</i>					
Pima County	863	1,030	928	831	690	744
Arizona	4,616	4,967	4,144	3,894	3,415	3,274

Source: Department of Child Safety (2023). Semiannual child welfare report, September 2023. Retrieved from <https://dcs.az.gov/reports>

## APPENDIX 2: METHODS AND DATA SOURCES

***U.S. Census and American Community Survey Data.*** The U.S. Census<sup>345</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 2020 U.S. Census data are available by census block. There are about 108,000 inhabited blocks in Arizona, with an average population of 66 people each. The Census data for the Pima North Region presented in this report were calculated for most indicators by identifying each block in the region and aggregating the data across all of those blocks. With the implementation of new privacy measures by the U.S. Census, some data previously available at the block level, such as grandchildren living in a grandparent's households or counts of households with children birth to age 5, are now only published at the block group or tract level. Regional estimates for these indicators were calculated by aggregating data over the census tracts which are wholly or partially contained in the region. Data from partial census tracts were apportioned according to the percentage of the 2020 Census population in that tract living inside the region.

The American Community Survey (ACS)<sup>346</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. ACS data are available by census tract. Arizona is divided into about 1,750 census tracts, with an average of about 3,900 people in each. The ACS data for the Pima North 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 2020 Census population in that tract living inside the 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 2017 to 2021. In general, the reliability of ACS estimates is greater for more populated areas. Statewide estimates, for example, are more reliable than county-level estimates.

***Education Data from ADE.*** Education data from the Arizona Department of Education (ADE) included in this report were obtained through a custom tabulation of unredacted data files conducted by the vendor on a secure ADE computer terminal in the fall of 2023. The vendor worked with the regional director to create a list of all public and charter schools in the region based on the school's physical location within the region as well as local knowledge as to whether any schools located outside the region served a substantial number of children living within the region. This list was used to assign schools and districts to the region as well to aggregate school-level data to the region-level. This methodology differs slightly from the methods that ADE uses to allocate school-level data to counties, so county and region totals may vary in some tables. Data were presented over time where available; however, due to changes in the ADE data system as well as the effects of the COVID-19 pandemic on data collection and definitions over the past three years, some indicators could not be presented as a time series.

***Child Care Capacity Calculations.*** Lists of child care providers are maintained by multiple state agencies in Arizona, including the Arizona Department of Health Services (ADHS), which licenses



child care centers; the Arizona Department of Economic Security (DES), which maintains the Child Care Resource and Referral (CCR&R) list; and First Things First (FTF), which administers the Quality First program. ADHS child care licensing database was used as the primary source for child care capacity calculations in this report, as analyses of both statewide and region-level data showed that most child care slots in regulated providers in the region are provided by centers. Centers that only serve children ages 5-12 were removed from child care capacity calculations, as these are typically before- & after-school programs that only serve school-age children. For all tables, providers were geocoded to regions using addresses or coordinates provided in the state agency datasets to assign them to regions. Comparisons of child care capacity to the young child population are meant to provide a relative assessment of the abundance or scarcity of child care supply relative to potential demand. The child care tables in this report do not reflect the capacity of unlicensed, unregulated or informal child care providers in the region. The estimated supply may also over-estimate availability in regulated care as it did not account for child care providers that operate under licensed capacity by choice or children who enroll in multiple facilities (e.g., a child who attends part-day Head Start or school-based preschool in the morning and a child care center in the afternoon).

***Change Calculations.*** Unless otherwise specified, changes in counts of data over time (i.e., percent increase or decrease) are calculated by subtracting the earlier number (e.g., a 2010 count) from the later number (e.g. the 2020 count) and dividing the result by the earlier number (e.g. the 2010 count). This calculation provides the percent change between the most recent count and the prior count, relative to the prior count.

***Data Availability.*** State agency data in this report were provided to FTF by agency staff through a data request process initiated in May 2023 and extending to January 2024. Wherever possible, data were requested for multiple years to allow for the visualization of trends as well as for the most recent year available. However, due to both the constraints of agency staff and agency-maintained datasets as well as the timing of requests, not all data were available on the same time and geographic scales. This report attempts to include the most recent and complete data available, with notes indicating where data were not available for particular time periods or geographies.

***Data Suppression.*** To protect the confidentiality of program participants, the FTF Data Dissemination and Suppression Guidelines preclude our reporting of social service and early education programming data if the count is less than 10 and preclude our reporting data related to health or developmental delay if the count is less than 6. In addition, some data received from state agencies are suppressed according to their own guidelines. ADHS does not report counts between 1 and 5; DES does not report counts between 1 and 9; ADE does not report counts less than 11. Additionally, both ADE and DES require suppression of the second-smallest value or the denominator in tables where a reader might be able to use the numbers provided to calculate a suppressed value. Throughout this report, information which is not available because of suppression guidelines is indicated by entries of “1-5” or “1-9” or “<11” for counts, or “DS” (data suppressed) for percentages. Data are sometimes not available for particular regions, either because a 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” or a table row note that states “regional data not available.”

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 or because the number was suppressed as a second-smallest value that could be used to calculate a suppressed value. 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 enrolled in Child-only Temporary Assistance for Needy Families Cash Assistance Program (TANF) and 12 children enrolled in a household with TANF, the entry in the table would read “13 to 21.” This is because the suppressed number of children in Child-only TANF is between 1 and 9, so the possible range of values is the sum of the known number (12) and 1 on the lower bound to the sum of the known number (12) plus 9 on the upper bound. Ranges that include numbers below the suppression threshold of less than 6 or 10 may still be included if the upper limit of the range is above 6 or 10. Since a range is provided rather than an exact number, the confidentiality of program participants is preserved.



Table 78. Zip Code Tabulation Areas (ZCTAs) in the Pima North Region

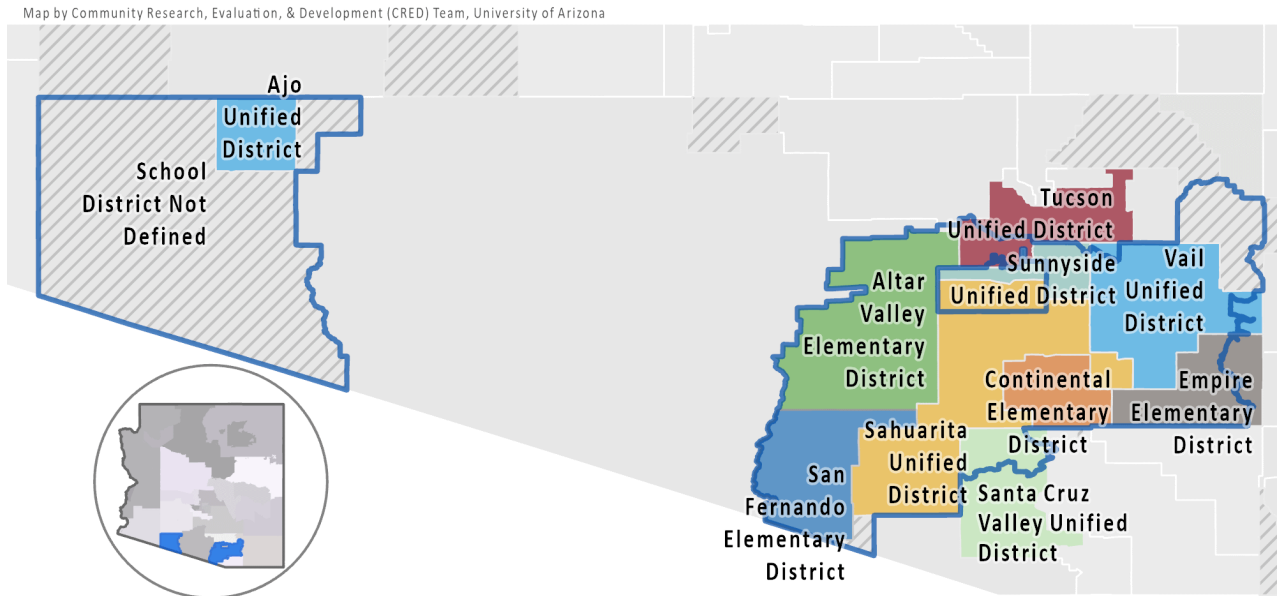
Zip Code Tabulation Area (ZCTA)	Population (all ages)	Percent of this ZCTA's total population living in the Pima North Region	This ZCTA is shared with
<b>Pima North Region</b>	<b>731,668</b>		
85619	108	96%	Cochise Region
85653	19,875	100%	Pinal Region
85654	94	100%	
85658	14,669	93%	Pinal Region
85701	5,132	100%	
85704	34,430	100%	
85705	56,711	100%	
85707	734	100%	
85708	3,837	100%	
85710	57,381	100%	
85711	41,518	100%	
85712	33,108	100%	
85713	44,368	95%	Pima South Region
85714	12,788	90%	Pima South Region
85715	18,561	100%	
85716	31,521	100%	
85718	28,706	100%	
85719	46,242	100%	
85723	132	100%	
85726	11	100%	
85730	39,241	100%	Pima South Region
85737	22,212	100%	
85739	7,707	41%	Pinal Region
85741	34,131	100%	
85742	30,057	100%	
85743	30,441	100%	
85745	36,774	100%	
85746	62	0.1%	Pima South Region, Pascua Yaqui Tribe Region, Tohono O'odham Nation Region
85747	8	0.0%	Pima South Region
85748	18,816	100%	
85749	19,009	100%	
85750	25,007	100%	
85755	18,277	100%	

Source: U.S. Census Bureau (2020). 2020 Decennial Census, Demographic and Housing Characteristics, Table P1

Note: With the implementation of differential privacy in the 2020 Census, small area estimates now have injected 'noise' (error) to prevent accidental disclosure of Census responses. Geographies that are not primary census geographies, like ZCTAs, have noisier (or less accurate) estimates than primary geographies, like tracts.

# APPENDIX 4: SCHOOL DISTRICTS OF THE PIMA NORTH REGION

Figure 75. School Districts in the Pima North 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 2020 TIGER/Line Shapefiles (<https://www.census.gov/cgi-bin/geo/shapefiles/index.php>)

Table 79. School Districts and Local Education Agencies (LEAs) in the Pima North Region

Name of district or Local Education Agency (LEA)	Number of schools	Grades served
<b>Pima North Region</b>	<b>255</b>	<b>PS-12</b>
Amphitheater Unified District	22	PS-12
Catalina Foothills Unified District	8	PS-12
Flowing Wells Unified District	11	PS-12
Marana Unified District	19	K-12
Tanque Verde Unified District	4	PS-12
Tucson Unified District	77	PS-12
Pima County Accommodation School District	3	4-12
Pima County JTED	37	9-12

Name of district or Local Education Agency (LEA)	Number of schools	Grades served
Academy Del Sol, Inc.	1	K-8
Academy of Mathematics and Science, Inc.	2	K-12
Academy of Tucson, Inc.	3	K-12
Aprender Tucson	1	K-9
Arizona Community Development Corporation	2	K-8
BASIS Charter Schools, Inc.	4	K-12
Blue Adobe Project	1	9-12
Canyon Rose Academy, Inc.	2	9-12
Carden of Tucson, Inc.	1	K-8
CITY Center for Collaborative Learning	3	6-12
Compass High School, Inc.	1	9-12
Daisy Education Corporation dba Sonoran Science Academy	4	K-12
Desert Rose Academy, Inc.	1	9-12
Desert Sage School	1	9-10
Desert Sky Community School, Inc.	1	K-5
Eastpointe High School, Inc.	1	9-12
Ed Ahead	1	K-5
Edge School, Inc., The	2	9-12
Educational Impact, Inc.	1	K-8
Griffin Foundation, Inc. The	2	K-8
Ha:san Educational Services	1	9-12
Hermosa Montessori Charter School	1	K-8
Highland Free School	1	K-6
Institute for Transformative Education, Inc.	1	9-12
Khalsa Family Services	1	K-8
Legacy Traditional School	2	K-8
Leman Academy of Excellence, Inc.	5	K-8
Liberty Traditional Charter School	2	K-8
Mexicayotl Academy, Inc.	1	K-8
Montessori Schoolhouse of Tucson, Inc.	2	K-8
Mountain Rose Academy, Inc.	1	9-12
Nosotros, Inc	1	K-12

Name of district or Local Education Agency (LEA)	Number of schools	Grades served
Online School of Arizona	1	9-12
Pima Prevention Partnership	3	6-12
Portable Practical Educational Preparation, Inc. (PPEP, Inc.)	1	9-12
Presidio School	1	K-12
Satori, Inc.	1	2-8
Science Technology Engineering and Math Arizona	1	K-8
Southern Arizona Community Academy, Inc.	2	9-12
StrengthBuilding Partners	1	6-10
The Charter Foundation, Inc.	2	K-12
Tucson Country Day School, Inc.	1	K-8
Tucson International Academy, Inc.	3	K-12
Tucson Preparatory School	1	9-12
Tucson Youth Development/ACE Charter High School	2	9-12

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

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