FIRST THINGS FIRST

Coconino Region

2022

NEEDS AND ASSETS REPORT

COCONINO
REGIONAL PARTNERSHIP COUNCIL
2022
NEEDS AND ASSETS
REPORT

Funded by the

First Things First Coconino 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 wellbeing in our communities and our state.

This Needs and Assets Report for the Coconino 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 First Things First Coconino 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 Coconino 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 5 years old in communities throughout the region.

ACKNOWLEDGMENTS

The Coconino Regional Partnership Council wishes to thank all of the federal, state and local partners whose contributions of data, ongoing support and partnership with First Things First made this report possible. These partners included the Arizona Departments of Administration (Employment and Population Statistics), Child Safety, Economic Security, Education and Health Services; the Arizona Health Care Cost Containment System; Child Care Resource and Referral; and the U.S. Census Bureau. Local partners included the Northern Arizona Council of Governments (N.A.C.O.G.), Candelen (formerly the Association for Supportive Child Care), the Coconino County Best for Babies Court Team and LAUNCH Flagstaff. We are especially grateful for the spirit of collaboration exhibited by all our partners during an unprecedented time of crisis for our state and our nation.

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 Coconino Region.

Lastly, we want to acknowledge the current and past members of the Coconino 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 Coconino Region. The First Things First Coconino Region includes most but not all of Coconino County and parts of neighboring Mohave and Navajo counties. The region includes the lands belonging to the Hopi Tribe (including the part in Navajo County), the Kaibab Band of Paiute Indians (which is mostly in Mohave County) and the Havasupai Tribe, as these three tribes have chosen to participate as part of the Coconino Region. The region does not include the lands belonging to the Navajo Nation or the Hualapai Tribe. In the southern part of the county, the city of Sedona is assigned to the Yavapai Region and the Forest Lakes community is assigned to the Navajo/Apache Region. The city of Winslow is assigned to the Coconino Region, although it is located in Navajo County. To look at variations within the region, nine sub-regional communities were defined for this report: Fredonia, the Greater Flagstaff Area, Grand Canyon Village-Tusayan-Valle, Havasupai Tribe, Hopi Tribe, Page, Williams-Parks, Winslow, and the Kaibab Band of Paiute Indians. However, as the Kaibab Band of Paiute Indians did not approve inclusion of their data in this report, no data are reported for this community.

Population Characteristics. The Coconino Region had a total population of 124,238, of whom 9,652 were children birth to 5, according to the 2010 U.S. Decennial Census, which is the most recent Census tabulation available. About two-thirds of these children reside in the Greater Flagstaff Area, and one-third call the more rural areas of the region home. Updated numbers on the population of young children across the state of Arizona from the 2020 Census are anticipated to be released later in 2023. In the Coconino Region, these numbers are likely to be lower than the 2010 Census numbers because the number of births has fallen by nearly 20% over the past 6 years, a sharper decline compared to the decrease in number of births in Arizona as a whole (-9%).

The Coconino Region has a much higher percentage of both the overall population (19%) and young children birth to 4 (33%) who identify their race as American Indian or Alaska Native compared to Arizona overall (5% and 6%, respectively). Relatively few children have foreign-born parents in the region (8%) compared to the state (25%). More than 1 in 10 residents ages 5 and older (13%) speak other languages besides English or Spanish, and Native North American languages, including Navajo and Hopi, are the most common of these spoken statewide. Higher percentages of adult speakers of Native languages in tribal communities can be a considerable asset for cultural preservation and cultivating a strong sense of cultural identity for young children, so high rates of other language usage in the Hopi Tribe sub-regional community (68%) and Native language use at home among 25% of children enrolled in Havasupai Head Start are an important community asset. Additionally, an estimated 16% of Coconino Region residents ages 5 and older are proficiently bilingual or multilingual.

About two out of every three children birth to 5 (64%) live with two parents in the Coconino Region, and most of the rest (32%) live with a single parent. However, this distribution is flipped in Winslow and Hopi Tribe, where 49% and 74% of young children, respectively, live with a single parent. Families led by a single parent may have faced additional challenges during the pandemic due to economic disruptions and transitions to remote learning. About 4% of children birth to 5 in the region were living

in kinship care or foster care arrangements, and the highest proportions of young children living in non-parental care arrangements were seen in the Hopi Tribe (9%) and Grand Canyon Village-Tusayan-Valle (8%) communities. More than half of all children birth to 5 (53%) in the Hopi Tribe live in their grandparent's household, with or without their parent also present, which is much higher than the rate in the region overall (13%). Over 1,600 grandparents in the Coconino Region are responsible for raising their grandchildren according to the American Community Survey (ACS). Multigenerational households and grandparent caregivers in particular may need additional supports due to the heightened health risks faced by older adults during the pandemic.

Economic Circumstances. The median family income for Coconino County is estimated to be $75,800, which is only a bit higher than the 2021 self-sufficiency standard for a family comprised of two parents, one infant and one preschooler ($72,195) in Coconino County. This means that half of all families in the county have incomes below the self-sufficiency standard for a family with two young children and may struggle to make ends meet. Rates of poverty for the overall population in the Coconino Region (17%) are higher than those seen statewide (15%), but the poverty rate for young children in the region (16%) is quite a bit lower than Arizona's rate (23%). Over a third of young children (36%) live in low-income households with incomes below 185% of the federal poverty level, meaning they may be eligible for social safety programs such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). More than half of young children in the Fredonia (98%), Hopi Tribe (73%), Williams-Parks (58%) and Winslow (58%) communities live in low-income households. Just over 100 children in the Coconino Region participated in the Temporary Assistance for Needy Families (TANF) program in state fiscal year (SFY) 2020. Both the region and the state saw increased participation in TANF in SFY 2020, likely due to the economic challenges for many families brought on by the pandemic.

Despite the economic challenges induced by the pandemic, participation in many safety net programs designed to combat food insecurity declined across the Coconino Region. The percentage of the region's children who participate in the Supplemental Nutrition Assistance Program (SNAP) has fallen each year since 2016, but even with those declines over a third (36%) of children birth to 5 participated in SNAP in SFY 2020 (July 2019 through June 2020). Families with young children in the Coconino Region did not take full advantage of Pandemic EBT (a resource for those enrolled in SNAP), with less than a fifth of children birth to 5 potentially eligible receiving Pandemic EBT in March 2021 (692 compared to approximately 3,400 enrolled in SNAP). Enrollment in WIC also declined over the past 4 years in the Coconino County WIC program as well as the Havasupai Tribe and Hopi Tribe WIC programs, administered by the Inter Tribal Council of Arizona (ITCA). School meal service changed dramatically in the 2019-20 school year due to pandemic-related closures of schools. Many schools shifted to serving meals to children in the community through the Summer Food Service Program due to relaxed eligibility criteria, leading to more meals distributed through this program and fewer through the National School Lunch Program.

Unemployment rates increased dramatically in Coconino County from 2019 (5.8%) to 2020 (9.8%), mirroring increases seen statewide due to the pandemic. Monthly unemployment rates for the county peaked at 18.7% in April 2020, higher than the state peak of 14.2%, before dropping back down to

levels slightly above that seen pre-pandemic in both the county and state. Similarly, unemployment insurance claims surged from a pre-pandemic low of 117 in the Coconino Region in February 2020 to a high of 4,218 in April 2020. The majority of children birth to 5 in the region (68%) live with two parents who are both in the labor force or a single parent who is in the labor force, meaning that access to child care is particularly important to enable parents to work. These families may have particularly struggled with pandemic-related child care disruptions.

Before the pandemic, about a third of households in the Coconino Region (32%), including nearly half of all households who rented their homes (48%), were housing cost-burdened, spending more than the recommended 30% of their income on housing. The percent of students in all Coconino Region schools who were experiencing homelessness in the 2019-20 was relatively low (1%), but 14% of students in the Williams Unified District were identified as experiencing homelessness. Access to both a computer and the internet at home was also relatively high for children birth to 17 in the region (85%) and topped 90% in both the Greater Flagstaff Area and Page, but children in the Hopi Tribe (29%) and Fredonia (69%) communities were much less likely to have access to a computer and internet at home. Children and families with poor internet access may have faced significant challenges in the transition to remote learning during the pandemic.

Educational Indicators. In the Coconino Region, during the 2019-20 school year, approximately 5,500 children were enrolled in the early elementary school grades (kindergarten to third grade) in public and charter schools, and 314 children were enrolled in preschool. An additional 762 students in all grades attend Bureau of Indian Education schools located in the Hopi Tribe and Havasupai Tribe communities. When third grade students in the Coconino Region took AzMERIT assessments in the 2018-19 school year, 42% received passing scores on English Language Arts (ELA) and 43% had passing scores on Math. Statewide, 46% and 51% of third graders received passing scores on ELA and Math, respectively. A higher percentage of students of all grades in half of the BIE schools located in the region met or exceeded academic standards for English/Language Arts and Math compared to students in BIE schools nationwide; all four of these schools were located in the Hopi Tribe. At the high-school level, students in public and charter schools in the Coconino Region have higher four-year graduation rates (86% for the 2019 cohort) than the state as a whole (79%); all districts and charter schools in the region but one had four-year graduation rates that were higher than those seen statewide. As of the 2019-20 school year, only 1% of 7^{th} to 12^{th} grade students in the Coconino Region dropped out of school, compared to 3% statewide.

For adults ages 25 and older in the region, the ACS estimates that 8% have less than a high-school education, 22% graduated high school or received a GED but did not go farther, and 71% have some education beyond high school. This is a higher level of educational attainment than seen statewide where 13% of adults did not finish high school and only 63% have more than a high-school education. Nearly two-thirds of births in the Coconino Region in 2019 (65%) were to mothers with at least some education beyond high school, compared to 57% in Arizona as a whole, suggesting a higher level of educational attainment for parents in the region compared to the state.

Early Learning. The ACS estimates that nearly half of all 3- and 4-year-olds (47%) in the Coconino Region are enrolled in school, a much higher rate of preschool enrollment than seen in Arizona as a whole (39%). Estimated rates of preschool enrollment were as high as 79% in the Grand Canyon Village-Tusayan-Valle community. Part of the reason for these high enrollment rates may be high parental labor force participation in the region and relatively good access to early care and education providers in some communities.

Overall, there are 71 licensed or registered early care and education providers in the region, with the capacity to serve up to 4,106 children. Comparing this to the number of children with all parents in the labor force shows that the Coconino Region needs approximately 1,500 additional child care slots to provide a slot for all children of working parents in the region. The estimated gap between demand and supply is highest in the Greater Flagstaff Area, Hopi Tribe, Williams-Parks, and Winslow communities, while there is almost no supply gap in Page or Grand Canyon Village-Tusayan-Valle. The Havasupai Tribe Head Start and Early Head Start programs similarly have the capacity to serve most young children in the community. Access to high quality early care and education programs varies across the region, with Quality First providers representing the majority of slots in Havasupai Tribe, Grand Canyon Village-Tusayan-Valle and Williams-Parks, but very few slots in Winslow. Very few providers are nationally-accredited in the region. The loss of Preschool Development Grant funding in 2019 may also affect access to high quality care in the region unless offset by Quality First funding in the Arizona budget. The pandemic had a substantial effect on child care availability in the region; about half of all providers (48%) with half of the child care capacity in the region were reported closed in December 2020.

The most recent survey of child care providers, conducted in 2018, reported that the median monthly cost of child care in a licensed center in the region was $760 for an infant, $664 for a toddler, and $624 for a 3- to 5-year-old. These costs are lower than statewide medians, and families in Coconino County are paying a lower proportion of their overall income for a child care slot (10-12%, depending on the child's age) compared to other families statewide. However, child care costs relative to median income still exceed the 10% affordability criteria set by the U.S. Department of Health and Human Services. For low-income families, Department of Economic Security (DES) subsidies help make child care more affordable and in 2019, 265 young children in the Coconino Region received a subsidy, an increase from the previous year when only 187 children received these subsidies. Subsidy use dropped in 2020, with more than a quarter of eligible families (27%) not using subsides. This was likely due to the effects of the pandemic on the child care sector.

The number of young children referred to the Arizona Early Intervention Program (AzEIP) in the Coconino Region dropped substantially from 340 in 2019 to 255 in 2020, likely a result of the constraints of the COVID-19 pandemic. The number of referred children found eligible also decreased by nearly half, from 114 to 63, resulting in a decreased proportion of young children referred to AzEIP being determined eligible for services (2019, 34%; 2020, 25%). Overall, there was also a decline in the number of young children receiving Division of Developmental Disabilities (DDD) services between 2017 and 2020 (-46%) across the Coconino Region. Taken together, an estimated 2.3% of children birth

to 2 received services from AzEIP or DDD in 2020. Declines in service numbers in the region for both AzEIP and DDD over recent years and particularly during the pandemic raise concerns that some young children with delays or disabilities may not be receiving the timely services they need.

Unlike trends in AzEIP and DDD services, data from the Arizona Department of Education (ADE) show that the number of young children with special needs receiving services from local education agencies (LEAs) in the region increased 17% since the 2017-18 school year, with 179 children receiving services in 2019-20, a much higher increase than seen across the state overall (+4%). In the Coconino Region, these children received services for speech or language impediments (34%), developmental delays (31%), preschool severe delay (27%) and other disabilities (7%). In addition, there were 662 older children enrolled in special education in the region's schools in the early elementary grades (kindergarten to third grade). Pandemic-related disruptions to in-person schooling were especially challenging for children with special needs, and these children may need additional support to recover unfinished learning.

Child Health. Not having health insurance is a barrier to quality, consistent medical care. An estimated 6% of children birth to 5 in the Coconino Region lack health insurance coverage; in the Page, this proportion is much higher at 21%. However, children who are affiliated with a federally-recognized tribes can access health care services through the Indian Health Service (IHS). In federal fiscal year 2019, 62 young children in the Havasupai Tribe and 507 young children in the Hopi Tribe accessed health services at IHS facilities.

Of the 1,292 births in the Coconino Region in 2019, only 64.6% were to mothers who received prenatal care in the first trimester, lower than the 68.9% in the state. However, rates of births to mothers who received no prenatal care (1%) or had fewer than the recommended five prenatal visits (6%) were lower than those statewide, suggesting that while prenatal care may be more likely to be started late, more mothers are receiving sufficient prenatal care in the region than elsewhere in Arizona. Other maternal characteristics that may affect newborns' health are pre-pregnancy obesity (29% in the region; 30% statewide) and tobacco use during pregnancy (3.6% in the region; 4.3% statewide). The incidence of low birthweight and preterm delivery were relatively more frequent in the Coconino Region (8.0% and 9.8%) compared to the entire state (7.4% and 9.3%). In both the region and the state, about 8% of babies were admitted to a Neonatal Intensive Care Unit (NICU) shortly after birth. Trend data suggests that overall, most maternal and infant health outcomes are improving in the region with a couple exceptions—tobacco use during pregnancy increased between 2015 and 2019, and the rate of pre-term births remains relatively high.

High infant breastfeeding rates and relatively low rates of obesity for young children (ages 2-4) enrolled in WIC in the region suggest that children in the Coconino Region on the whole are better off in terms nutrition and weight status than elsewhere in the state. However, the Coconino Region has lower rates of children with required vaccinations in child care and kindergarten than the state overall. Rates of children with exemptions from all required vaccines in the region increased sharply in 2019-20 to 4.3% (compared to 3.1% statewide), while the share of kindergarteners with exemptions from all required vaccines fell slightly from a 2017-18 high of 5.6% to 4.6% in 2019-20 (compared to 3.4% statewide).

The 2019 infant mortality rate in the region (6.2 deaths per 1,000 live births) is higher than the rate across the state (5.4 per 1,000) and higher than the Healthy People 2020 target of 6.0 per 1,000. However, despite the higher infant mortality rate, the mortality rate for young children in Coconino County (110.8 per 100,000) was lower than the statewide rate (117.4 per 100,000) in 2019.

Family Support and Literacy. Family support services are a critical need for many families in the region, especially with the disruptions caused by the pandemic. Children do best in stable, nurturing environments where they feel safe and supported, but many families face challenges because of low incomes, mental health problems, substance use problems or other stressors.

Families in the Coconino Region benefit from home visitation services which help parents understand how to promote healthy child development, including early literacy. Families with children nationwide—especially low-income families and families with special-needs children—reported greater levels of stress, depression and anxiety due to the pandemic. However, even pre-pandemic, access to mental and behavioral health services for children birth to 5 was very limited in the Coconino Region, with an inadequate number of mental and behavioral health professionals for the population of all ages, let alone those specializing in the early childhood years. Given the mental health issues induced by the pandemic and its disruptions to daily life, improving access to mental and behavioral health care for young children and their parents or caregivers is a critical need in the region.

The Department of Child Safety (DCS) removed 68 children ages birth to 5 from their caregivers during the 2020 state fiscal year, and most of these children were residing in the Greater Flagstaff Area. In 2020, likely due to the pandemic, the number of reports to DCS dropped substantially in the county, though the number of removals was consistent with prior years. The number of licensed foster homes has declined statewide over the past few years, even as the number of children needing placements has increased. Key informants in the region highlighted a high need for local foster homes in the Coconino Region. Recent policies and new resources are helping children stay with grandparents or other extended-family members (kinship caregivers) when possible, which can be beneficial for child well-being.

ABOUT THIS REPORT

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 2010 Census and the 2015-2019 American Community Survey (ACS) 5-Year Estimates. Because the 2010 Census is now a decade old, it is used minimally in this report.[i] For example, children who were under 6-years-old in 2010 are now between 11 and 16 years old. The Census Bureau expects to release detailed tables from the 2020 Census later in 2023.[ii] Data in this report from the ACS summarize the responses from samples of residents taken between 2015 and 2019, which is notably before the COVID-19 pandemic began. Because these estimates are based on samples rather than the full population, ACS data should not be considered exact. Estimates for smaller geographies, such as sub-regional communities, are less accurate than estimates for larger geographies, such as the county or state, because they are based on smaller sample sizes. Estimates which are based on very few respondents (fewer than 50) will not be included in the data tables in this report. Within the Coconino Region specifically, accurate data from the ACS are not available for the Havasupai Tribe.

Data were provided to First Things First (FTF) by state agencies including the Arizona Department of Health Services (ADHS), the Arizona Department of Education (ADE), the Arizona Department of Economic Security (DES) and the Arizona Department of Child Safety (DCS). In most cases, the data in this report were calculated especially for the Needs & 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 and sometimes sub-regional communities, 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 from state agencies such as the Arizona Department of Commerce's Office of Economic Opportunity (OEO) and DCS semi-annual child welfare reports to supplement data received through specific requests.

Additionally, this report includes local quantitative and qualitative data collected from the Northern Arizona Council of Governments (N.A.C.O.G.), the Association for Supportive Child Care (ASCC), now known as Calenden, and the Coconino County Best for Babies Court Team, as well as data from reports published by the First Things First Coconino Regional Partnership Council and LAUNCH Flagstaff. Regional Partnership Council members and other local stakeholders participated in a facilitated data discussion on August 10, 2021, which allowed them to share their local knowledge and perspective in interpreting the data collected. Perspectives and feedback from participating session members are included as key informant perspectives within this report. The Data Interpretation Session paid special interest to the region's priority areas:

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[i] *Only Table 1 ("Population and households") and Figure 1 ("Share of children birth to 5 by sub-region") use 2010 Census data.*

[ii] *U.S. Census Bureau (2021). About 2020 Census Data Products, Demographic and Housing Characteristics File. Accessed at https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/release/about-2020-data-products.html*

1. Access to and utilization of high-quality early care and education by families with young children across the region,
2. Developmental, mental and/or behavioral health care access for young children and their parents or guardians, and
3. The child welfare system in Coconino County.

Additional information and data are included on these topics as possible.

In most tables in this report, the top rows of data correspond to the First Thing First Coconino Region and defined sub-regional communities. Not all data are available at the FTF regional level because not all data sources analyze their data based on FTF regional boundaries. The last table rows present data that are useful for comparison purposes, including Coconino 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 "<10" or "<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 "[11 to 27]" 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.

THE COCONINO REGION

The First Things First regional boundaries were initially established in 2007, creating 31 regions which were designed to (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 and facilitate the ability to convene a Regional Partnership Council and (d) allow for the collection of demographic and indicator data. First Things First also acknowledged the government-to-government relationship with federally-recognized tribes. Each tribe with lands in Arizona was given the opportunity to participate within a First Things First designated region or elect to be designated as a separate region. The regional boundaries are reviewed every two years. In fiscal year 2015, the boundaries were modified using census blocks, creating 28 regions. This report uses the 2015 definition of the regional boundaries.

The First Things First Coconino Region includes most but not all of Coconino County and parts of neighboring Mohave and Navajo counties. The region includes the lands belonging to the Hopi Tribe (including the part in Navajo County), the Kaibab Band of Paiute Indians (which is mostly in Mohave County) and the Havasupai Tribe, as these three tribes have chosen to participate as part of the Coconino Region. This decision must be ratified every two years, and each of these tribes have opted to continue as part of the region, with the opportunity to be represented on the Regional Partnership Council. The region does not include the lands belonging to the Navajo Nation or the Hualapai Tribe. In the southern part of the county, the city of Sedona is assigned to the Yavapai Region and the Forest Lakes community is assigned to the Navajo/Apache Region. The city of Winslow is assigned to the Coconino Region, although it is located in Navajo County.

Sub-Regional Communities and Tribal Nations

Because communities may vary in terms of needs and assets, the Coconino Regional Partnership Council requested that data be analyzed and reported at the community level to provide a more complete picture of the region. Dividing the region into sub-regions helps the Council target strategies to use resources effectively and efficiently. Nine communities within the Coconino Region were identified by the Regional Partnership Council and Director as focus areas.

The **Fredonia** community contains the Town of Fredonia and the Census Designated Place (CDP) of Moccasin.

The **Grand Canyon Village-Tusayan-Valle** community contains the Town of Tusayan and the CDPs of Valle and Grand Canyon Village.

The **Greater Flagstaff Area** community contains the City of Flagstaff and the CDPs of Fort Valley, Doney Park, Mountainnaire and Munds Park. It also contains the unincorporated communities of Bellemont, Kachina Village, Gray Mountain, Winona, Happy Jack, Wiggins Crossing and Mormon Lake. In terms of both population and area, it is the largest sub-regional community in the Coconino Region.

The **Havasupai Tribe** community is defined as the Havasupai Reservation and contains the CDP of Supai. A few Havasupai families live in Supai Camp, which is located near Grand Canyon Village.

The **Hopi Tribe** community is defined as the Hopi Reservation and Off-Reservation Trust Land and contains the CDPs of Moenkopi, Hotevilla-Bacavi, Kykotsmovi Village, Second Mesa, Shongopovi, First Mesa, Keams Canyon and part of Winslow West.

The **Page** community contains the City of Page as well as most of the land in the Coconino Region on the North Rim of the Grand Canyon, including the unincorporated communities of North Rim, Jacob Lake and Marble Canyon.

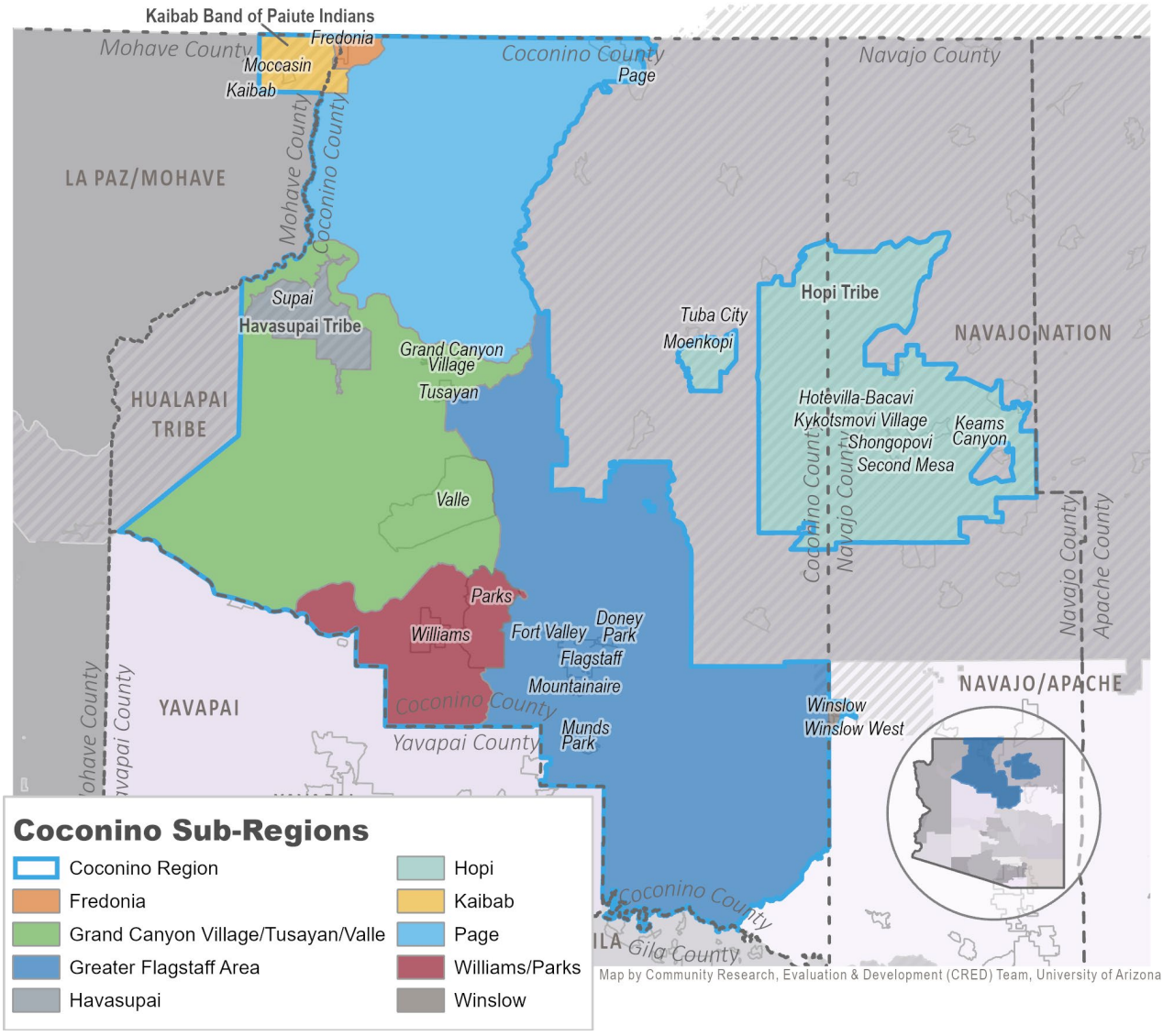
The **Williams-Parks** community contains the City of Williams and the CDP of Parks.

The **Winslow** community contains the City of Winslow and the CDP of Winslow West, excluding Hopi Trust land.

The **Kaibab Band of Paiute Indians** community is defined as the Kaibab Indian Reservation and contains the CDP of Kaibab. This report does not contain data for the Kaibab Band of Paiute Indians community because permissions have not been granted for inclusion of their data in this reporting cycle.

The nine sub-regional communities in the region are illustrated in Figure 2.

Figure 1. The First Things First Coconino Region and its sub-regions



Source: 2010 TIGER/Line Shapefiles prepared by the U.S. Census. Map produced by CRED.

POPULATION CHARACTERISTICS

POPULATION CHARACTERISTICS

Why It Matters

Families with young children often utilize community resources such as early education, health care facilities and social services to help their children thrive.[1,2,3,4,5] Accurate and up-to-date information about the characteristics of families is critical for ensuring policy makers and program providers can determine what resources are needed in their regions, including where these services should be located and how to tailor offerings to the specific needs of those who are likely to use them. Having reliable access to child care, health care and social services has been shown to improve children's health and educational outcomes.[6,7,8,9] As Arizona communities become increasingly diverse, providers need access to relevant demographic data to ensure they engage with families in culturally responsive ways.[10,11,12]

In addition to growing racial, ethnic and social diversity, U.S. and Arizona families are becoming more diverse in terms of family structure.[13] Many children live in single-parent households, and it is increasingly common for children to live in kinship care (care of children by someone other than their parents, such as relatives or close friends).[14,15] Multi-generational households, particularly where grandparents live in the home with children and parents, are common in some communities and cultures and can provide financial and social benefits.[16] As family structure changes, so can family strengths and challenges that impact child development, such as poverty, access to health and education resources and the quality of a child's interactions with adult caregivers.[17,18,19,20] Regardless of their family structure, all young children benefit from nurturing relationships with adults. Research has identified that these early relationships are a primary influence on brain development.[21] Ensuring that children have adult caregivers who consistently engage in high quality interactions beginning in infancy can help protect young children from negative effects of stress and adversity and builds a foundation in the brain for all the learning, behavior and health that follow.[22,23]

Program and policy decisions that are informed by data on the structure and stability 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.

What the Data Tell Us

Population, Race, and Ethnicity

According to the 2010 U.S. Census, the Coconino Region had a population of 124,238, of whom 9,652 were children birth to 5 (Table 1. Population and households in the 2010 U.S. Census). This meant that the region contained 1.9% of the total Arizona population and 1.7% of the population of young children in the state. The percent of households in the Coconino Region that included at least one young child (16%) was identical to that seen both statewide and in Coconino County. However, more than one in

five households have a young child in several sub-regional communities, including Winslow (20%), Hopi Tribe (25%), and Havasupai Tribe (37%).

Table 1. Population and households in the 2010 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)	
Coconino Region	**124,238**	**9,652**	**43,764**	**6,795**	**16%**
Fredonia	1,448	126	534	81	15%
Grand Canyon Village-Tusayan-Valle	3,615	237	1,432	173	12%
Greater Flagstaff Area	86,630	6,340	30,872	4,520	15%
Havasupai Tribe	465	63	100	37	37%
Hopi Tribe	7,185	774	2,081	517	25%
Page	7,943	737	2,869	503	18%
Williams-Parks	6,820	460	2,817	337	12%
Winslow	9,892	880	2,980	604	20%
Coconino County	134,421	10,777	46,711	7,474	16%
Arizona	6,392,017	546,609	2,380,990	384,441	16%
United States	308,745,538	24,258,220	116,716,292	17,613,638	15%

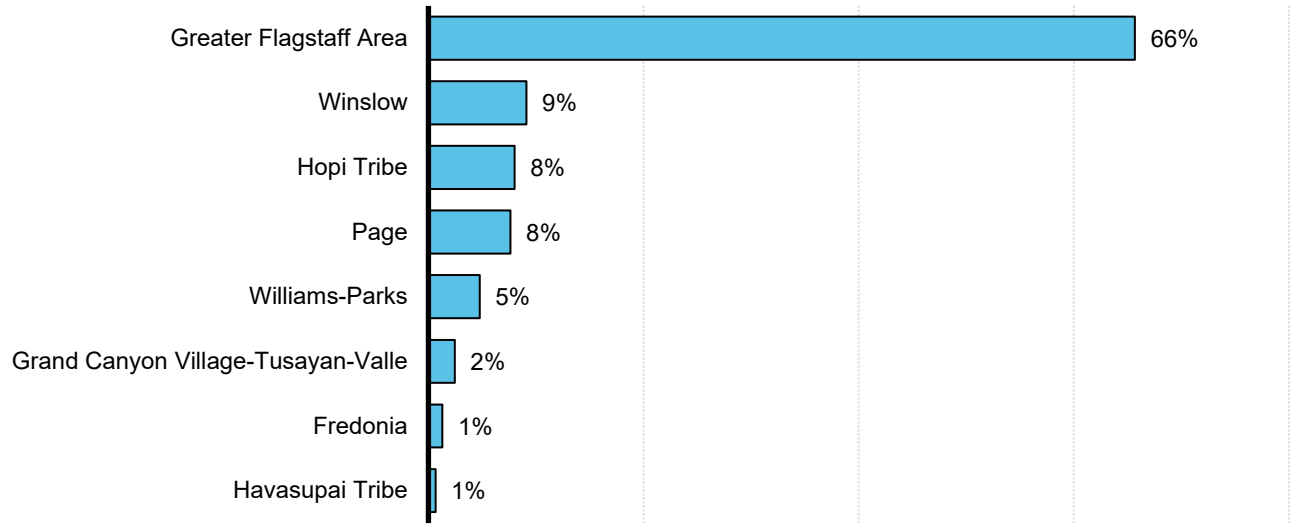
Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Tables P1, P14, & P20

Note: The total population of Arizona in the 2020 Decennial Census is 7,151,502, which is a 12 percent increase.

Due to the remoteness of the community and data collection challenges, key informants from the Havasupai Tribe noted that the Census population numbers for the community often undercount the number of children and families in the Havasupai Tribe. Reliable data on population and demographics in the Havasupai Tribe are not available from the American Community Survey, and given that the 2020 Census enumeration occurred while the Havasupai Tribe was closed due to the pandemic, there are substantial concerns about undercounting in the 2020 Census. Throughout this report, alternative data sources including birth records, education reports and social service data are presented to describe children and families in the Havasupai Tribe.

The Greater Flagstaff Area, as the largest and most populous community in the region, hosts the largest share of children birth to 5 in the region, with approximate two out of every three young children in the region calling the Greater Flagstaff Area home (Figure 2). Havasupai Tribe, Fredonia, and Grand Canyon Village-Tusayan-Valle, all smaller and more rural communities, have the smallest shares of young children in the region.

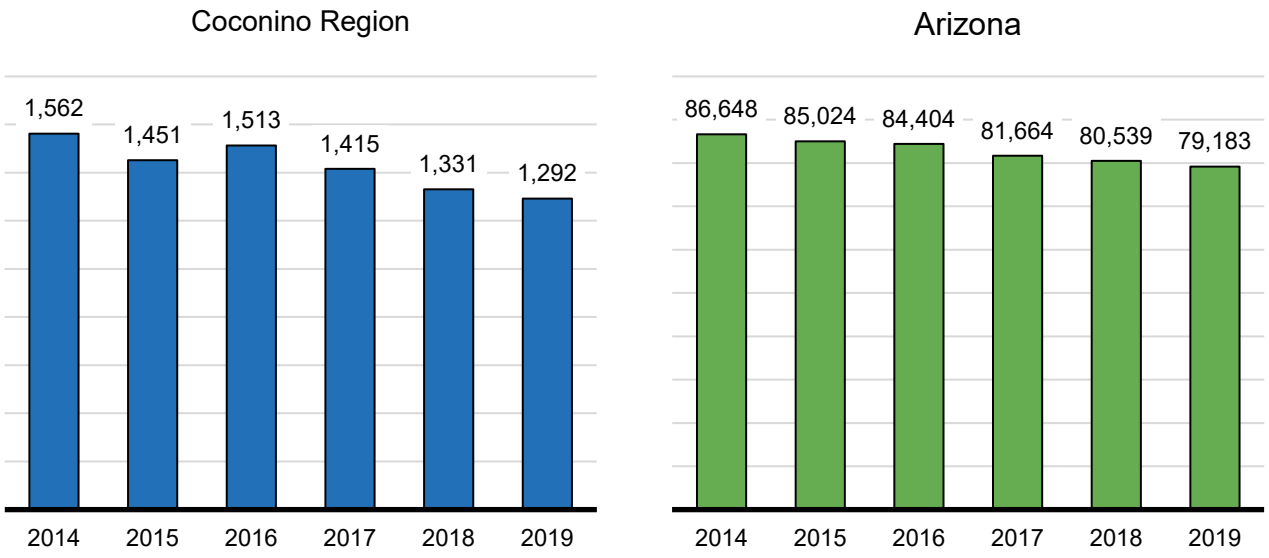
Figure 2. Share of children birth to 5 by sub-region, 2010 U.S. Census



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

Over the past 6 years, the number of babies born in the Coconino Region dropped from over 1,500 in 2014 to approximate 1,300 in 2019 (Figure 3). This declining number of births mirrors statewide decreases in births, but the rate of change in the Coconino Region (-17%) was nearly double that in Arizona overall (-9%). This suggests that the number of young children in the region in 2020 is likely lower than the number reported in the 2010 Census. New estimates from the 2020 Census for the population of young children are anticipated to be released later in 2023.

Figure 3. Number of babies born, 2014 to 2019



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

The racial and ethnic composition of the Coconino Region is unique when compared to Arizona and the U.S. overall (Table 2). According to the American Community Survey (ACS) five-year estimates, 58% of the region's population identifies as non-Hispanic White, similar to the percentages seen in Arizona and nationally. However, nearly one in five residents in the Coconino Region (19%) identify as American Indian or Alaska Native, compared to only 5% in Arizona and 1% nationally. Conversely, only 17% of residents identify as Hispanic or Latino, a much lower percentage than the state's 31%. Smaller fractions of residents identify their race as Black (2%), Asian or Pacific Islander (2%) or multi-racial (4%). Racial and ethnic compositions also vary by community. Substantially higher proportions of residents in the Hopi Tribe (96%), Page (53%) and Winslow (32%) communities identify as American Indian or Alaska Native. The Fredonia (74%), Grand Canyon Village-Tusayan-Valle (70%) and Greater Flagstaff Area (67%) communities have at least two-thirds of their population identifying as White. Winslow (32%) and Williams-Parks (23%) have a higher proportion of Hispanic or Latino residents than elsewhere in the region, and Winslow has a greater share of Black residents (4%) than the region or county. Given that the COVID-19 pandemic disproportionately impacted Hispanic, Black and American Indian and Alaska Native communities,[24,25] these sub-regional variations may be helpful to consider in supporting communities as they recover in the wake of the pandemic.

Table 2. Race and ethnicity of the population of all ages, 2015-2019 ACS

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
Coconino Region	**132,228**	**17%**	**58%**	**2%**	**19%**	**2%**	**4%**
Fredonia	1,335	12%	74%	1%	10%	1%	4%
Grand Canyon Village-Tusayan-Valle	3,462	12%	70%	1%	12%	2%	4%
Greater Flagstaff Area	93,251	18%	67%	2%	8%	3%	4%
Havasupai Tribe	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hopi Tribe	9,222	1%	2%	0%	96%	1%	0%
Page	8,171	8%	37%	1%	53%	1%	3%
Williams-Parks	6,864	23%	61%	2%	10%	1%	4%
Winslow	9,677	32%	32%	4%	32%	0%	6%
Coconino County	141,274	14%	54%	1%	27%	2%	4%
Arizona	7,050,299	31%	55%	5%	5%	4%	4%
United States	324,697,795	18%	61%	13%	1%	6%	3%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Tables B01001, B01001b, B01001c, B01001d, B01001e, B01001g, B01001h, & B01001i

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. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Compared to the overall population, the population of children birth to 4 in the Coconino Region is more diverse (Table 3). As in the overall population, White, non-Hispanic children make up the largest proportion (42%), while one in three young children (33%) are American Indian or Alaska Native and nearly 1 in 4 are Hispanic or Latino (24%). Also similar to the overall population, there are very low proportions of Black (1%) or Asian or Pacific Islander (0.1%) children, and 7% of young children are identified as multiracial. All young children (100%) in Fredonia are White, non-Hispanic, while nearly all in Page (99%) and Hopi Tribe (99%) are American Indian or Alaska Native. Winslow (43%) and the Greater Flagstaff Area (31%) have the highest proportions of Hispanic or Latino young children, as well as multi-racial children (10% and 9%, respectively).

Table 3. Race and ethnicity of children birth to 4, 2015-2019 ACS

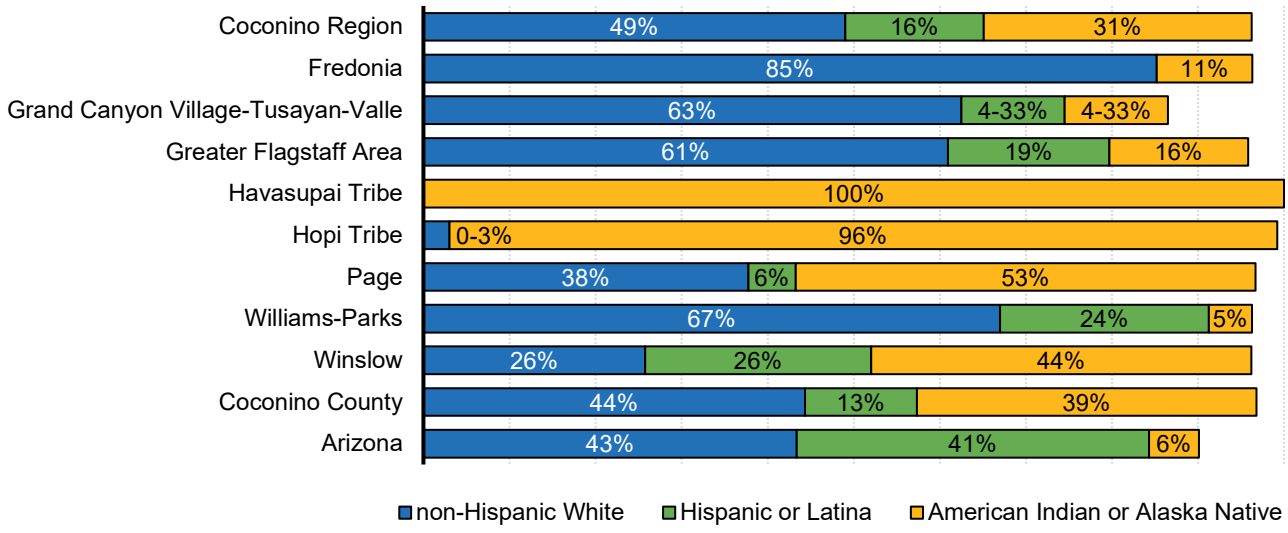
Geography	Estimated number of children (birth to 4 years old)	Hispanic or Latino	White, not Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Two or more races
Coconino Region	**7,207**	**24%**	**42%**	**1%**	**33%**	**0.1%**	**7%**
Fredonia	22	0%	100%	0%	0%	0%	0%
Grand Canyon Village-Tusayan-Valle	235	12%	47%	0%	41%	0%	0%
Greater Flagstaff Area	4,562	31%	55%	1%	14%	0%	9%
Havasupai Tribe	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hopi Tribe	893	1%	0%	0%	99%	1%	0%
Page	387	0%	1%	0%	99%	0%	0%
Williams-Parks	503	15%	60%	0%	21%	0%	4%
Winslow	586	43%	15%	6%	44%	0%	10%
Coconino County	7,762	20%	38%	1%	41%	0%	6%
Arizona	433,968	45%	38%	5%	6%	3%	9%
United States	19,767,670	26%	50%	14%	1%	5%	8%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Tables B01001, B01001b, B01001c, B01001d, B01001e, B01001g, B01001h, & B01001i

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. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

The racial and ethnic backgrounds of mothers giving birth in the region from 2017 to 2019 largely mirror that of young children in the region (Figure 4). In every community except for Williams-Parks, the percentage of mothers who were American Indian or Alaska Native exceeded that seen statewide (6%). Winslow (26%), Williams-Parks (24%) and the Greater Flagstaff Area (19%) had higher shares of Hispanic or Latina mothers than that of the region (16%) or county (13%). In Fredonia (85%), Williams-Parks (67%), Grand Canyon Village-Tusayan-Valle (63%) and the Greater Flagstaff Area (61%), the majority of births were to White, non-Hispanic mothers.

Figure 4. Births by select race or ethnicity of the mother, 2017-2019 combined



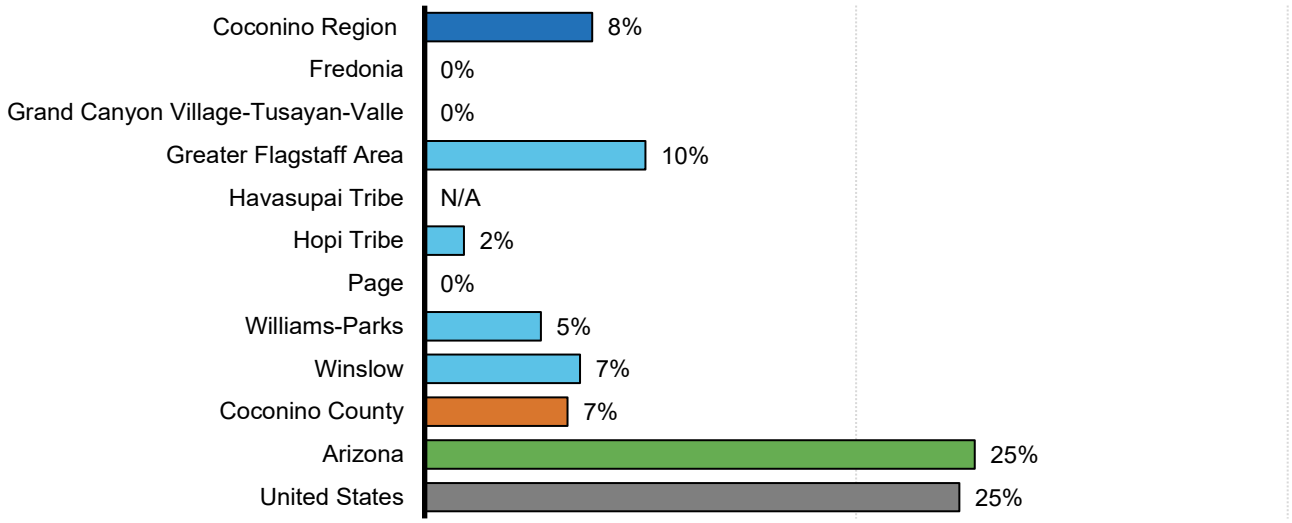
Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data.

Note: 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 figure.

Immigrant Families and Language Use

A growing number of children nationwide live in a family where one or both of their parents is foreign-born.[26] Statewide, this is true for about a quarter (25%) of children birth to 5 (Figure 5). In the Coconino Region overall, this is true for only 8% of young children, although it varies by community, rising to 10% in the Greater Flagstaff Area. Despite the reality that parents may have become naturalized citizens or permanent residents and the fact that the vast majority of these young children are citizens,[27] changes in national immigration policy have led some immigrant families to avoid using social services for which they and their children are legally qualified due to fear of deportation or risking their legal status in the country.[28,29,30] This can put immigrant families 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.[31,32,33,34] Key informants in the region specifically noted that fears around effects on legal status have kept some immigrant families in the Coconino Region from accessing nutrition assistance programs such as the Supplemental Nutrition Assistance Program (SNAP). In addition, during the COVID-19 pandemic, immigrants have been more likely to work in frontline positions and experience job loss, increasing their risk of COVID-19 exposure and creating additional barriers to testing and treatment with the loss of employer-sponsored health insurance.[35]

Figure 5. Children ages birth to 5 living with parents who are foreign-born, 2015-2019 ACS



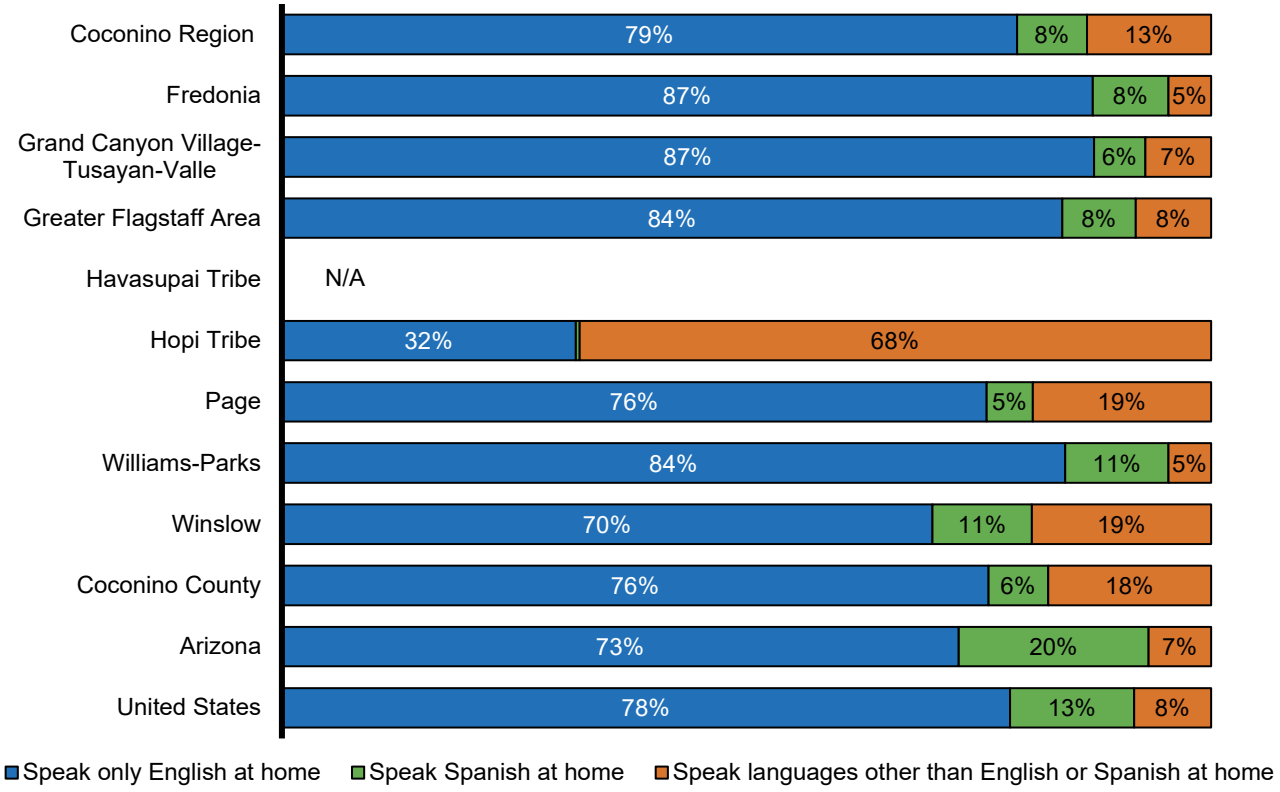
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B05009

Note: The term "parent" here includes stepparents. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Households with multiple languages spoken pose a unique balance of benefits for child learning and barriers to caregiver engagement (e.g., when interacting with schools or health care providers)[36]. The ACS estimates that about 8 in 10 (79%) of the Coconino Region's residents speak only English at home, and that 8% speak Spanish at home (Figure 6). More than 1 in 10 residents (13%) speak other languages, of which Native North American languages, including Navajo and Hopi, are the most common. Spanish language usage at home is lower in the region than in the state but highest in both Williams-Parks (11%) and Winslow (11%).

Language preservation and revitalization are critical to strengthening culture in Native communities, addressing issues of educational equity and promoting social unity, community well-being and Indigenous self-determination.[37, 38] More than two out of every three residents ages 5 and older (68%) in the Hopi Tribe report speaking a language other than English or Spanish at home, as do about one in five residents in Page (19%) and Winslow (18%). Data from the Havasupai Tribe Head Start program showed that 25% of families of enrolled 3- and 4-year-olds spoke Native North American Languages as their primary language at home in 2019.[39] Higher percentages of adult speakers of Native languages in tribal communities can be a considerable asset for cultural preservation and cultivating a strong sense of cultural identity for young children.

Figure 6. Language spoken at home (by persons ages 5 and older), 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16001

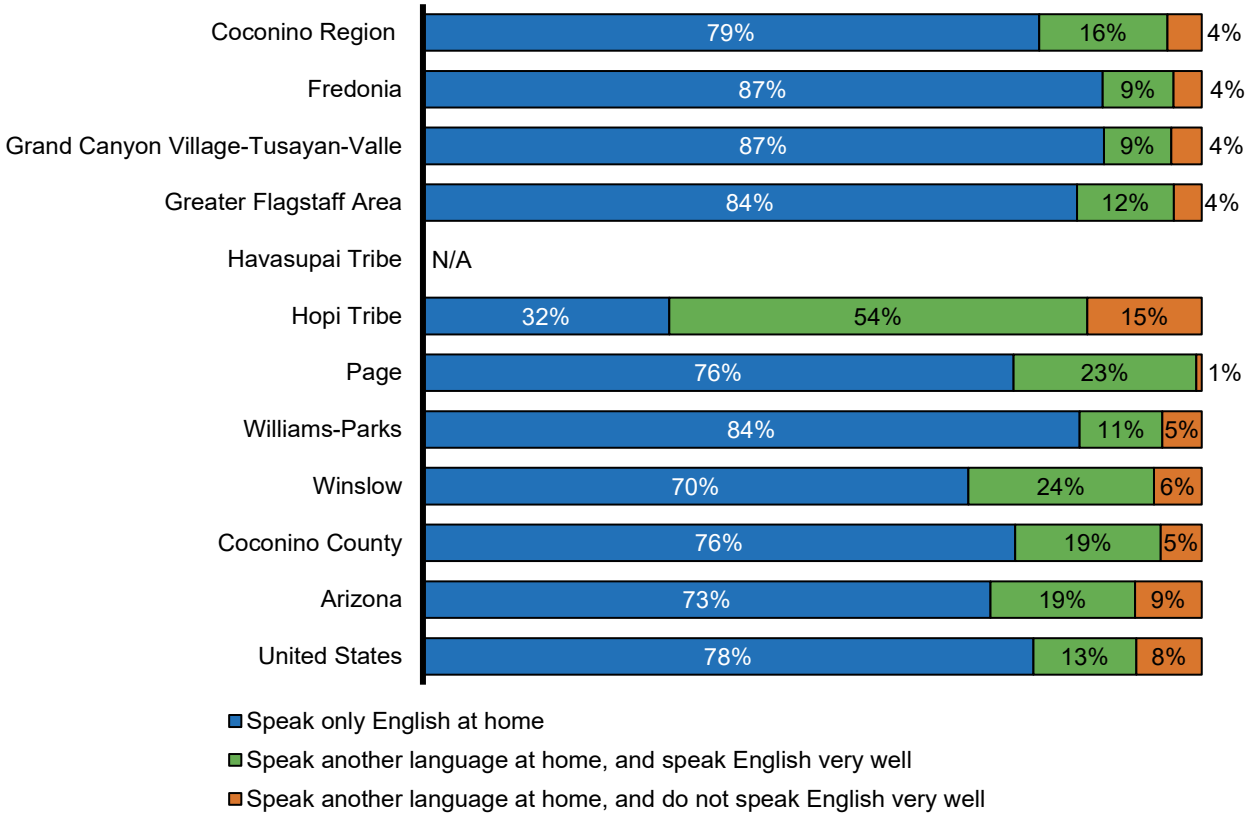
Note: The three percentages in each row may not sum to 100% because of rounding. The American Community Survey (ACS) no longer specifies the proportion of the population who speak Native North American languages for geographies smaller than the state. In Arizona, Navajo and other Native American languages (including Apache, Hopi, and O'odham) are the most commonly spoken (2%), following English (73%) and Spanish (20%). Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Most residents who speak a language other than English at home report that they speak English "very well,"[iii] meaning they are proficiently bilingual or multilingual. This is the case for 16% of Coconino Region residents ages 5 and older, and more than half of the population (54%) in Hopi Tribe and nearly a quarter of residents in Winslow and Page (Figure 7). Young children can benefit from this exposure to multiple languages; mastery of more than one language is an asset in school readiness and academic achievement and offers cognitive and social-emotional benefits in early school and throughout their lifetime.[40,41,42,43] Acknowledging and valuing linguistic heritage and recognizing needs for resources and services in languages other than English remain important considerations for organizations and agencies across the Coconino Region and Arizona as a whole.

[iii] "Very well" refers to the self-rated ability to speak English in response to the American Community Survey question "How well does this person speak English?". Other response options include: "well," "not well" and "not at all." See https://www.census.gov/topics/population/language-use/about.html

In addition to those who are multilingual, about 4% of Coconino Region residents speak a language other than English at home and do not consider themselves as speaking English "very well" (Figure 7). For Hopi Tribe, this is true for an estimated 15% of residents. Parents and caregivers with limited English proficiency may experience barriers to accessing health care and social services, as well as barriers to engaging in important interactions at their children's schools; these barriers can affect a family's ability to promote positive child development. The availability of bilingual or multilingual staff and resources can help support these families.[44,45]

Figure 7. English-language proficiency (for persons ages 5 and older), 2015-2019 ACS

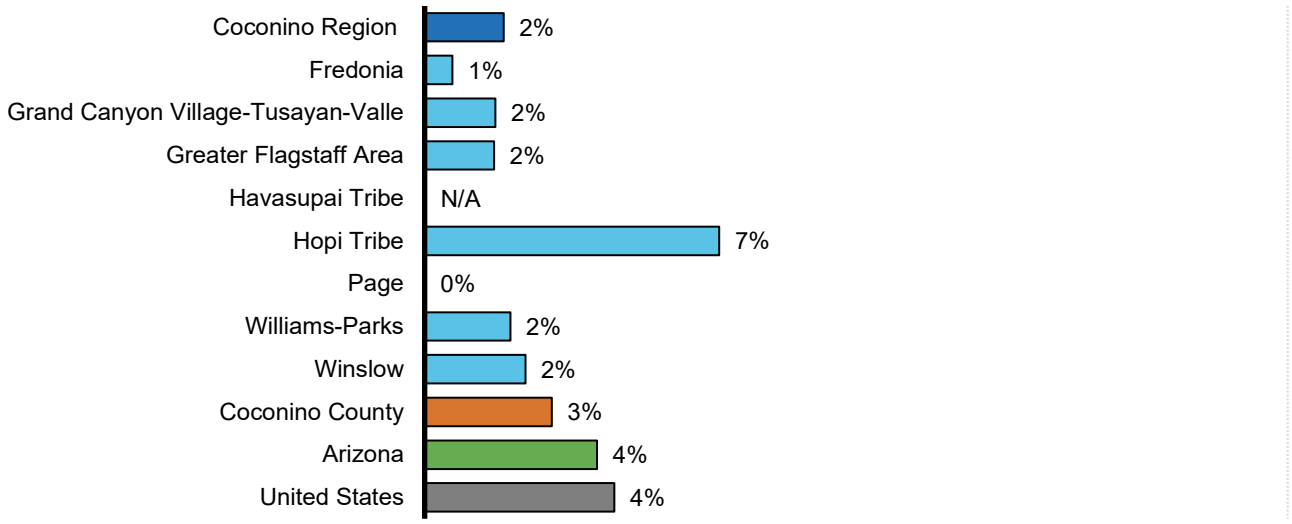


Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16001

Note: The three percentages in the figure should sum to 100%, but may not because of rounding. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

At the household level, 2% of the households in the Coconino Region – representing just over 800 households – are identified as "limited-English-speaking," which means that no adult or teenager in the household speaks English very well (Figure 8). This proportion rises to 7% in the Hopi Tribe. However, in every other community in the region, the percent of households with limited English proficiency among adults or teenagers is much lower than that seen statewide (4%).

Figure 8. Percent of households that are limited-English-speaking, 2015-2019 ACS

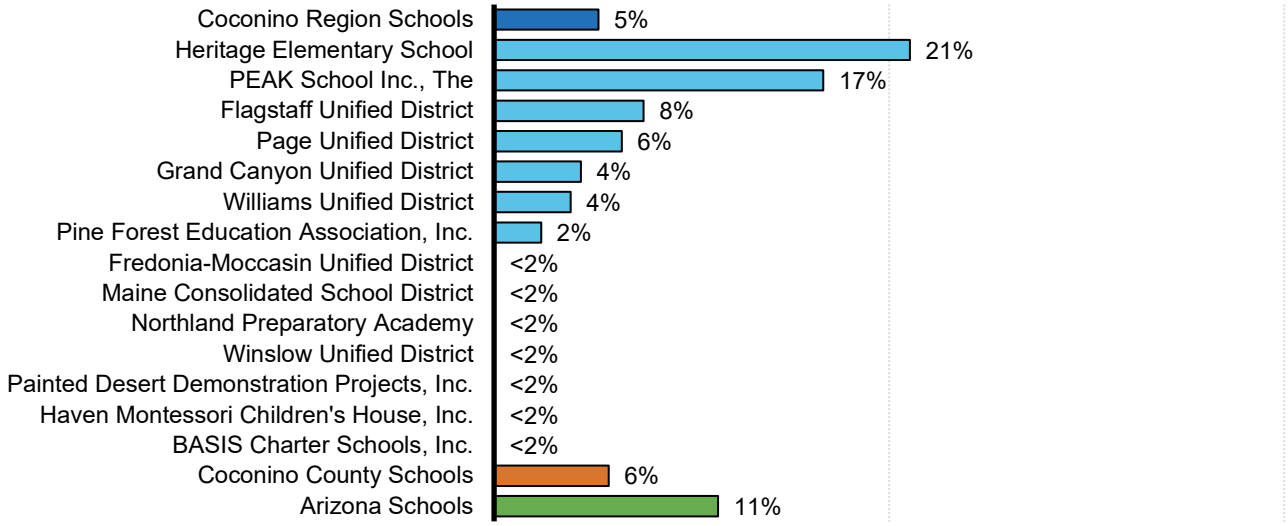


Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16002

Note: A "limited-English-speaking" household is one in which no one over the age of 13 speaks English very well. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Schools dedicate resources and programming for students who do not speak English as their first language and need additional support to become proficient in English. These students are identified via caregiver report on a home language survey and subsequently by a sub-proficient score on the Arizona English Language Learner Assessment (AZELLA).[46] In the Coconino Region overall, 5% of students were classified as English Learners (EL), compared to 11% statewide in the 2019-20 school year (Figure 9). However, the total number of EL students in the early elementary grades has fallen by nearly 100 students over the past three years (Table 4). Two charter schools, Heritage Elementary School in Williams (21%) and the PEAK School in Flagstaff (17%) have the highest percentages of kindergarten to third grade students classified as EL students. Flagstaff Unified District (8%) and Page Unified District (6%) also have shares of EL students in the early elementary grades that exceed the rates seen in the region overall.

Figure 9. Percent of kindergarten to 3rd grade students who were English Language Learners, 2019-20



Source: Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: English Language Learners are students who do not score 'proficient' in the English language on the Arizona English Language Learner Assessment (AZELLA) and thus are eligible for additional supportive services for English language acquisition.

Table 4. Number of English Language Learners enrolled in kindergarten to 3rd grade, 2017-18 to 2019-20

Geography	K-3 English Language Learners, 2017-18	K-3 English Language Learners, 2018-19	K-3 English Language Learners, 2019-20
Coconino Region Schools	**371**	**269**	**274**
Coconino County Schools	396	282	290
Arizona Schools	37,144	35,025	37,313

Source: Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: English Language Learners are students who are not deemed 'proficient' in the English language and thus eligible for additional supportive services for English language acquisition.

Family and Household Composition

Nearly two-thirds (64%) of children birth to 5 in the Coconino Region live with two parents (or a parent and a stepparent) and most of the rest (32%) live with a single parent (Table 5). However, single parent families were much more prevalent in the Grand Canyon Village-Tusayan-Valle (41%), Page (45%), Williams-Parks (46%), Winslow (49%) and Hopi Tribe (72%) communities.

With the move to remote learning during the pandemic, parents and caregivers took on the challenging role of assisting with children's remote learning. The burden was particularly taxing for single-parent households, with more than three-quarters (78%) of single parents surveyed nationally managing children's remote learning. Single-parent households were more likely to experience unemployment, food insecurity, difficulty paying for housing and utilities and heightened behavioral difficulties in children during the pandemic. [47,48,49] Single-parent households were also more likely to rely upon grandparents to take on primary caregiving (37%) and support of children's remote learning (20%) compared to the overall population (26% and 11%, respectively).[50] These additional hardships may impact the nearly 2,800 young children living with a single parent in the Coconino Region.

Table 5. Living arrangements for children ages birth to 5, 2015-2019 ACS

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
Coconino Region	**8,612**	**64%**	**32%**	**2%**	**2%**
Fredonia	38	97%	2%	0%	0%
Grand Canyon Village-Tusayan-Valle	251	51%	41%	0%	8%
Greater Flagstaff Area	5,502	78%	20%	1%	1%
Havasupai Tribe	N/A	N/A	N/A	N/A	N/A
Hopi Tribe	1,029	19%	72%	7%	2%
Page	521	49%	45%	6%	0%
Williams-Parks	580	50%	46%	0%	4%
Winslow	666	44%	49%	5%	1%
Coconino County	9,276	60%	35%	3%	2%
Arizona	517,483	59%	37%	3%	2%
United States	23,640,563	63%	33%	2%	2%

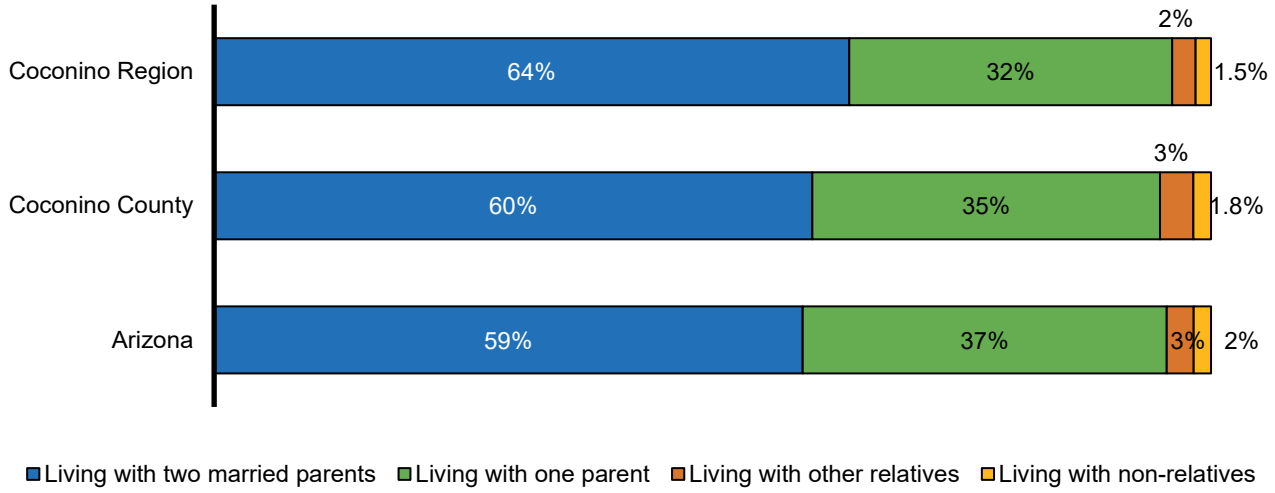
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Tables B05009, B09001, & B17001

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 cohabitating but unmarried parents are not counted as living with two parents (these children are counted in the 'one parent' category). Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

A small fraction of young children in the Coconino region live in kinship care arrangements with relatives other than parents (such as grandparents, uncles, and aunts; 2%) or in the household of an unrelated person (such as a foster parent; 2%) (Figure 10). The share of children in these living arrangements is similar to that seen statewide. Data from the Hopi Tribe and Havasupai Tribe Head Start

programs show that among children enrolled in Head Start Programs in 2019, a slightly higher percentage were living with non-relative foster parents in the Havasupai Tribe (6%), or with relatives (11%), particularly grandparents, in the Hopi Tribe (Figure 11). According to the ACS, across the region, the highest percentages of children living with non-relatives were seen in Grand Canyon Village-Tusayan-Valle (8%) and Williams-Parks (4%), while the Hopi Tribe (7%) and Page (6%) communities have the highest percentages living with relatives other than parents (Table 5).

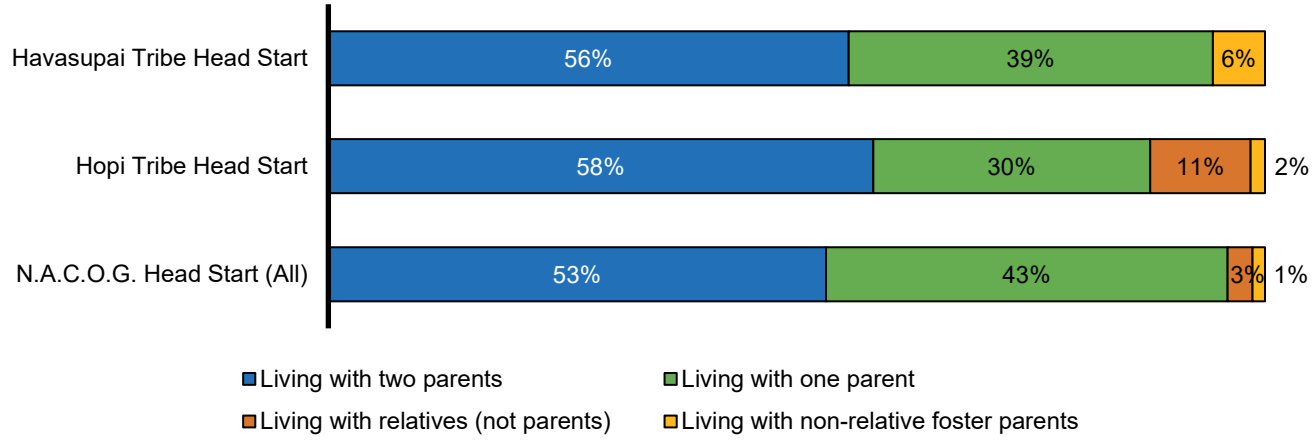
Figure 10. Living arrangements for children ages birth to 5, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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 cohabitating but unmarried parents are not counted as living with two parents (these children are counted in the 'one parent' category).

Figure 11. Living arrangements for children ages birth to 5 in select Head Start Programs, 2018-19



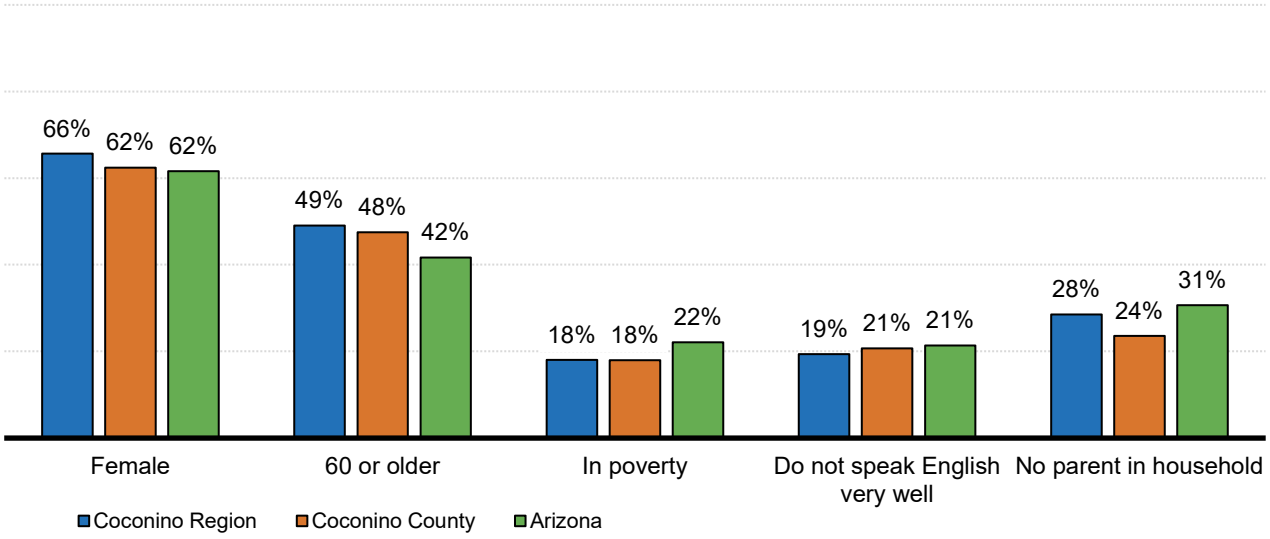
Source: Office of Head Start (2020). 2019 Program Information Report. Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/data/pir

Note: Of the 11% of Head Start children living with relatives in the Hopi Tribe, almost all were living with a grandparent. N.A.C.O.G. Head Start programs serve children birth to 5 in both Early Head Start and Head Start Programs. Hopi Head Start serves children ages 3 to 5, and Havasupai Head Start serves children ages 3 to 4. Please note that Head Start asks families to self-report whether they are a two-parent or one-parent family, regardless of marital status, which leads to higher rates of reported two-parent families as unmarried but cohabitating parents are included with two-parent families.

Children living in kinship care, that is, living with a close friend or relative who is not a parent (like a grandparent), can arrive in those situations for a variety of reasons, including a parent's absence for work or military service, chronic illness, drug abuse or incarceration or due to abuse, neglect or homelessness. Though the proportion of children living in kinship-care arrangements in the region is small, these families 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 ageing caregiver for a young child. In some situations, children in kinship care may also face special needs as a result of trauma and could benefit from additional support and assistance to help them adjust and to ensure they have a stable and nurturing home environment.[51]

According to ACS data, grandparents are considered responsible for their 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. An estimated 1,623 grandparents in the Coconino Region are responsible for raising one or more grandchildren (ages birth to 17) who live with them. Over a quarter of these grandparents (28%) do not have the child's parent(s) living in the household (Figure 12). Furthermore, of these over 1,600 grandparents, 66% are female, 49% are in their sixties or older, 18% are in poverty, and 19% percent are not proficient English speakers. Grandparents with limited English proficiency who are their grandchildren's primary care provider may experience barriers to accessing health care and social services for their grandchildren, as well as barriers to engaging in important interactions at schools.

Figure 12. Selected characteristics of grandparents who are responsible for one or more grandchildren under 18 in their households, 2015-2019 ACS



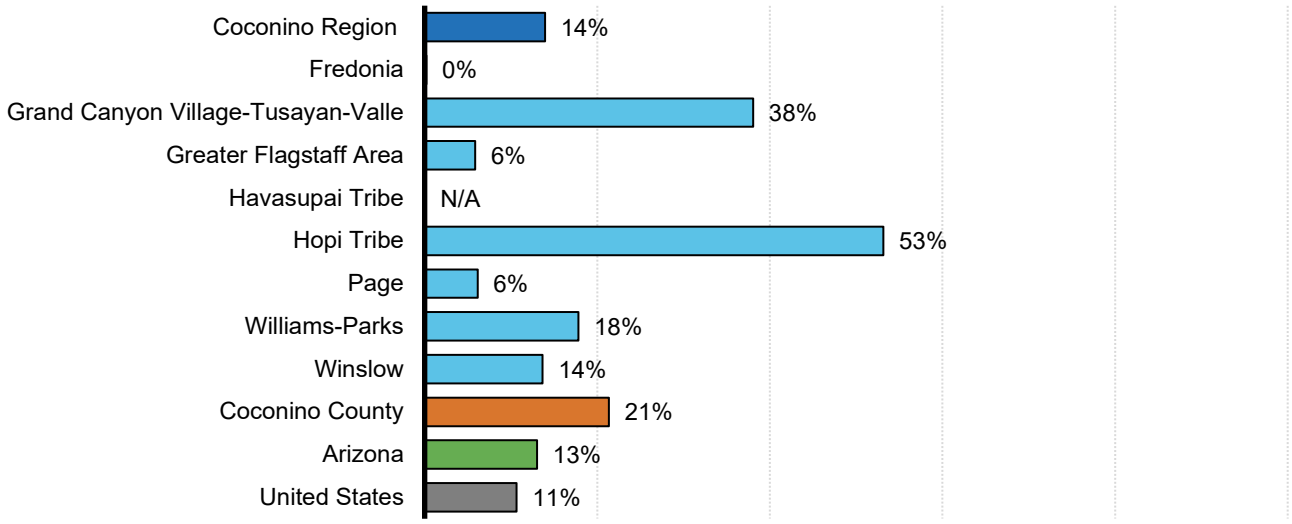
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Tables B10051, B10054, B10056, & B10059

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.

Beyond kinship care, many young children live in multi-generational households. The ACS estimates that 14% of children birth to 5 in the Coconino Region live in their grandparent's household, compared to 13% across Arizona (Figure 13). Note that these grandparents may or may not be responsible for raising the child, and that the child's parent(s) may or may not also be living in the household. The Hopi Tribe has the highest percentage of children birth to 5 living in a grandparent's household (53%), followed by Grand Canyon Village-Tusayan-Valle (38%), Williams-Parks (18%), and Winslow (14%).

Understanding the circumstances of grandparents living with their grandchildren is critical to providing services in a way that will meet the unique needs of grandparent-led families. Although multigenerational households can enhance family bonds and provide additional financial and caregiving resources, children's risk of living in poverty is higher for those living with grandparents, and grandparents often encounter multiple barriers when accessing public assistance as caregivers and face unique psychological and physical stressors. [52,53,54,55] Grandparents who care for their grandchildren may require targeted outreach and information about resources, support services, benefits and policies available to aid in their caregiving role.[56] Grandparents in multigenerational households are also at heightened risk of COVID-19 infection, especially those living with essential workers.[57] Given that the risk for severe illness from COVID-19 increases with age,[58] targeted supports for multigenerational households will be important for preventing continued spread of the disease.

Figure 13. Grandchildren ages birth to 5 living in a grandparent's household, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Tables B10001 & B27001

Note: This table includes all children (under six 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. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

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

ECONOMIC CIRCUMSTANCES

ECONOMIC CIRCUMSTANCES

Why it Matters

Poor economic conditions are a threat to child well-being across a range of indicators including academic achievement, physical health, and mental health.[59] Poverty can affect the way children grow and develop, even including changes to their brains.[60,61] Thus, children in impoverished homes are at a greater risk of problems that include being born at a low birth weight, lower school achievement and poor health.[62,63,64,65,66,67,68] They are also more likely to remain poor later in life, passing along these challenges to future generations.[69,70] On the other hand, children raised in families with higher incomes tend to do better in a variety of ways across their lives. This includes being less likely to have health problems like depression and diabetes and more likely to finish high school and earn higher wages.[71,72,73,74]

Economic resources are important for meeting basic needs, like providing nutrition. Food security, defined by the U.S. Department of Agriculture (USDA) as "access at all times to enough food for an active, healthy life for all household members"[75] is linked with many aspects of child well-being, and yet households with young children experience food insecurity at nearly twice the rate (15.3%) of households with no children (8.8%).[76] Safety-net programs aim to minimize the impacts of poverty on child and family well-being.[77,78,79] These programs include:

- The Supplemental Nutrition Assistance Program (SNAP; also referred to as "nutrition assistance" and "food stamps"),[iv]
- The Special Supplemental Nutrition Program for Women, Infants and Children (WIC),[v]
- The National School Lunch Program[vi] and Summer Food Service Program,[vii]
- Temporary Assistance for Needy Families (TANF),[viii]
- KidsCare (the state children's health insurance program),[ix]
- Child care assistance[x] and

[iv] *For more information see: https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program*

[v] *For more information see: https://www.fns.usda.gov/wic*

[vi] *For more information see: https://www.fns.usda.gov/nslp*

[vii] *For more information see: https://www.fns.usda.gov/sfsp/summer-food-service-program*

[viii] *For more information see: https://www.acf.hhs.gov/ofa/programs/tanf*

[ix] *For more information see: https://www.azahcccs.gov/Members/GetCovered/Categories/KidsCare.html*

[x] *For more information see: https://des.az.gov/services/child-and-family/child-care*

- Housing support.[xi]

Other factors related to economic stability include employment and housing.[80] Unemployment (and underemployment[xii]) can limit access to resources like health insurance – typically provided by employers – that support children's health and well-being. Unemployment can also contribute to family stress, conflict, homelessness and child abuse.[81,82] Similarly, housing instability can harm the physical, social-emotional and cognitive development of young children.[83] High housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health and homelessness.[84,85] This high relative cost leaves inadequate funds for other necessities, such as food and utilities.[86]

What the Data Tell Us

Income and Poverty

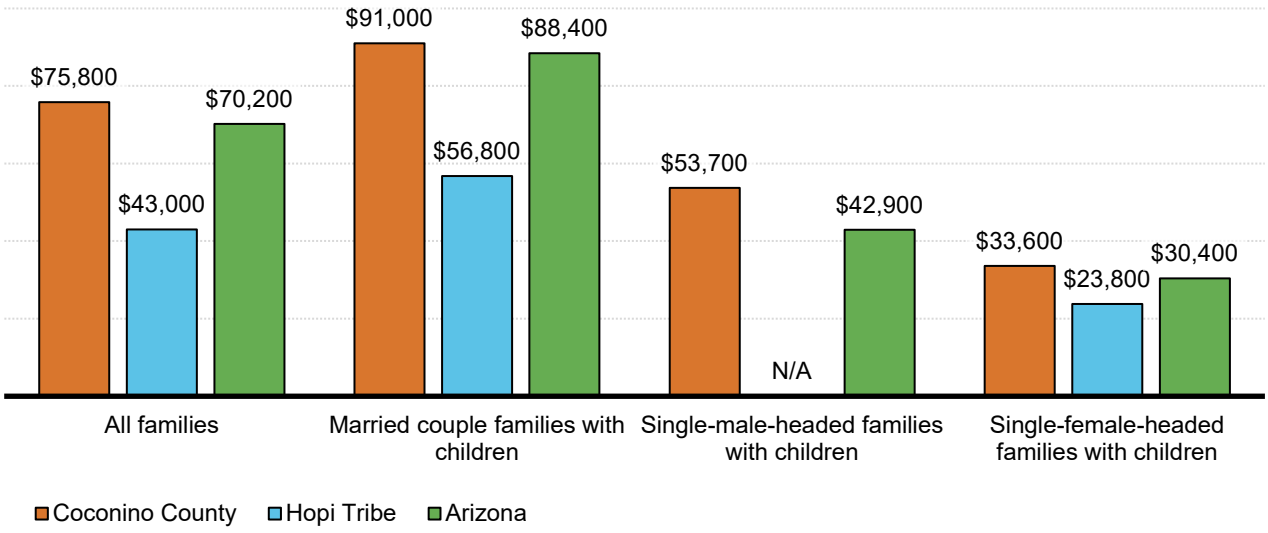
The median family income for Coconino County is estimated to be $75,800 (Figure 14), which means that half of the county's families have incomes lower than that amount and the other half have incomes above it. This includes all families of at least two people, whether or not they have children. For married-couple families who have at least one child (up to 17 years old), the median income is higher than that of all families, likely because many such families are dual-income families. The median income for families with children in Coconino County is $91,000 for married couples, compared to $53,700 for single-male-headed families and $33,600 for single-female-headed families. The median income estimates for all types of families in Coconino County exceed those seen statewide. Median income estimates were not available for many sub-regional communities, but the estimates available for the Hopi Tribe show that the median incomes for all types of families are substantially lower than those in the county or the state.

The COVID-19 pandemic had a sudden and dramatic impact on income for many families nationwide. In Arizona, typically at least half of surveyed adults reported that someone in their household had lost employment income, with one week spiking up to two-thirds of respondents. Arizona generally mirrors the trends seen nationwide.[87] These impacts were likely felt locally as well and may mean that median incomes in upcoming years may look different in the county and state.

[xi] *For more information see: https://des.az.gov/services/basic-needs/shelter-housing*

[xii] *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*

Figure 14. Median family income for families with children ages birth to 17, 2015-2019 ACS

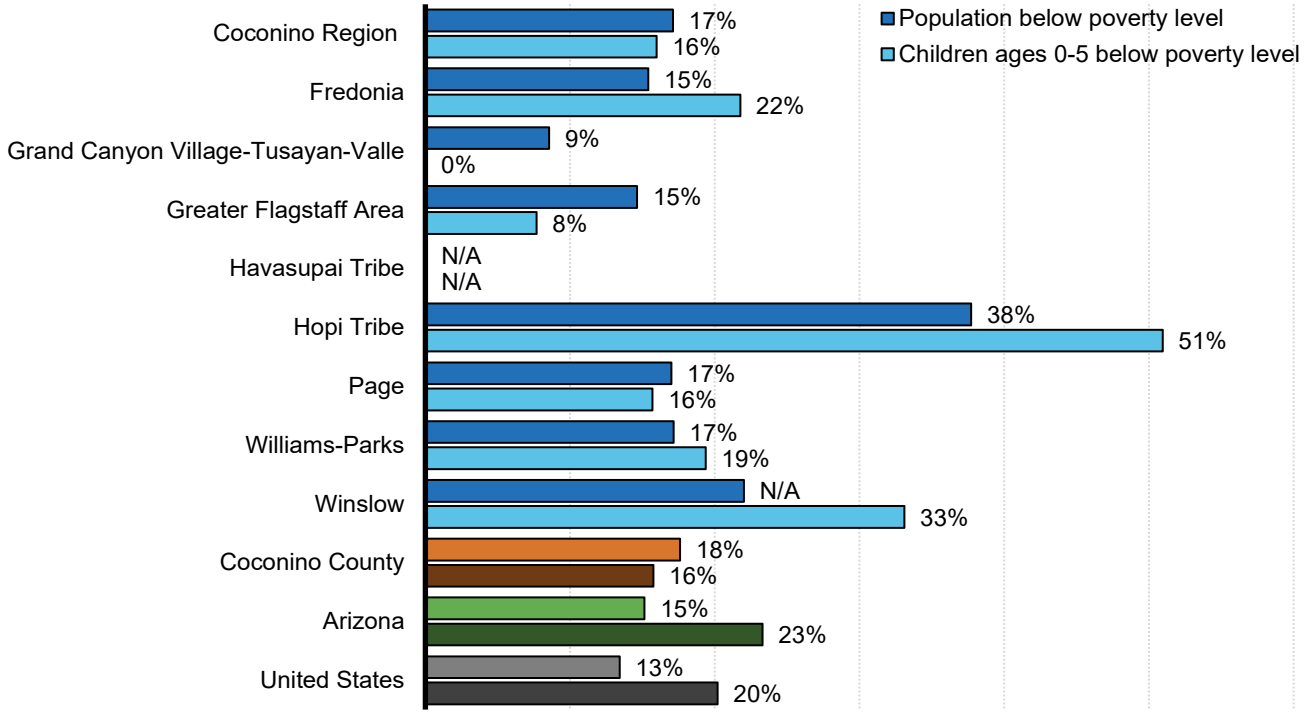


Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B19126

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 ages birth to 17. Median income estimates are only available for official Census geographies, such as counties, places, or reservations. Since the region and many sub-regional communities are custom aggregations of census geographies, no median income estimates are available for them.

In Arizona, the rate of poverty in the population is estimated to be 15 percent, or about one out of every seven people (Figure 15). Among young children, the rate is higher: nearly one out of every four children birth to 5 (23%) live in families with incomes below the poverty level. However, in the Coconino Region, poverty rates follow a different pattern, with the poverty rate for young children (16%) falling below the overall poverty rate (17%). This is largely driven by the Greater Flagstaff Area, where the young child poverty rate (8%) is nearly half that of the total population (15%). Several communities have markedly higher poverty rates for young children than those seen in the region; more than half of young children (51%) in the Hopi Tribe and a third (33%) in the Winslow community live below the poverty level. These two communities also have the highest overall poverty rates in the region (38% and 22%, respectively). Note that these rates represent averages over the five years spanning 2015 to 2019; data reflecting the COVID-19 pandemic era and its effects on poverty in the region are not yet available. Data from 2019 Head Start Program Information Reports (PIRs) show that 53% of children ages 3 to 5 enrolled in Hopi Tribe Head Start were in families with incomes below 100% of the federal poverty level, and 94% of children ages 3 to 4 in the Havasupai Tribe Head Start program lived in poverty.[88] This suggests that young child poverty rates in the Havasupai Tribe are notably high compared to other communities

Figure 15. Rates of poverty for persons of all ages and for children ages birth to 5, 2015-2019 ACS



Source: U.S. Census Bureau. (2020). American Community Survey five-year estimates 2015-2019, Table B17001

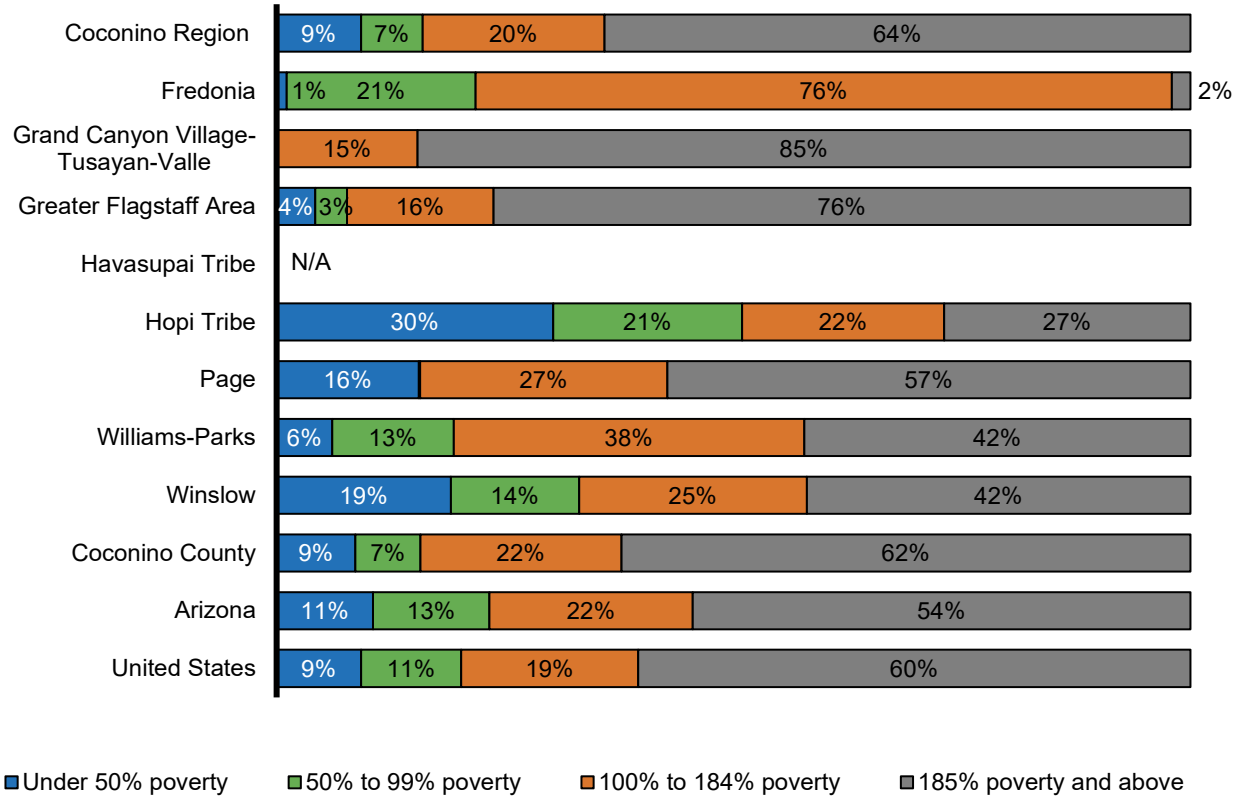
Note: This graph includes only persons whose poverty status can be determined. Adults who live in group settings such as dormitories or institutions are not included. Children who live with unrelated persons are not included. In 2019, the poverty threshold for a family of two adults and two children was $25,926; for a single parent with one child, it was $17,622. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

In the Coconino Region, an estimated 16% of children birth to 5 live in a household whose income is less than the federal poverty level (Figure 16). Over a third of young children (36%) live in households with incomes under 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 free or reduced-price school meals. Rates vary substantially by community. Nearly all young children in Fredonia (98%) and three-quarters in the Hopi Tribe (73%) live below 185% of the poverty level. Other communities where over half of young children are below the 185% threshold include Williams-Parks (58%) and Winslow (58%).

It is important to note that the number of families and young children who live in poverty according to official definitions like this one far underestimates the number of children in families who struggle to make ends meet. As a benchmark, the Federal Poverty Guideline – the criterion used for establishing eligibility for some safety net programs – for a family of four was $25,750 in 2019 and $26,200 in 2020.[89,90] However, the federal poverty guideline definition of poverty was developed in the 1950s and is based on the assumption that basic nutrition accounts for one-third of family spending; it is widely

considered to be much less than what a family actually needs to earn for financial stability. The "self-sufficiency standard" attempts to estimate how much families need to earn to fully support themselves, accounting for differences in costs of housing, transportation, child care and other budget items across places.[91] The 2021 self-sufficiency standards for a family comprised of two parents, one infant and one preschooler is $72,195 in Coconino,[92] which is similar to the county median income ($75,787). Given that half of families earn less than the median income, this suggests that many families in the county are likely to be struggling to fully support themselves.

Figure 16. Children ages birth to 5 living at selected poverty thresholds, 2015-2019 ACS



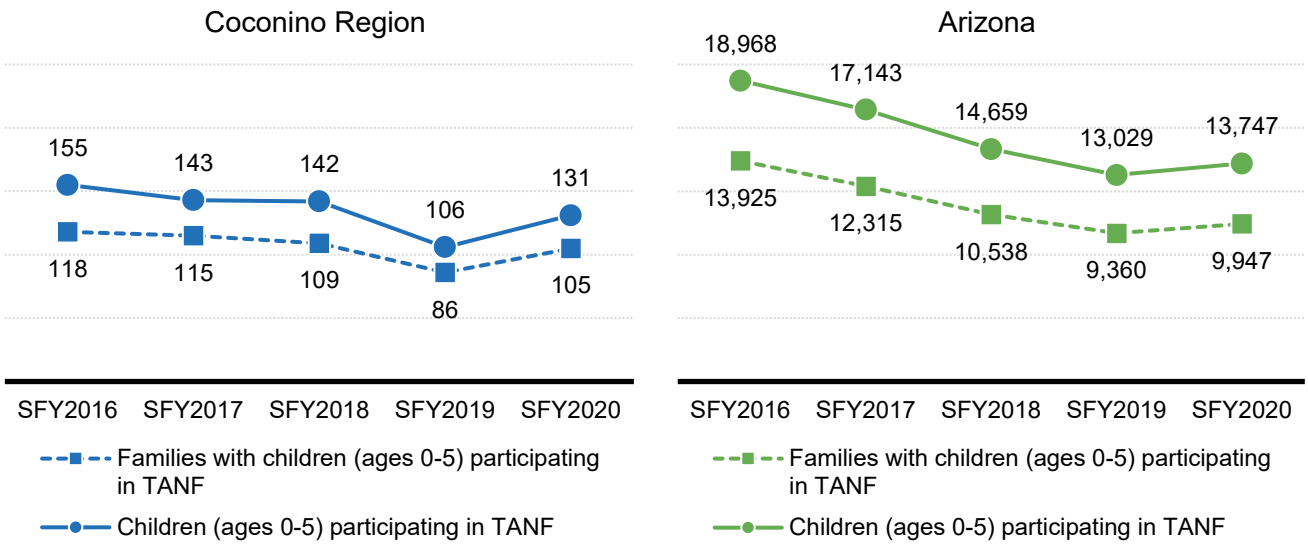
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B17024

Note: The four percentages in each row should sum to 100%, but may not because of rounding. In 2019, the poverty threshold for a family of two adults and two children was $25,926; for a single parent with one child, it was $17,622. The 185% thresholds are $47,963 and $32,600, respectively. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Public assistance programs are one way of counteracting the effects of poverty and providing supports to children and families in need. The Temporary Assistance for Needy Families (TANF) Cash Assistance program provides temporary cash benefits and supportive services to children and families. Eligibility is based on citizenship or qualified resident status, Arizona residency and limits on resources and monthly income. The number of young children supported by TANF and the number of families with children birth to 5 receiving TANF had been declining in the Coconino Region and Arizona as a whole in recent years (Figure 17). However, in state fiscal year 2020 (SFY2020), both the region and state saw an

increase in both young children and families with young children participating in TANF. The immediate, widespread economic hardship induced by the pandemic resulted in shifts in existing cash assistance programs and the development of additional economic supports. For example, between February and July 2020, the number of families using TANF rose 35% in Arizona. During the state of emergency order, Arizona suspended the TANF work requirement[93] and lifetime eligibility limit of 12 months,[94] which had been the shortest in the nation,[95] thereby allowing more families to tap into these emergency funds.

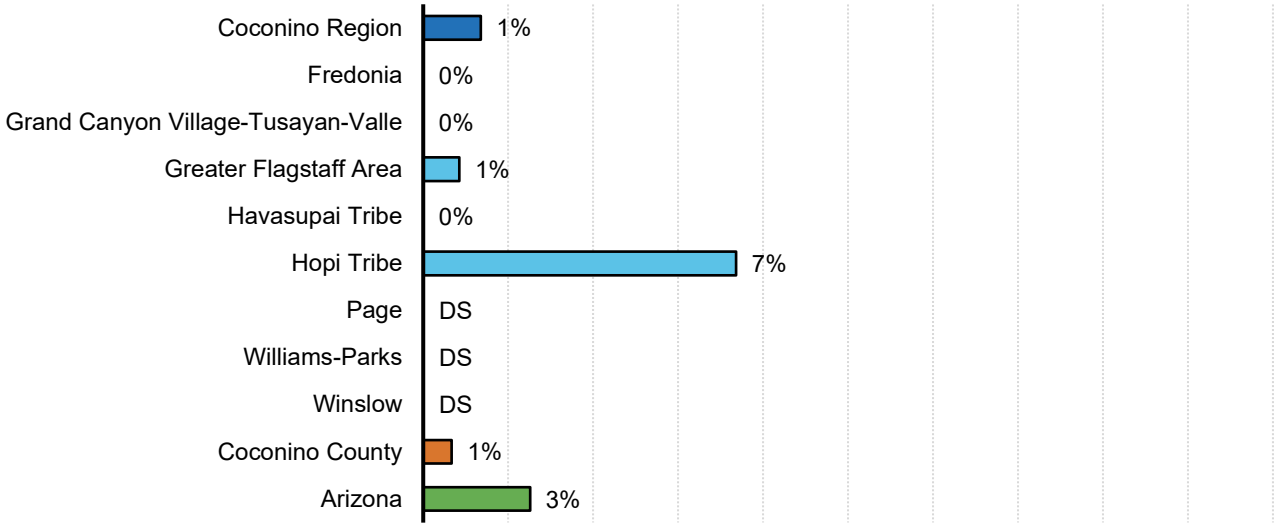
Figure 17. Number of children ages birth to 5 and families with children ages birth to 5 receiving TANF, state fiscal years 2016 to 2020



Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data.

Overall, the percentage of young children in the Coconino Region (1%) and Arizona (3%) participating in TANF in SFY 2020 remained quite low (Figure 18). Fewer than 20 children were receiving TANF in Page, Williams-Parks or Winslow. Most children participating in TANF resided in the Hopi Tribe (57 young children) or the Greater Flagstaff area (54 children). This low participation in TANF is notable considering that an estimated 1,355 young children lived in poverty pre-pandemic (Figure 19).

Figure 18. Estimated percent of children ages birth to 5 participating in TANF, state fiscal year 2020



Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P14 & P20.

Note: TANF numbers do not include numbers for tribal TANF programs such as the Navajo Nation Program for Self Reliance, but the population of Navajo Nation residing within Coconino County are included in the population denominator. Therefore the percent of the population receiving TANF is lower in the county than the region.

To combat widespread economic hardship brought on by the COVID-19 pandemic, the federal government issued three Economic Impact Payments to eligible individuals in 2020 and 2021. These funds were available to U.S. citizens or lawful permanent residents whose adjusted gross incomes were no more than $75,000 for single adults, $112,500 for heads of household and $150,000 for married couples filing jointly.[96] Eligible families received: $1,200 per adult and $500 per child in April 2020, $600 per family member in December 2020/January 2021 and $1,400 per person in March 2021.[97]

While these payments were a financial boon for many families, immigrant families were excluded from the first round of payments under the CARES Act. Families in which at least one parent filed using an individual Taxpayer Identification Number (ITIN) (as a resident or nonresident immigrant) instead of a social security number (SSN) were originally excluded from the payments. This includes the families of 104,000 Arizona children who were ineligible for the first round of stimulus payments.[98] Although a subsequent bill allowed for retroactive payments if one parent had an SSN, these had to be claimed through 2020 tax returns.[99,100] For the second round of payments, filers using ITINs were ineligible, but their spouses and children were eligible if the spouse used an SSN. Children who only have parents with ITINs received none of the emergency support, regardless of economic need.

Food Insecurity

Many families struggle with consistent access to "enough food for an active, healthy life," a problem known as food insecurity.[101] This limited or uncertain availability of food is negatively associated with

many markers of health and well-being for children, including heightened risks for developmental delays[102] and having obesity.[103] To help reduce food insecurity, there are a variety of federally-funded programs including the Supplemental Nutrition Assistance Program (SNAP),[104] the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC),[105] the National School Lunch Program (NSLP),[106] the School Breakfast Program,[107] the Summer Food Service Program (SFSP),[108] and the Child and Adult Care Food Program (CACFP).[109] These programs are outlined in the sections below.

An additional food resource in the Coconino Region is the Emergency Food Assistance Program (TEFAP) which helps supplement the diets of low-income individuals by providing them with emergency food and nutrition assistance at no cost. TEFAP foods are distributed as Emergency Food Packages and in meals served at Congregate Feeding Sites (soup kitchens). There are 13 TEFAP sites in the Coconino Region, three of which are located in Hopi Tribe, and 10 TEFAP sites in Coconino County.[xiii]

Notably, only about 58 percent of food insecure households nationwide report participating in federally-funded nutrition assistance programs.[110] A nationally representative survey found that for caregivers in low-income families, food insecurity during the pandemic, exacerbated by the loss of free meals (e.g., school lunch), was the lone consistent predictor of anxiety, depression and stress.[111] Arizona families with young children are particularly vulnerable to being persistently food insecure and becoming food insecure during the pandemic. Furthermore, food insecurity tends to be worse for people of color. Nationally, Hispanic individuals are almost twice as likely (15.8%) as non-Hispanic White individuals (8.1%) to be food insecure, and Native Americans are three times as likely (23.5%) to be food insecure.[112] Feeding America estimates that in Coconino County, the child food insecurity rate rose from 18.3% in 2019 to 22.8% in 2021, meaning that more than one out of every five children may now be food insecure.[113]

Supplemental Nutrition Assistance Program (SNAP)

Administered by the Arizona Department of Economic Security and also referred to as "Nutrition Assistance" and "food stamps," SNAP is designed to combat food insecurity. It has been shown to help reduce hunger and improve access to healthier food.[114] In the years prior to the pandemic, the number of families with young children who participate in SNAP has steadily declined across the region and state (Figure 19). This decline likely reflects the continuing economic recovery from the Great Recession as well as increasing wages due to legislation raising the minimum wage in Flagstaff.[115,116] Despite the number of young children who receive SNAP benefits declining between 2016 and 2020, in the region, over a third (36%) of all children ages birth to 5 received SNAP benefits in SFY2020 (Figure 20), underscoring how important this support is for childhood food security. These percentages were even higher in many communities, including Havasupai Tribe (48%), Page (64%), Hopi Tribe (74%) and Winslow (89%).

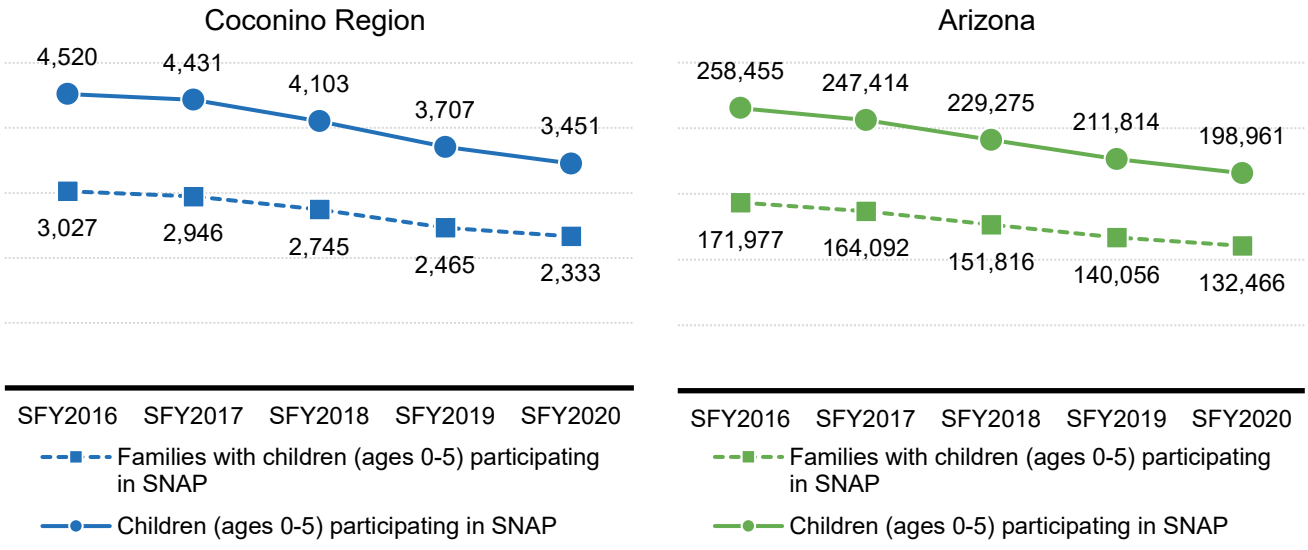
[xiii] *For more information on TEFAP please visit: https://des.az.gov/services/basic-needs/food-assistance/emergency-food-assistance*

SNAP benefits support working families whose incomes simply do not provide for all their needs. For low-income working families, the additional funds available to access food from SNAP can help make a meaningful difference. For example, for a three-person family with one person who earns a minimum wage, SNAP benefits can boost take-home income by 10-20%.[117] However, even among those accessing SNAP benefits, nearly half of households in poverty still struggle with food security.[118]

During the pandemic, changes were made to SNAP program administration to better meet the needs of families in a time of crisis. Beginning in December 2020, participants received a 15% increase in benefits. Among other administrative changes, interviews were waived, certification periods were extended and online shopping was approved, making it easier for families to access benefits. WIC also adjusted administrative guidelines, and participants were allotted extra monthly funds to use on fruits and vegetables. These waivers and emergency allotments can be extended while the state is under a COVID-19 emergency declaration and were still in effect as of this report being written (October 2021). Beginning October 2021, the USDA also instituted a roughly 27% increase in SNAP benefits, the largest permanent increase in the program's history.

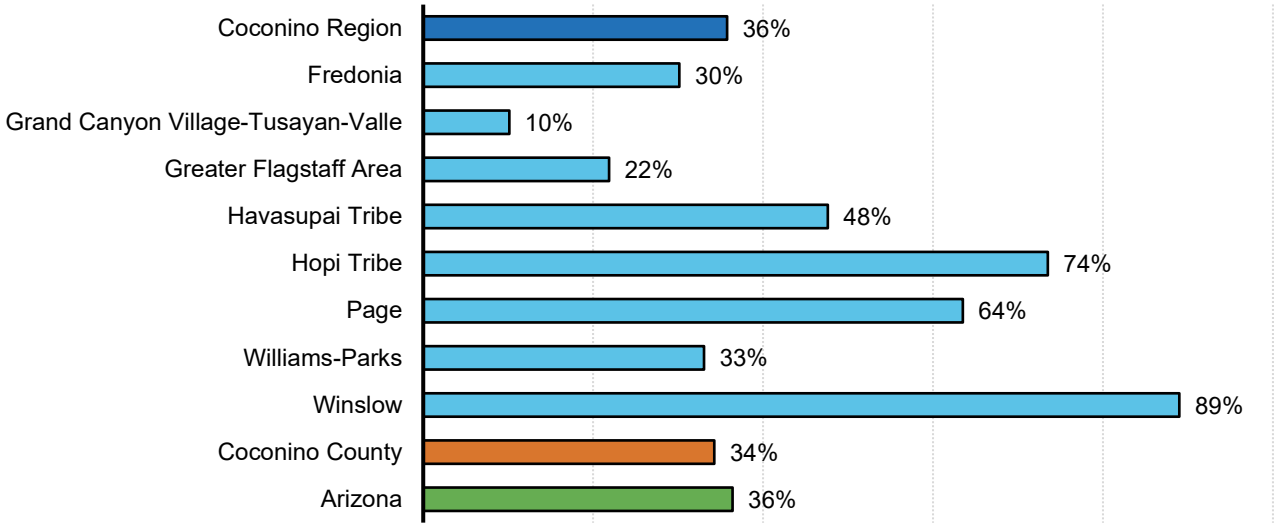
Despite these efforts to adapt SNAP benefits to the pandemic, in a survey of SNAP users in Arizona, nearly half (46%) of respondents found their benefits insufficient to meet their family's needs, due to barriers such as issues paying for online groceries and not being able to use a full month's benefit due to COVID-19 related shopping difficulties, such as stores running out of food items. Individuals with fewer financial resources are less able to stock up on necessities to be supplied for a quarantine, and formula stocking shortages were a particular concern for families with young children. [119,120]

Figure 19. Number of children ages birth to 5 and families with children birth to 5 participating in SNAP, state fiscal years 2016 to 2020



Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data.

Figure 20. Estimated percent of children ages birth to 5 participating in SNAP, state fiscal year 2020

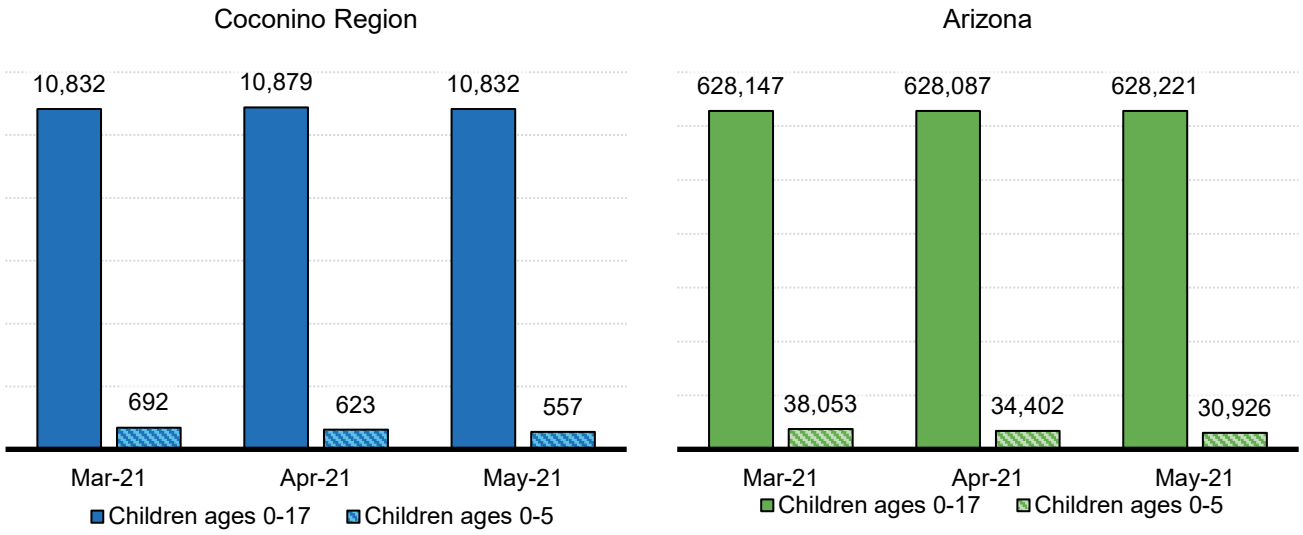


Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P14 & P20.

The Pandemic Electronic Benefit Transfer Program (P-EBT), a collaboration between the Arizona Department of Education, the Arizona Department of Economic Security and the USDA Food and Nutrition Service, was established to offset the loss of meals normally received for free at schools or child care settings. Eligible families included those participating in SNAP with a child birth to 5 and those with a child who received free or reduced-price school lunch. Over 520,200 children were eligible for the program in Arizona, which ended on September 24, 2021.

The majority of the children who received Pandemic EBT in the Coconino Region were above the age of 5, even though children birth to 5 who were receiving SNAP were eligible to receive P-EBT. For example, in March 2021, only 692 of the 10,832 children ages birth to 17 receiving P-EBT were under 6 years of age; similar patterns were seen statewide (Figure 21). In contrast, in 2020, over 3,400 children under the age of 6 were participating in SNAP in the region (Figure 19), suggesting less than a fifth of eligible young children were enrolled in Pandemic EBT. In addition, while receipt of P-EBT remained nearly constant across all children aged 0-17, receipt for children aged birth to 5 decreased between March and May 2021 in the region (Figure 21).

Figure 21. Children ages birth to 17 and birth to 5 receiving Pandemic EBT, March to May 2021



Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data.

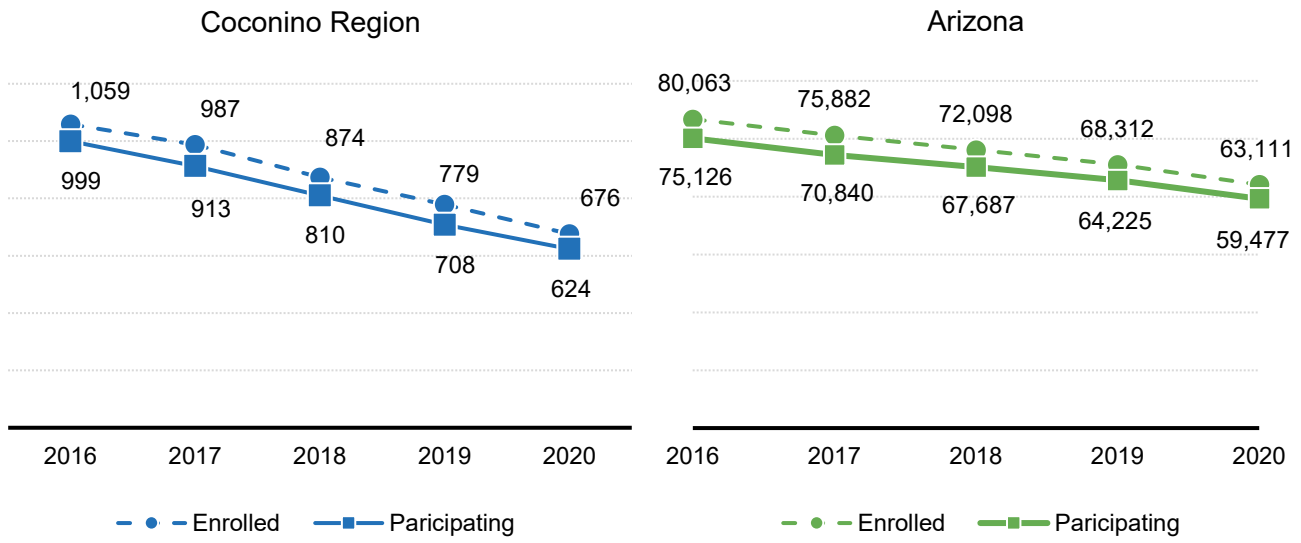
Special Supplemental Nutrition Program for Women, Infants and Children (WIC)

An additional resource to address food insecurity is the WIC program administered in the state of Arizona by the Arizona Department of Health Services as well as the Inter Tribal Council of Arizona (ITCA) for 21 tribal nations in the state, including the Hopi Tribe and Havasupai Tribe. WIC serves pregnant, postpartum and breastfeeding women, as well as infants and young children (ages birth to 4) who are low-income (i.e., family incomes at or below 185% of the federal poverty level). The program offers funds for nutritious food, breastfeeding and nutrition education, and referrals to health and social services.[xiv] Participation in WIC has been shown to be associated with healthier births, lower infant mortality, improved nutrition, decreased food insecurity, improved access to health care, and improved cognitive development and academic achievement for children.[121]

The number of women enrolled and participating in WIC declined in the region and across the state between 2016 and 2020 (Figure 22). Despite these declines, participation rates among enrolled women in the region have remained high, with about 92% of women enrolled in WIC consistently receiving benefits between 2016 and 2020. Declines in enrollment were also seen in the Havasupai Tribe and Hopi Tribe WIC programs; the number of women enrolled fell from 194 in 2017 to 96 for Hopi Tribe and 16 to 11 for Havasupai Tribe.[122]

[xiv] For more information on the Arizona WIC Program, visit http://azdhs.gov/prevention/azwic/

Figure 22. Women enrolled and women participating in WIC, 2016 to 2020

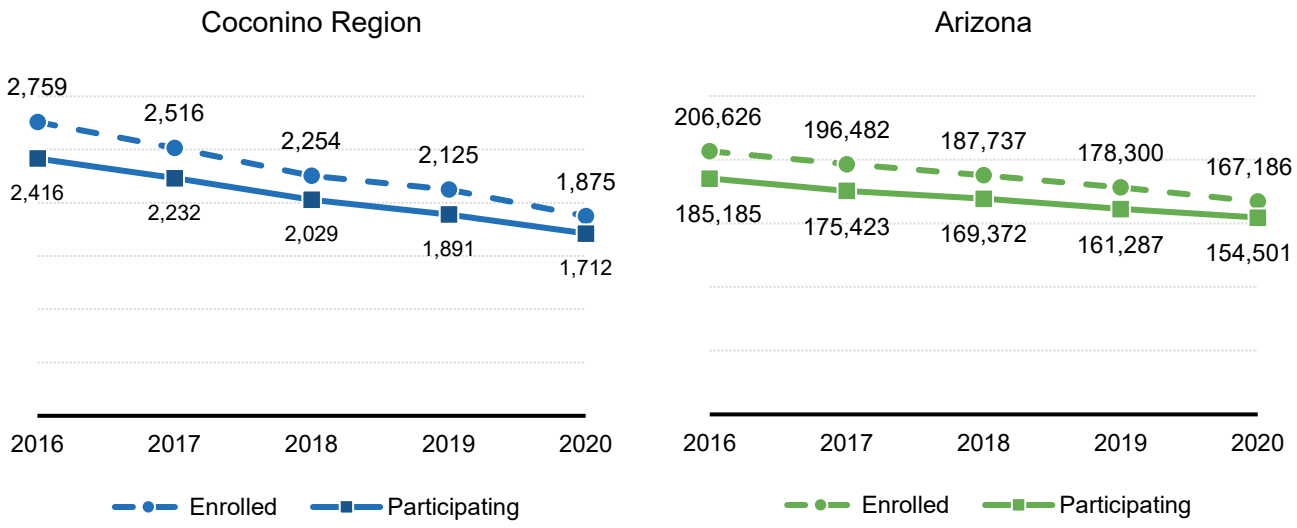


Source: Arizona Department of Health Services (2021). [WIC Dataset]. Unpublished data.

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

Mirroring declines in WIC enrollment and participation among women, the number of children birth to 4 enrolled and participating in WIC steadily declined between 2016 and 2020 in the Coconino Region and across the state (Figure 23). Participation among enrolled children also remained fairly steady, with 91% of enrolled children ages 1 to 4 receiving benefits in 2020 (Figure 24). Participation rates for infants were slightly higher, with 95% of infants enrolled in WIC receiving benefits in 2020. From 2017 to 2020, the number of children enrolled in the Havasupai Tribe and Hopi Tribe WIC programs also fell by about a third (Figure 25). Similar declines were seen across all ITCA WIC programs in the state. Overall participation rates in both programs remain high, at 94% for Hopi Tribe and 93% for Havasupai Tribe, compared to 92% in all ITCA WIC programs in 2020.[123] As with the region, participation rates were higher among infants (100% for Havasupai Tribe and 96% for Hopi Tribe) compared to children ages 1 to 4 (90% for both nations).[124]

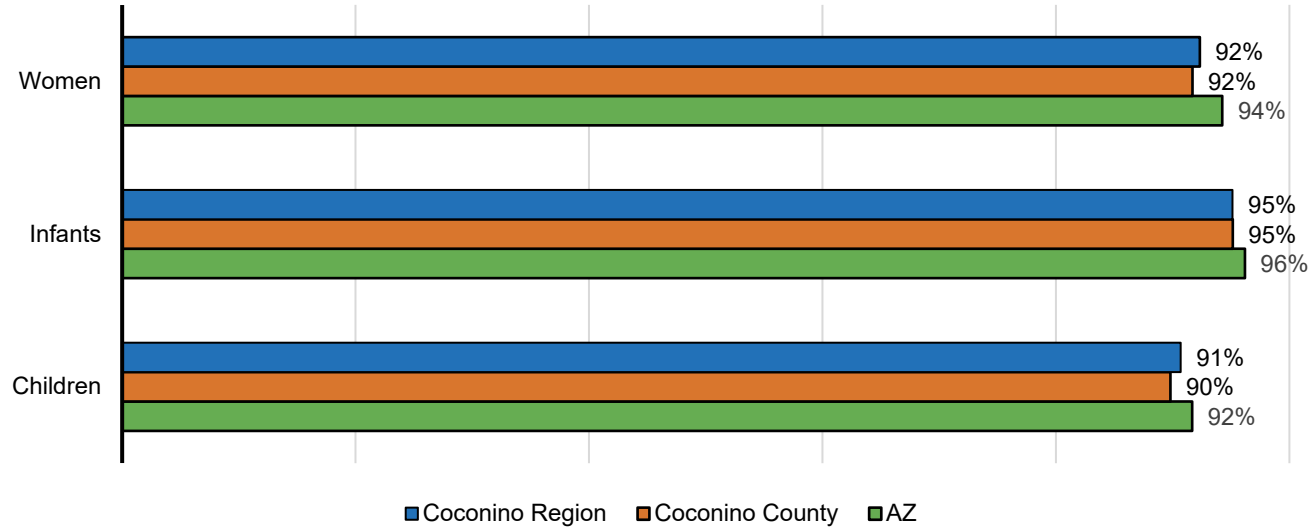
Figure 23. Children ages birth to 4 enrolled and participating in WIC, 2016 to 2020



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.

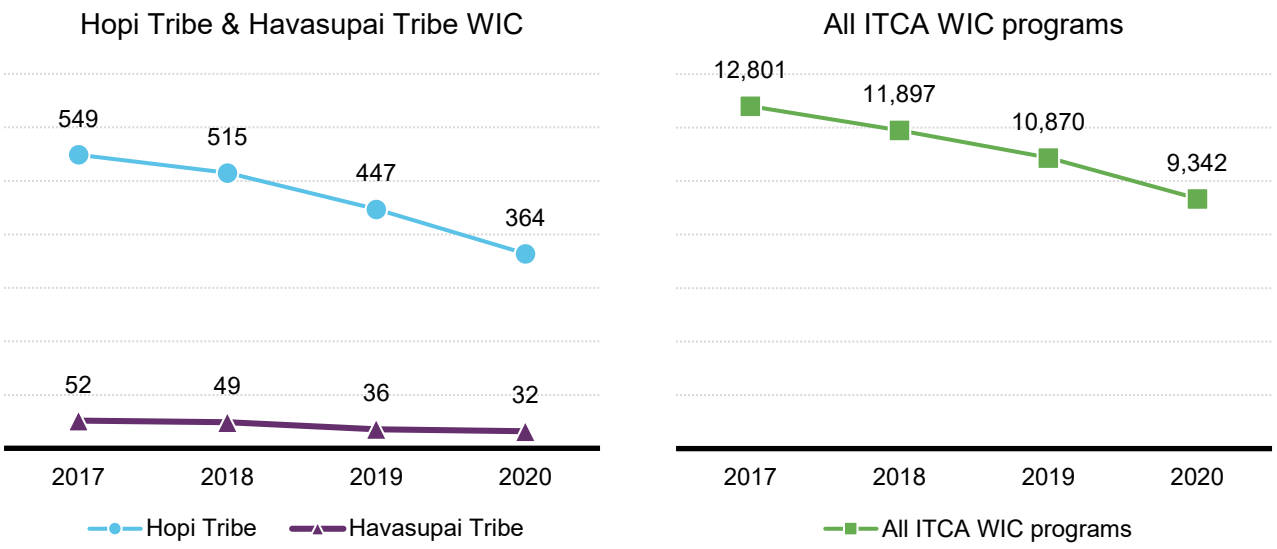
Figure 24. WIC participation rates by category, 2020



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.

Figure 25. Children ages birth to 4 enrolled in the Hopi Tribe and Havasupai Tribe WIC programs, 2017 to 2020



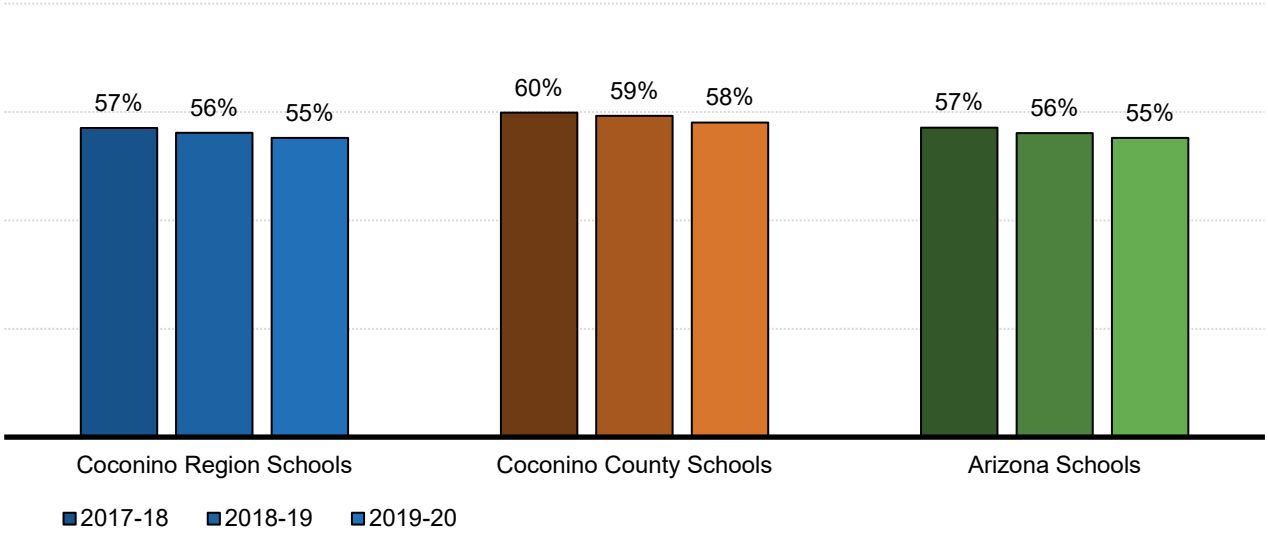
Source: Inter Tribal Council of Arizona (2021). [WIC Dataset]. Unpublished data.

It should be noted that while the available safety-net programs discussed above are important for families, not all key costs are covered. For families of young children in particular, the fact that SNAP and WIC funds cannot be used to purchase diapers can present a major financial burden.[125]

School Meal Programs

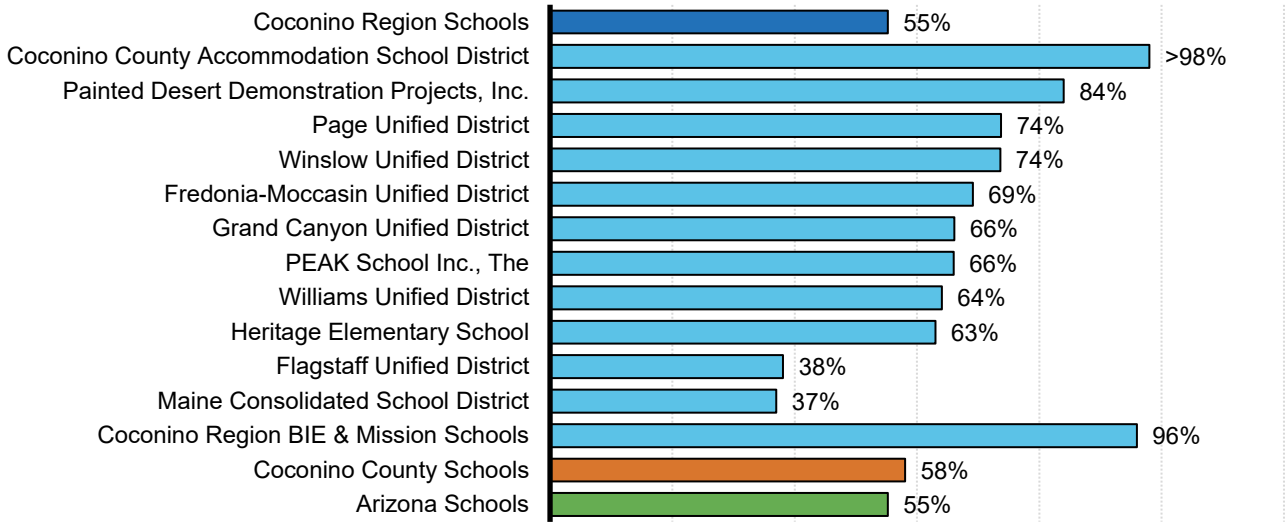
Schools play an important role in the nutrition assistance system, especially for children who are food insecure. Administered by the Arizona Department of Education (ADE), the National School Lunch Program (NSLP) provides free and reduced-price meals at school for students whose family incomes are at or less than 130% of the federal poverty level for free lunch, and 185% of the federal poverty level for reduced-price lunch. Just over half of students (55%) in the Coconino Region were eligible for free or reduced-price lunch in recent years (Figure 26), identical to the proportion eligible statewide (55% in 2020). However, many schools and districts in the region had much higher percentages of students eligible in the 2019-20 school year (Figure 27). Nearly all students in the Coconino County Accommodation District (>98%) and Coconino Region Bureau of Indian Education (BIE) and mission schools (96%), located in Hopi Tribe and Havasupai Tribe, are eligible for free or reduced-price lunch. More than two out of every three students were eligible in the Page Unified (74%), Winslow Unified (74%), Fredonia-Moccasin Unified (69%) and Grand Canyon Unified (66%) school districts, as well as two charter schools, STAR School operated by Painted Desert Demonstration Projects (84%) and the PEAK School (66%).

Figure 26. Free and reduced-price lunch eligibility, 2017-18 to 2019-20



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

Figure 27. Free and reduced-price lunch eligibility, 2019-20



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

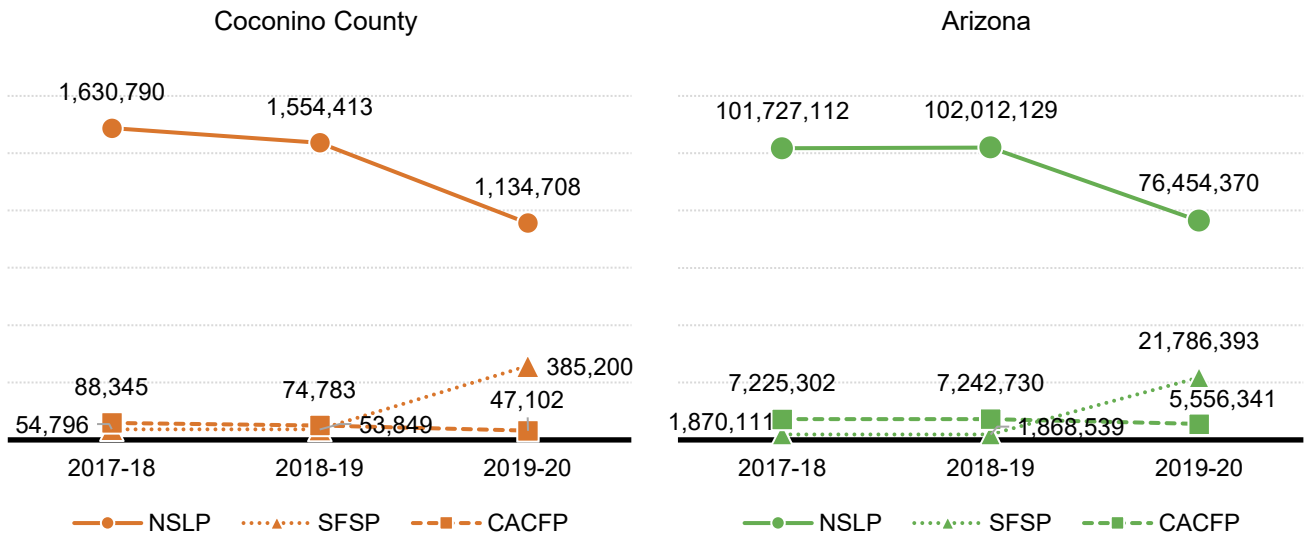
Note: The Coconino Region BIE & Mission schools that participate in the National School Lunch Program include Hotevilla Bacavi Community School, Moencopi Day School, First Mesa Elementary, Second Mesa Day School, Winslow Residential Hall, Keams Canyon Elementary, Havasupai Elementary, Hopi Mission School, and Hopi Jr/Sr High School.

In addition to the NSLP, ADE supports two other programs addressing children's food security. Funded by the USDA, the Child and Adult Care Food Program (CACFP)[xv] gives reimbursements to participating child care centers, preschools, emergency centers, and after-school programs for nutritious meals and snacks served to eligible children. Providers must complete a renewal each year. Eligible providers include for-profit child care centers serving at least 25% free or reduced-price lunch participants and non-profit providers.[126] Also funded by the USDA, the Summer Food Service Program (SFSP)[xvi] works to keep all children birth to 18 fed when school is out of session by providing free meals (breakfast, lunch, supper) and snacks at community sites. The SFSP program 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.[127]

Figure 28 shows varying trends across school nutrition programs with decreases overall in NSLP and CACFP lunches served between 2017-18 and 2019-20, and an overall increase in lunches served through the SFSP. Decreases in the NSLP and CACFP in the 2019-20 school year were likely due to closures of child care centers and schools in the spring of 2020 due to the COVID-19 pandemic. By contrast, the USDA approved year-round operation of SFSP during the pandemic with no free or reduced-price lunch eligibility criteria applied, allowing more children to receive food during school closures. These patterns in Coconino County mirror those seen statewide; however there was a slight decline in lunches served even pre-dating the pandemic for both NSLP and SFSP, which was not seen statewide. As schools resume more normal operations in the 2020-21 school year, school meal programs will continue to be a vital support for child food security, especially after the disruptions of the pandemic.

[xv] For more information see: https://www.azed.gov/hns/cacfp
[xvi] For more information see: https://www.azed.gov/hns/sfsp

Figure 28. Trends in lunches served through school nutrition programs, 2017-18 to 2019-20



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 issues 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

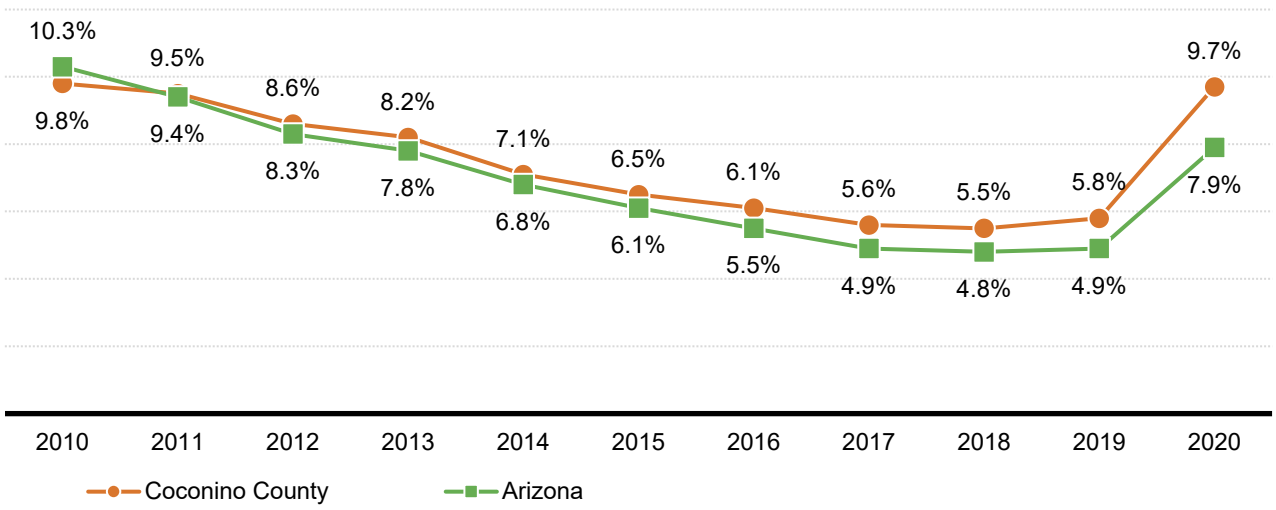
Employment

Unemployment and underemployment can affect a family's ability to meet the expenses of daily living, as well as their access to resources needed to support their children's well-being and healthy development. A parent's job loss can affect children's school performance, leading to poorer attendance, lower test scores, and higher risk of grade repetition, suspension or expulsion.[128] Unemployment can also put families at greater risk for stress, family conflict, and homelessness. [129]

The unemployment rate is the proportion of the total number of people in the civilian labor force who are unemployed and looking for work. Note that unemployment rates do not include people who have dropped out of the labor force entirely, including those who wanted to but could not find suitable work and so have stopped looking for employment.[130]

Nationwide, before the pandemic, unemployment rates had been on a steady decline since the end of the Great Recession in 2009. In the year prior to the pandemic, 2019, the unemployment rate in Coconino County was 5.8% compared to 4.9% statewide (Figure 29). Nationally, in 2020, the unemployment rate more than doubled (from 3.7% to 8.1%) due to the pandemic. Unemployment rates jumped in Arizona (7.9%) and Coconino County as well (9.7%).

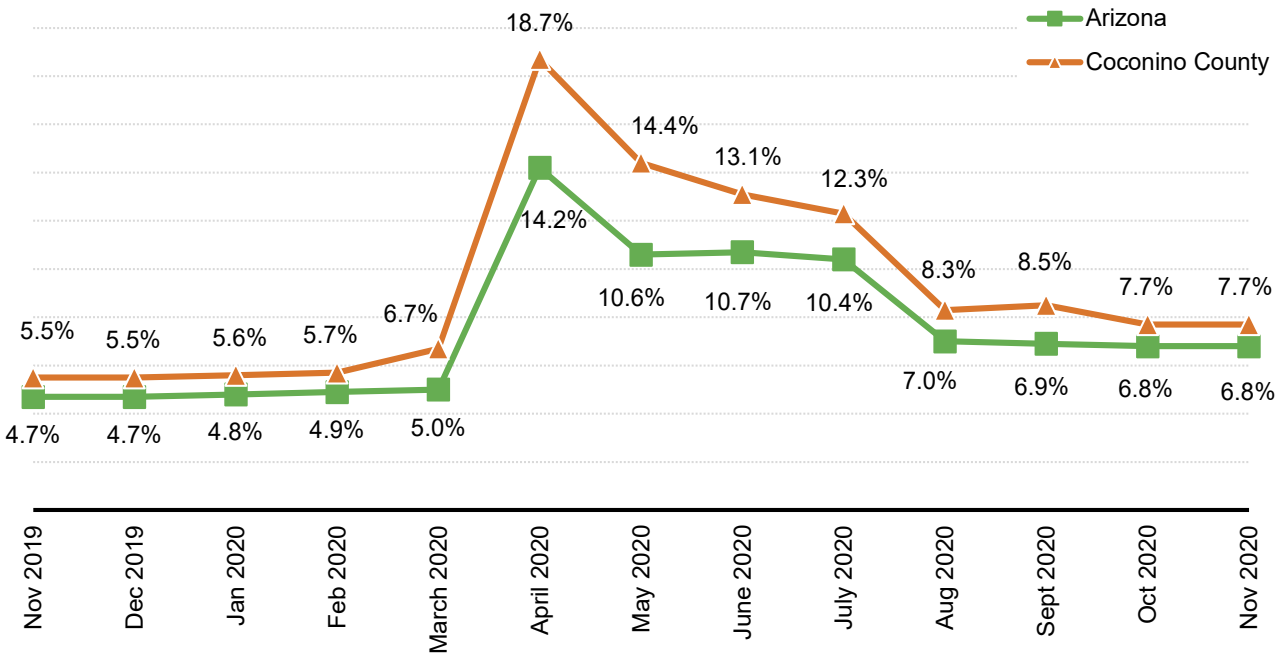
Figure 29. Average annual unemployment rates, 2010 to 2020



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

The effect of the pandemic on unemployment rates is highlighted in monthly rates shown in Figure 30. Unemployment rates in the county and across the state peaked in April 2020, remained at more than double the pre-pandemic rates through July 2020, and then decreased to about 8% in Coconino County by the fall of 2020. By November 2020, Coconino County's unemployment rate was only about 1 percentage point higher than the state's rate (Figure 30).

Figure 30. Monthly unemployment rates (seasonally adjusted), Nov 2019 to Nov 2020



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

Note: 'Seasonal adjustment' refers to a statistical technique that tries to remove the influence of predictable seasonal patterns on employment rates (such as harvest schedules or major holidays).

An additional metric of employment is the labor-force participation rate. This rate is the fraction of the population who are in the labor force, whether employed or unemployed. The American Community Survey estimates that the average labor-force participation rate for Arizona over the five years from 2015 to 2019 is 60%, and 64% in the Coconino Region. In other words, nearly two-thirds of the adult population in the Coconino Region are in the labor force (either working or looking for work) and one-third are not (which includes students, retirees, stay-at-home parents, and others). As with many economic indicators, the labor-force participation rates and unemployment rates vary across communities (Table 6). Labor-force participation rates are highest in Page (68%) and Fredonia (68%), while rates are lowest in the Hopi Tribe (50%) and Winslow (54%) communities. Hopi Tribe and Winslow also have the highest rates of unemployment in the region (9%). This suggests that part of the reason for low labor-force participation could be due to discouraged workers, that is, potential workers who have stopped looking for work (and are therefore not considered in the labor force) because they believe that there are no jobs available for them.[131] Additionally, due to many historical and legal reasons as well as differences in practical economic structures, employment rates in Native communities can vary greatly from state rates.[132]

Table 6. Unemployment and labor-force participation for the adult population (ages 16 and older), 2015-2019 ACS

Geography	Estimated working-age population (age 16 and older)	Unemployment rate	Labor-force participation rate	Percent of working-age population in the labor force and employed	Percent of working-age population in the labor force but unemployed	Percent of working-age population not in the labor force
Coconino Region	**108,183**	**7%**	**64%**	**59%**	**4%**	**36%**
Fredonia	1,207	3%	68%	66%	2%	32%
Grand Canyon Village-Tusayan-Valle	2,995	3%	64%	62%	2%	36%
Greater Flagstaff Area	78,123	7%	65%	61%	5%	35%
Havasupai Tribe	N/A	N/A	N/A	N/A	N/A	N/A
Hopi Tribe	6,909	9%	50%	46%	4%	50%
Page	6,136	7%	68%	64%	5%	32%
Williams-Parks	5,533	3%	64%	62%	2%	36%
Winslow	7,081	9%	54%	49%	5%	46%
Coconino County	115,514	8%	63%	58%	5%	37%
Arizona	5,600,921	6%	60%	56%	3%	40%
United States	259,662,880	5%	63%	60%	3%	37%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B23025

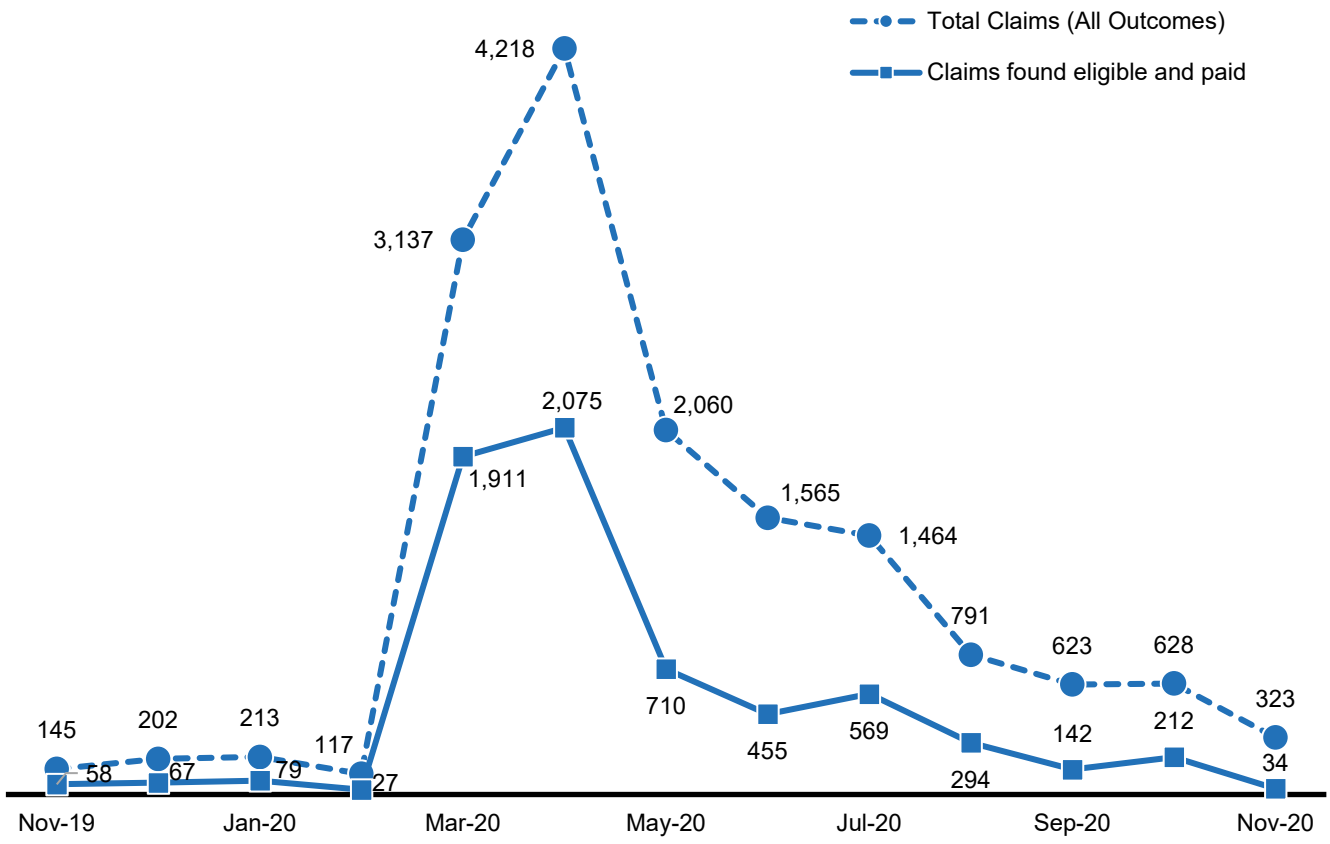
Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The "labor force participation rate" is the fraction of the population who are in the labor force, whether employed or unemployed. The "unemployment rate" is the fraction of the civilian labor force which are unemployed. The last three percentages in each row (employed, unemployed, and not in the labor force) should sum to 100%, but may not because of rounding. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

The COVID-19 pandemic shocked the labor market. Statewide, unemployment insurance claims peaked at 262,523 the week of May 16, 2020. This is over twice the number of claims at the peak of the Great Recession in 2009.[133] In March 2020, the Pandemic Unemployment Assistance (PUA) program temporarily expanded unemployment insurance eligibility to categories of workers who were not previously eligible for unemployment, including self-employed workers, freelancers, independent contractors and part-time workers. The Pandemic Emergency Unemployment Assistance (PEUC) program extended benefits for those who had already used the 26 weeks of benefits usually allowed in Arizona.[134] In addition to expanded eligibility, federal provisions granted unemployed workers nationwide supplemental funds during the pandemic - $600 additional per week through July 31, 2020, and $300 additional per week through September 5, 2021.[135]

The demand for these programs in the Coconino Region is highlighted in Figure 31. The number of unemployment claims jumped substantially, from a pre-pandemic low of 117 in February 2020, to a high of 4,218 in April 2020. Claims remained elevated above pre-pandemic levels through November 2020. Notably, even as claims surged during the pandemic, there is a consistent and wide gap between the number of claims filed and the number of claims found eligible and paid. Pre-pandemic, about 30% of claims were paid. In March and April 2020, a higher proportion of claims were found valid (61% and 49%, respectively) and paid, but by the fall, a higher proportion of claims were denied, with only 11% of claims paid in November 2020. This suggests there may be widespread economic challenges in families with lost incomes who requested but did not receive unemployment benefits.

In May 2021, the governor announced that supplemental unemployment funding would end early in Arizona, on July 10, 2021, and instead launched Arizona's Back to Work Program which offered financial incentives for returning to work ($2000 for full-time, $1000 for part-time for eligible workers) as well as scholarships for community colleges.[136,137]

Figure 31. Monthly unemployment claims in the Coconino Region, Nov 2019 to Nov 2020



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

For parents of young children, many employment decisions may be influenced by the availability and affordability of child care. More than two-thirds (68%) of children birth to 5 in the Coconino Region,

more than 5,600 children in total, live in households where all present parents are in the workforce (that is, are employed, or actively seeking paying work) (Table 7). This includes children in households with a single parent who is in the labor force (25%) and two-parent households where both parents work (42%). In other words, the majority of Coconino Region households with young children likely require some form of child care, and the percent of young children living in households with all parents in the labor force is higher in the region than in Arizona overall (62%). This need appears to be especially high in several communities, including both Grand Canyon Village-Tusayan-Valle (81%) and Winslow (80%), where more than four out of every five young children live in households where all parents are in the workforce. In both Williams-Parks and Hopi Tribe, nearly half of all young children live with a single parent who is in the workforce (46% and 51%, respectively).

Despite this high need, the Center for American Progress estimates that 48% of Arizonans live in a "child care desert," defined as an area where there are at least three times as many children as there are child care slots, meaning that the absence of accessible, affordable child care may be a barrier to employment.[138] In Arizona, the majority of rural families (67%), low-income families (59%) and Hispanic/Latino families (55%) live in a child care desert, making them disproportionately impacted by barriers to child care and therefore barriers to employment.[139] This is slightly worse than in the U.S. as a whole, where 60% of rural families and 55% of low-income families live in child care deserts.

Given the pre-pandemic need for child care and the already limited availability of child care in the state, the closure of many child care centers and schools due to the COVID-19 pandemic had substantial effects on the ability of parents to work. According to the U.S. Census Bureau's Household Pulse survey, during the pandemic, about one in five non-working adults in households with children reported that their main reason for not working was because of children not in school or child care. In Arizona, the share of non-working adults with children who reported that lack of care was the primary reason for not working ranged from 8 to 40% depending on the survey week. For the majority (16 of 27) of weeks of the Household Pulse, caring for children not in school or daycare was the number one reason given why non-retired adults were not working in Arizona. This suggests that access to child care is essential for parents and other caregivers in Arizona to access employment opportunities.

During the pandemic (through September 2021), DES offered the Essential Workers' Scholarship Program which offered essential workers child care scholarships that could be used for children through age 12.[140] Arizona's Back To Work Program, announced in May 2021, can provide eligible parents returning to work between June and September 2021 with funding assistance for three months of child care. Further discussion of child care demand and supply can be found in the *Early Care and Education Enrollment* section of this report.

Table 7. Parents of children ages birth to 5 who are or are not in the labor force, 2015-2019 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
Coconino Region	**8,276**	**42%**	**23%**	**1%**	**25%**	**8%**
Fredonia	38	54%	24%	19%	2%	0%
Grand Canyon Village-Tusayan-Valle	230	37%	19%	0%	45%	0%
Greater Flagstaff Area	5,379	50%	28%	1%	17%	3%
Havasupai Tribe	0	N/A	N/A	N/A	N/A	N/A
Hopi Tribe	933	8%	12%	1%	51%	28%
Page	489	45%	7%	0%	22%	26%
Williams-Parks	558	25%	25%	2%	46%	3%
Winslow	624	40%	7%	0%	39%	13%
Coconino County	8,802	40%	22%	1%	26%	11%
Arizona	494,590	32%	28%	1%	29%	9%
United States	22,727,705	39%	25%	1%	27%	7%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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 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 cohabitating but unmarried parents are not counted as living with two parents (these children are counted in the 'one parent' category). Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

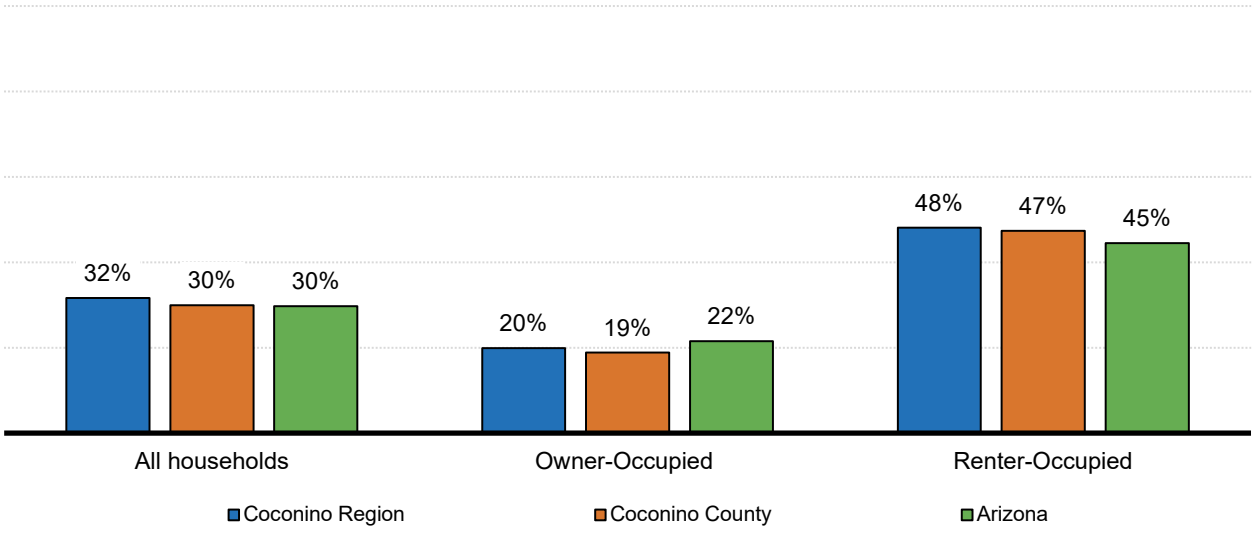
Housing Instability

Examining indicators related to housing quality, costs, and availability can reveal additional factors affecting the health and well-being of young children and their families in a region. Housing challenges such as issues paying rent or mortgage, overcrowded living conditions, unstable housing arrangements, and homelessness can have harmful effects on the physical, social-emotional, and cognitive development of young children.[141]

The most recent data available on housing affordability predates the COVID-19 pandemic. Traditionally, housing has been deemed affordable for families if it costs less than 30% of annual household income.[142] According to ACS five-year estimates, of the estimated 44,316 households in the Coconino Region, nearly a third (32%) are housing-cost burdened, i.e., spending more than 30% of their

household income on housing (Figure 32). Those renting are even more likely to be housing-cost burdened, with nearly half (48%) of renter-occupied housing units in the region costing more than 30% of household income compared to only 20% of owner-occupied units. Looking across the region, housing stock in the Fredonia and the Hopi Tribe communities were relatively more affordable, with only 13% and 11% of households paying more than 30% of their income, respectively (Table 8). Conversely, about half of all of renters in the Greater Flagstaff Area (53%) and Page (48%) were housing-cost burdened prior to the pandemic. This amount of income spent on housing leaves less available for food, utilities, early education programs and other supports that help young children thrive. Additionally, high housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health and homelessness.[143,144]

Figure 32. Percent of households with housing costs of 30 percent or more of household income by home ownership status, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B25106

Table 8. Housing-cost burden for all households, and for owners and renters separately, 2015-2019 ACS

Geography	Estimated number of households	Housing costs 30 percent or more of household income	Estimated number of owner-occupied housing units	Housing costs 30 percent or more of household income	Estimated number of renter-occupied housing units	Housing costs 30 percent or more of household income
Coconino Region	**44,316**	**32%**	**25,806**	**20%**	**18,510**	**48%**
Fredonia	444	13%	300	15%	144	9%
Grand Canyon Village-Tusayan-Valle	1,409	22%	989	21%	419	24%
Greater Flagstaff Area	31,829	35%	17,875	21%	13,954	53%
Havasupai Tribe	N/A	N/A	N/A	N/A	N/A	N/A
Hopi Tribe	2,198	11%	1,547	14%	651	5%
Page	2,653	30%	1,619	18%	1,035	48%
Williams-Parks	2,952	26%	1,948	21%	1,004	36%
Winslow	2,736	28%	1,489	16%	1,247	42%
Coconino County	47,447	30%	28,962	19%	18,485	47%
Arizona	2,571,268	30%	1,656,756	22%	914,512	45%
United States	120,756,048	31%	77,274,381	22%	43,481,667	46%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B25106

Note: An "occupied housing unit" is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied as separate living quarters. Buildings such as dormitories, bunkhouses and motel rooms are not counted as housing units. The number of households is equal to the number of occupied housing units. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

While pre-pandemic housing cost burdens were already high enough to cause concern in some counties in Arizona, the economic disruptions of the COVID-19 pandemic, including losses of household employment income reported by approximately half of adults in the state, led to housing instability for some families as they struggled to make housing payments. Just before the pandemic, in October 2019, the Coconino Region had 234 students enrolled in public and charter schools who were experiencing homelessness (Table 9). Most of these students were enrolled in the Flagstaff Unified District and the Williams Unified District, where 14% of the student body were experiencing homelessness. Counts of students experiencing homelessness include children living in shelters, cars, transitional housing, campground, motels and trailer parks, plus children who are living ‘doubled up’ with another family due to loss of housing or economic hardship. Although data for 2020 and 2021 are not yet available, the economic upheaval brought on by the pandemic could raise that number.

In an effort to mitigate housing disruptions, there have been multiple federal efforts to prevent eviction or foreclosure and ease housing instability among households in the U.S. throughout the pandemic. Eviction moratoriums and mortgage forbearance programs for federally-backed mortgages aimed to prevent families from losing their homes during the pandemic, and the Emergency Rental Assistance Program aimed to distribute funds for rental and utility payments to households at risk of eviction.[145] The American Rescue Plan provided additional assistance for both homeowners and renters with the aim of preventing eviction and foreclosure.[146] However, local housing agencies have struggled to implement many of these programs, and shifting funding requirements or stringent reimbursement policies have hampered efforts to get funds to households who need them.[147] The end of the federal eviction moratorium issued by the Centers for Disease Control and Prevention means that effective administration of housing aid is all the more important for protecting families from eviction and foreclosure.[148]

Table 9. Students experiencing homelessness (McKinney-Vento Act definition) enrolled in public and charter schools, 2017-18 to 2019-20

Geography	Number of homeless students			Percent of students who were homeless		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
Coconino Region Schools	**387**	**323**	**234**	**2%**	**2%**	**1%**
Coconino County Accommodation School District	DS	DS	DS	DS	DS	DS
Flagstaff Unified District	192	144	95	2%	2%	1%
Williams Unified District	110	125	94	16%	19%	14%
Grand Canyon Unified District	DS	DS	DS	DS	DS	DS
Fredonia-Moccasin Unified District	DS	DS	DS	DS	DS	DS
Page Unified District	65	40	27	2%	1%	1%
Maine Consolidated School District	DS	DS	DS	DS	DS	DS
Flagstaff Junior Academy	DS	DS	DS	DS	DS	DS
Winslow Unified District	DS	DS	DS	DS	DS	DS
Coconino County Schools	380	322	235	2%	2%	1%
Arizona Schools	15,923	12,931	11,538	**1%**	**1%**	**1%**

Source: Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: The counts of students experiencing homelessness in charter schools in the Coconino Region were all below the ADE suppression thresholds, so while these counts are included in the Coconino Region Schools total, rows for each school are not shown in this table. The McKinney-Vento Act provides funding and supports to ensure that homeless children and youth have access to education. Under the McKinney-Vento Act, children are defined as experiencing homelessness 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

Information Access Through Computers and Internet

One increasingly critical need for modern homes is a reliable means of internet access. Families often rely on communication and information technologies to access information, connect socially, pursue an education and apply for employment opportunities. During the pandemic, a reliable internet connection was essential for a successful transition to remote work and school for many. Parents are also more likely to turn to online resources, rather than in-person resources, for information about obtaining health care and sensitive parenting topics including bonding, separation anxiety and managing parenting challenges.[149] The term "digital divide" refers to disparities in communication and information technologies,[150] and the lack of sustained access to information and communication technologies in low-income communities is associated with economic and social inequality.[151] Low-income households may

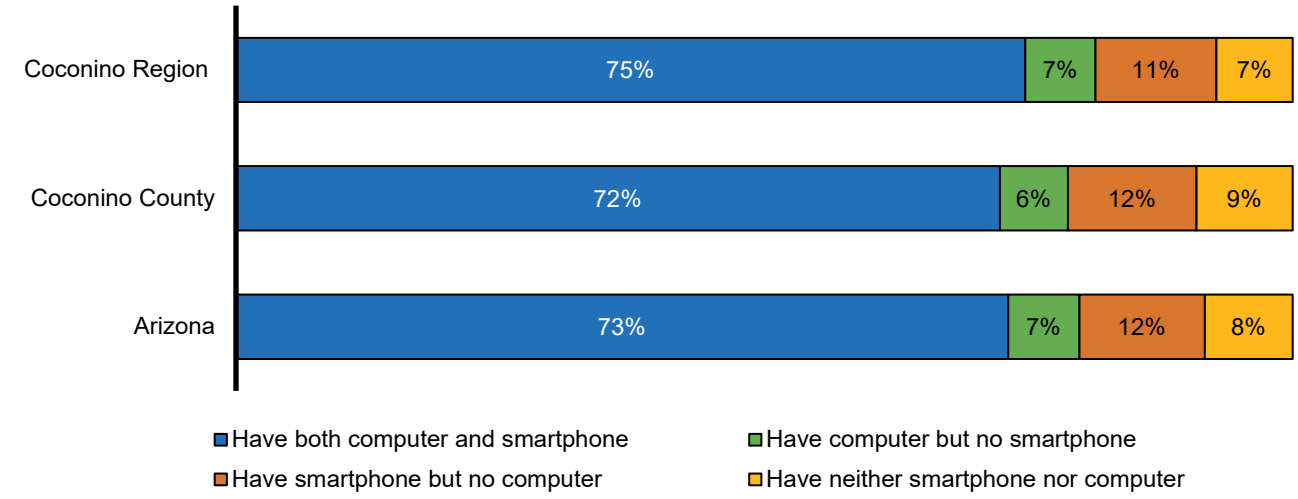
experience regular disruptions to this increasingly important service when they can't pay bills, repair or update equipment or access public locations that may offer connectivity (e.g., computers at local libraries).[152] Additionally, American households are increasingly reliant on smartphones as their sole source of internet access. Particularly for individuals who are younger, lower-income and non-white, broadband service at home is less common and smartphone-only internet use is more common.[153]

According to the ACS, three out of every four households (75%) in the Coconino Region have both a computer and a smartphone in their home. An estimated 7% have a computer but no smartphone, 11% have a smartphone but no computer, and the remaining 7% have neither (Figure 33). While these rates are similar to those seen across the state, certain communities have a much different landscape of access. Over a third of households (35%) in Hopi Tribe lacks a smartphone or a computer, suggesting they have no access to the internet while at home (Figure 34). This is also true for 11% of households in Winslow and 10% in Williams-Parks. Thus, despite trends toward online communications and social media announcements, it is important for state and local agencies to recognize that there are disparities in internet access and ensure that families can be reached and can obtain information about services through other means, including telephone, radio or mail.

Furthermore, in many rural areas, even those families with internet access and a computer may find connectivity frustratingly slow or inconsistent.[154] Households in rural areas typically experience more limited coverage from mobile networks and slower-speed internet services, as well as limited internet provider options which can result in higher monthly costs.[155,156,157,158] This is clearly seen in Hopi Tribe, as only about one in four people (26%) have cellular internet access at home compared to 79% in the region, and nearly 1 in 10 residents (9.4%) rely on dial-up internet connections, which tend to be far slower and less reliable than broadband internet, compared to 0.4% in the region.[159] This gap in the ability to connect will likely continue to be an issue in rural areas and Native communities unless concerted efforts are made to improve access. Data on connectivity and internet access are not available from the ACS for the Havasupai Tribe. However, in late 2019, the Havasupai Tribe obtained a permanent broadband license from the Federal Communications Commission, which has greatly advanced efforts to provide high speed internet connections to families in the community.[160]

There are also rural areas where local communities have been able to intervene to increase connectivity. Key informants in the region noted that the town of Tusayan provides internet access to all residents as well as a computer lab that any resident can use to access the internet, even if they lack access to a computer at home. These kinds of solutions can help bridge the digital divide in rural communities.

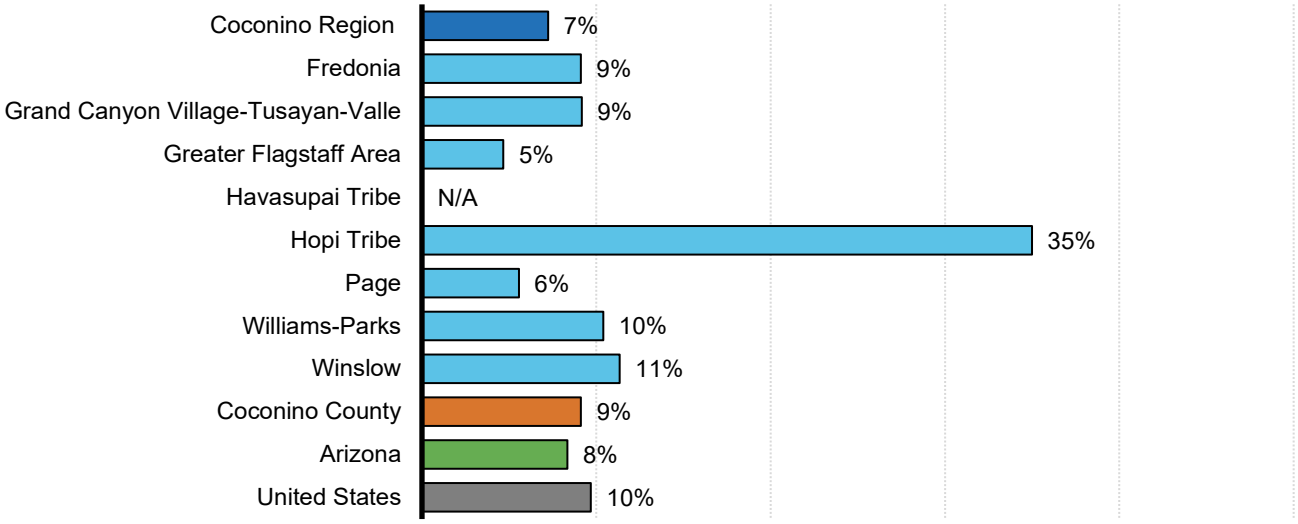
Figure 33. Households with and without computers and smartphones, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B28010

Note: In this table, "computer" includes both desktops and laptops; "smartphone" includes tablets and other portable wireless devices. The four percentages in each row should sum to 100%, but may not because of rounding.

Figure 34. Percent of household with neither a smartphone nor a computer, 2015-2019 ACS



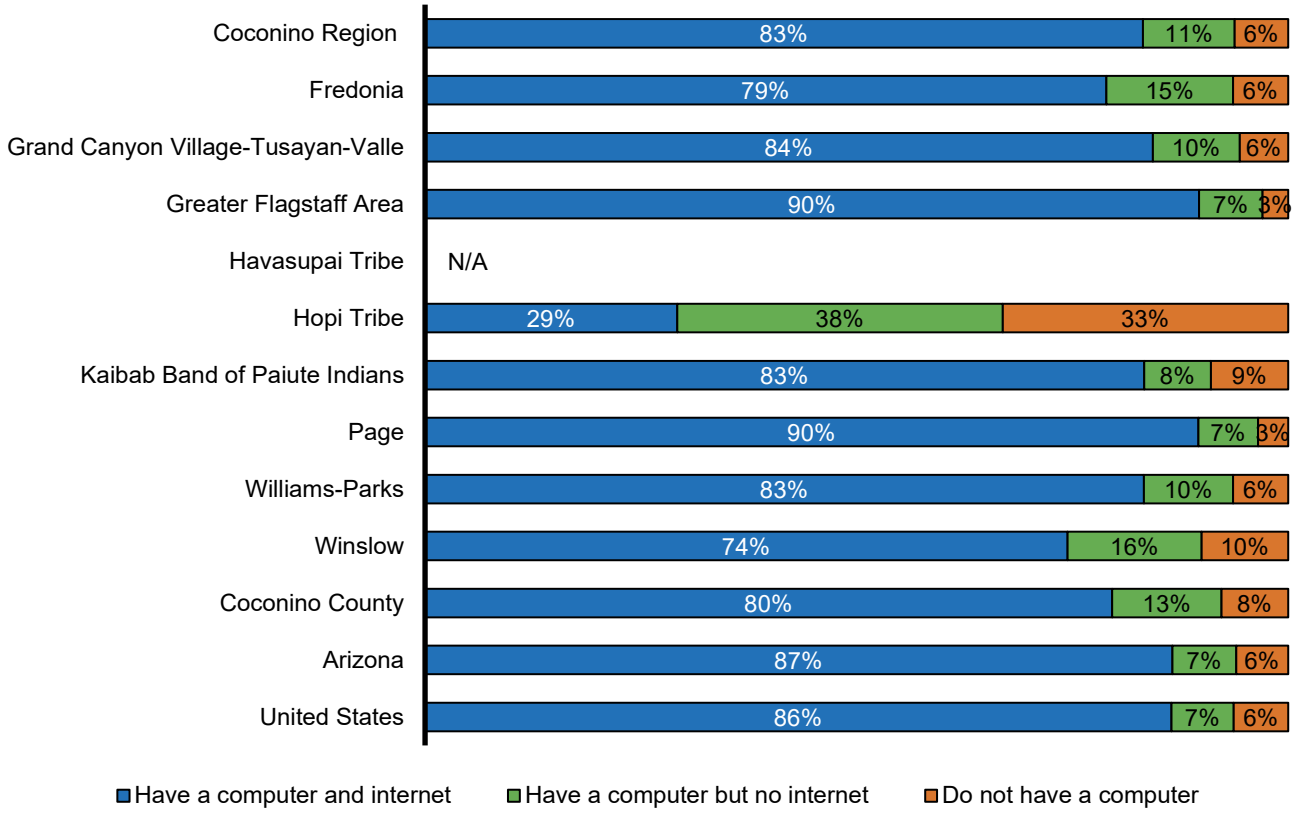
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B28010

Note: In this table, "computer" includes both desktops and laptops; "smartphone" includes tablets and other portable wireless devices. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Looking at individuals rather than households, most Coconino Region residents have access to a computer connected to the internet (83%) (Figure 40). About 11% have a computer without internet and about 6% have no computer. As with household connectivity, individuals in Hopi Tribe (29%) and

Winslow (76%) have much lower rates of computer and internet access than rest of the region (83%), state (86%) and nation (86%) (Figure 35).

Figure 35. Persons of all ages in households with and without computers and internet connectivity, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B28005

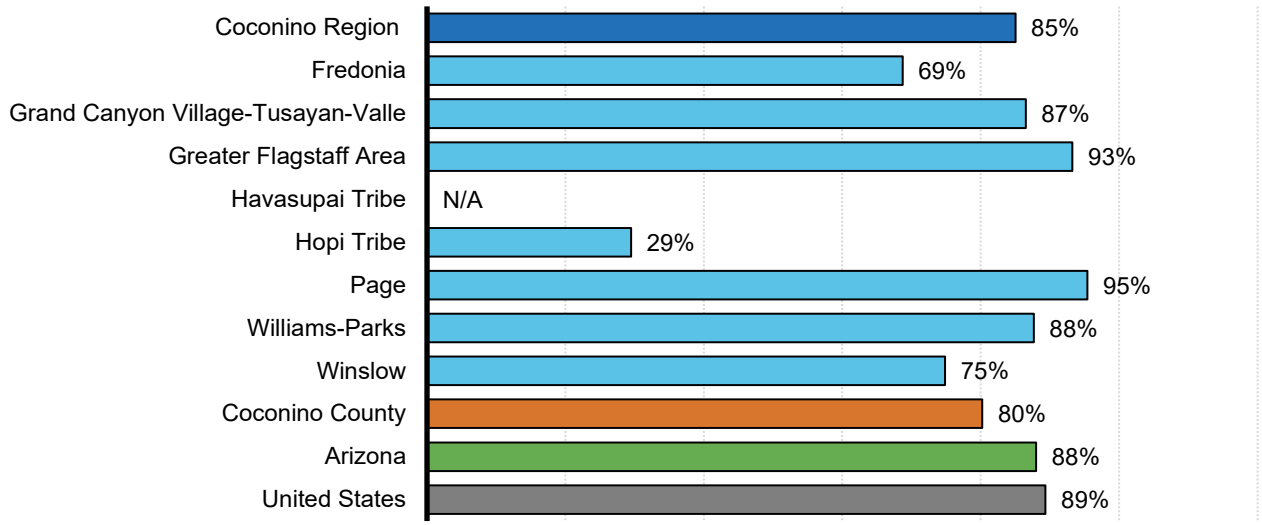
Note: The three percentages in each row should sum to 100%, but may not because of rounding. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Computers and internet access are increasingly important for children in completing school assignments and projects, particularly during the later years of primary education and beyond.[161] Statewide, 88% of children 0-17 have access to a computer and internet at home; this is true for 85% of children in the Coconino Region and only 80% in the county (Figure 36). Rates of access were highest in Page (95%), the Greater Flagstaff Area (93%), Williams-Parks (88%) and Grand Canyon Village-Tusayan-Valle (87%), and lowest in the Hopi Tribe (29%) and Fredonia (69%).

As schools closed and transitioned to remote learning during the COVID-19 pandemic, access to a computing device and the internet became increasingly important for children to engage in educational activities and to connect socially with teachers or peers. Schools and communities applied multiple strategies to close the digital divide, including provision of mobile hotspot devices and laptops by schools and libraries.

One silver-lining to the pandemic is the allocation of CARES Act and American Rescue Plan dollars for expanding rural broadband access, which may help shrink the digital divide.[162] Still, access to internet and computing devices was not evenly distributed across all communities—rural, low-income, and Native, Black and Hispanic students disproportionately faced access issues.[163] Even as schools return to in-person learning, investments in closing the digital divide remain essential to ensuring equity in outcomes for all students.

Figure 36. Percent of children ages birth to 17 in household with a computer and internet connectivity, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B28005

Note: Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

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

EDUCATIONAL INDICATORS

EDUCATIONAL INDICATORS

Why it Matters

A community's K-12 education system can support positive outcomes for children and their families, as well as the economic well-being of the entire community. Individuals with higher levels of education are less likely to live in poverty and tend to live longer and healthier lives.[164] Graduating from high school, in particular, is associated with better health and financial stability, lower risk for incarceration and better socio-emotional outcomes compared to dropping out of high school.[165,166] Parents with more education are also more likely to have children with positive outcomes related to school readiness and educational achievement, with children of parents who have at least a high school diploma or GED scoring higher in reading, math and science in their first four years of school. [167,168] The educational achievement of adults within a region speaks to the assets and challenges of a community's workforce, including those that are working with or on behalf of young children and their families.

High-quality early learning experiences lay a foundation for children's learning in kindergarten, early elementary school and beyond.[169] Participation in high-quality early education has been linked to better school performance in elementary and high school.[170] Reading skills in third grade, specifically, are an important predictor of later academic learning and success measured in standardized tests. Students who are at or above grade-level reading in third grade are more likely to graduate high school and attend college.[171] Given these intergenerational impacts of educational attainment and the cascading effect of early education on later academic achievement and success in adulthood, it is critical to provide substantial support for early education and promote policies and programs that encourage the persistence and success of Arizona's children.

What the Data Tell Us

School Attendance and Absenteeism

In the 2019-20 school year, a reported 5,509 children were enrolled in preschool through third grade in public and charter schools in the Coconino Region, including 314 preschool students (Table 19). Grades kindergarten through third grade averaged about 1,300 students per grade in the region. More than 85% of students attend public schools, with the rest enrolled in charter schools. Additionally, 762 students in all grades attend Bureau of Indian Education (BIE) schools located in the region (Figure 38). These include seven schools in the Hopi Tribe and one school in the Havasupai Tribe. Figure 37 shows a map of schools and school districts in the Coconino Region.

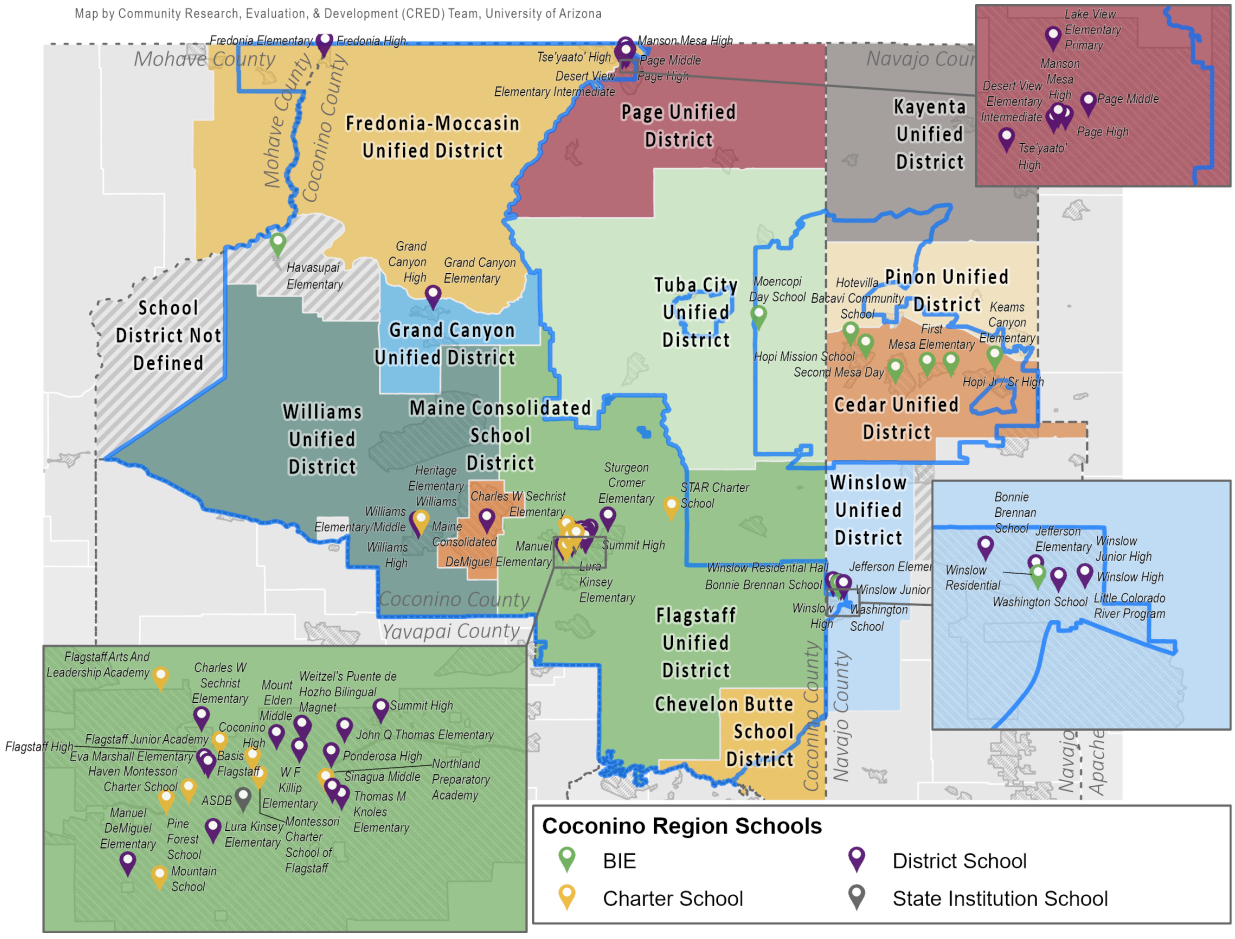
Table 10. Preschool to 3rd grade students enrolled in public and charter schools, 2019-20

Geography	Preschool	Kindergarten	1st Grade	2nd Grade	3rd Grade
Coconino Region Schools	**314**	**1,268**	**1,270**	**1,277**	**1,380**
Flagstaff Unified District	152	628	636	674	706
Williams Unified District	30	50	43	38	50
Grand Canyon Unified District	DS	25	24	21	21
Fredonia-Moccasin Unified District	DS	22	15	16	17
Page Unified District	65	183	173	182	190
Maine Consolidated School District	12	17	15	14	14
Winslow Unified District	29	141	134	125	146
Pine Forest Education Association, Inc.	N/A	23	38	29	36
Mountain School, Inc.	N/A	33	33	32	34
Flagstaff Montessori, L.L.C.	N/A	19	29	19	27
Flagstaff Junior Academy	N/A	23	25	22	32
Painted Desert Demonstration Projects, Inc.	N/A	12	DS	DS	DS
PEAK School Inc., The	N/A	DS	DS	DS	DS
Heritage Elementary School	N/A	DS	DS	DS	DS
Haven Montessori Children's House, Inc.	N/A	18	16	DS	DS
BASIS Charter Schools, Inc.	N/A	59	66	66	66
Coconino County Schools	338	1,211	1,231	1,257	1,304
Arizona Schools	21,867	81,606	82,386	82,305	83,003

Source: Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the Uarizona CRED Team

Note: The Coconino Region Schools total also includes students enrolled through the North Central Regional Cooperative of the Arizona State Schools for the Deaf and Blind. Schools with 'N/A' in the Preschool column did not report any enrolled preschoolers to ADE.

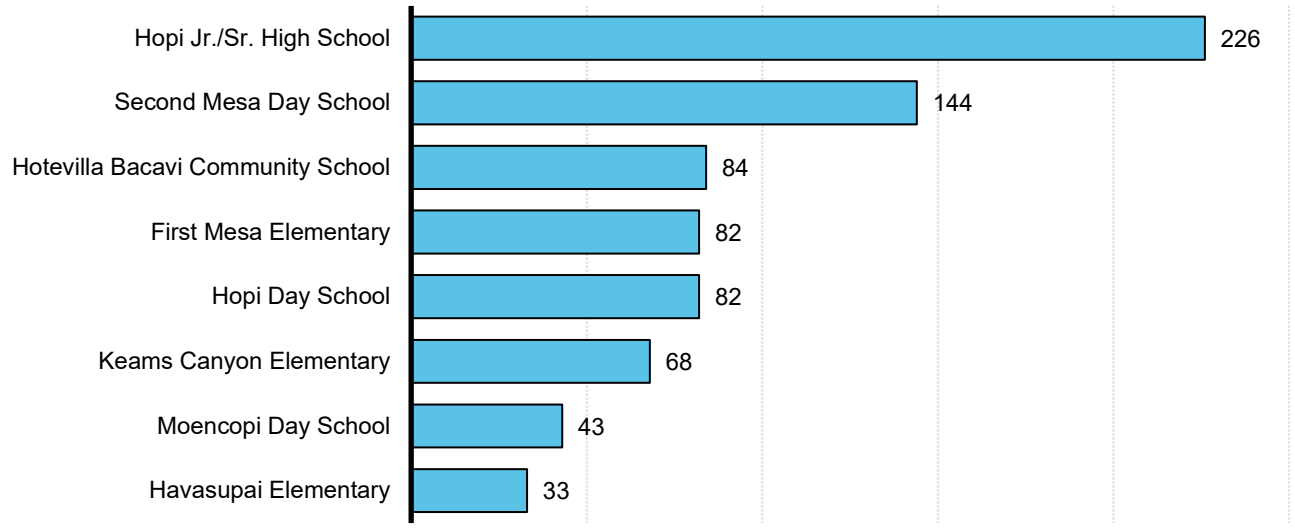
Figure 37. Schools and School Districts in the Coconino Region



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

Note: This map only displays public and charter schools that report data to the Arizona Department of Education or BIE schools in the Hopi Tribe and Havasupai Tribe.

Figure 38. Enrollment in Hopi Tribe and Havasupai Tribe BIE Schools, 2018-19

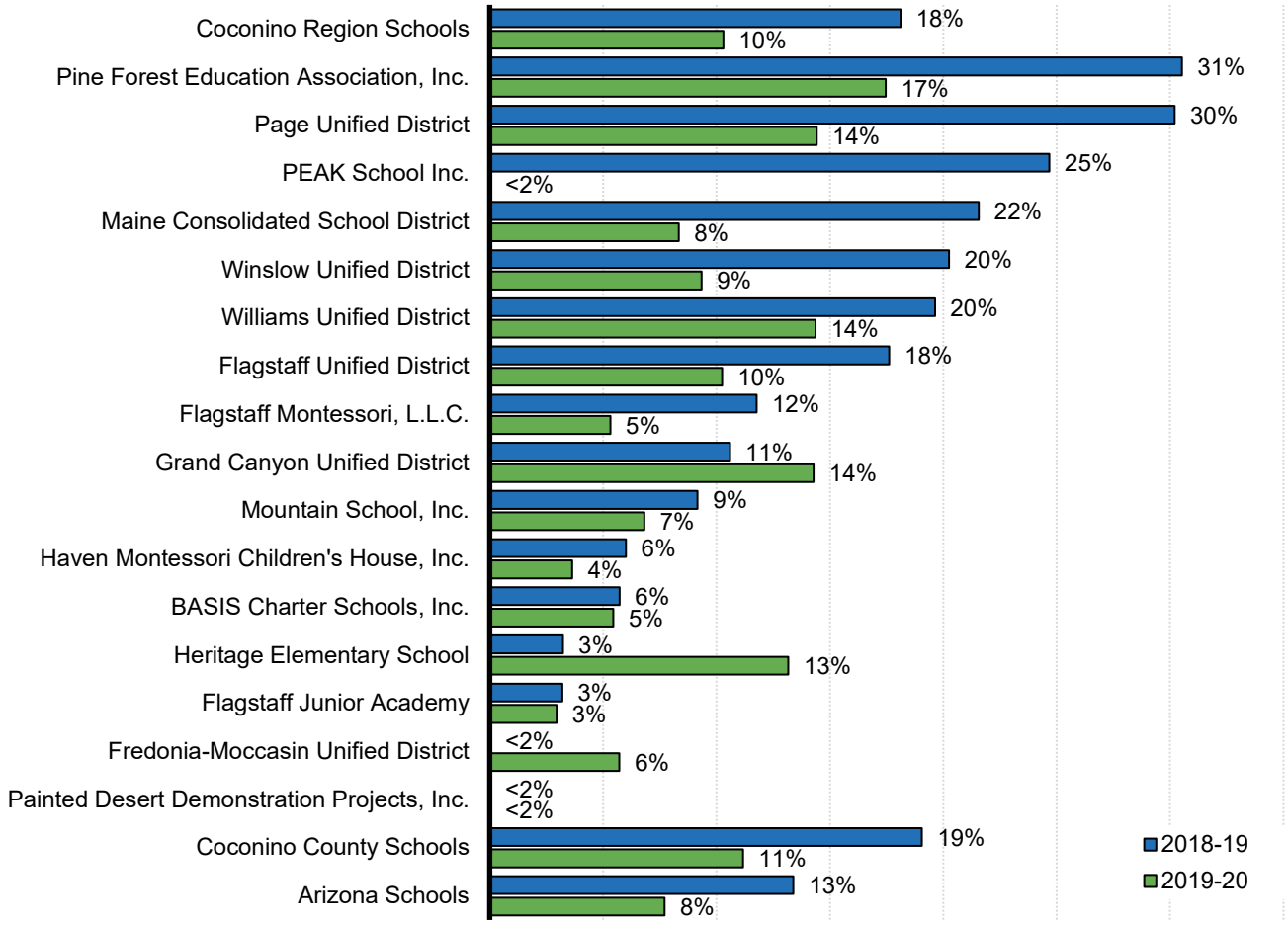


Source: Bureau of Indian Education (2021). Annual School Report Cards. Retrieved from https://www.bie.edu/topic-page/performance-data-statistics

School attendance and academic engagement early in life can significantly impact the direction of a child's schooling. Chronic absenteeism is defined as missing more than 10% of the school days within a school year (including for reasons of chronic illness), and it affects even the youngest children, with more than 10% of U.S. kindergarteners and first graders considered chronically absent.[172] Chronic absences in children enrolled in grades K-3 in the Coconino Region in the 2018-19 school year (18%) were quite a bit higher than those seen across the state (13%), with substantial variability across school districts (Figure 39). In the 2019-20 school year, chronic absences dropped almost everywhere – all districts, the region overall, and the state overall, with the only exceptions in Grand Canyon Unified District (11% in 2018-19; 14% in 2019-20) and Heritage Elementary School (3% in 2018-19; 13% in 2019-20). The drops in chronic absenteeism are likely driven by changes due to the pandemic including changes in how attendance was tracked by schools in the spring of 2020.

Looking to the 2018-19 year as a the last "normal" school year, there were several districts and charter schools where at least one in five early elementary students were chronically absent (Figure 39). These districts include: Page Unified District (30%), Maine Consolidated School District (22%), Williams Unified District (20%), Winslow Unified District (20%), the PEAK School (25%), and Pine Forest Charter School, operated by Pine Forest Education Association (31%). Poor school attendance can cause children to fall behind academically, leading to lower proficiency in reading and math and increased risk of not being promoted to the next grade.[173] Chronic absenteeism also negatively impacts the development of key social-emotional skills, including self-management, self-efficacy and social awareness.[174] Consistent school attendance is particularly important for children from economically disadvantaged backgrounds, the group of children most at risk for chronic absenteeism.[175,176]

Figure 39. Chronic absenteeism rates, 2018-19 to 2019-20



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

Note: Students are considered chronically absent if they miss more than 10 percent of the school days in a school year. This figure includes children who are absent due to chronic illness. Please note that school closures and transitions to distance learning substantially affected how attendance was tracked by schools in the spring of 2020.

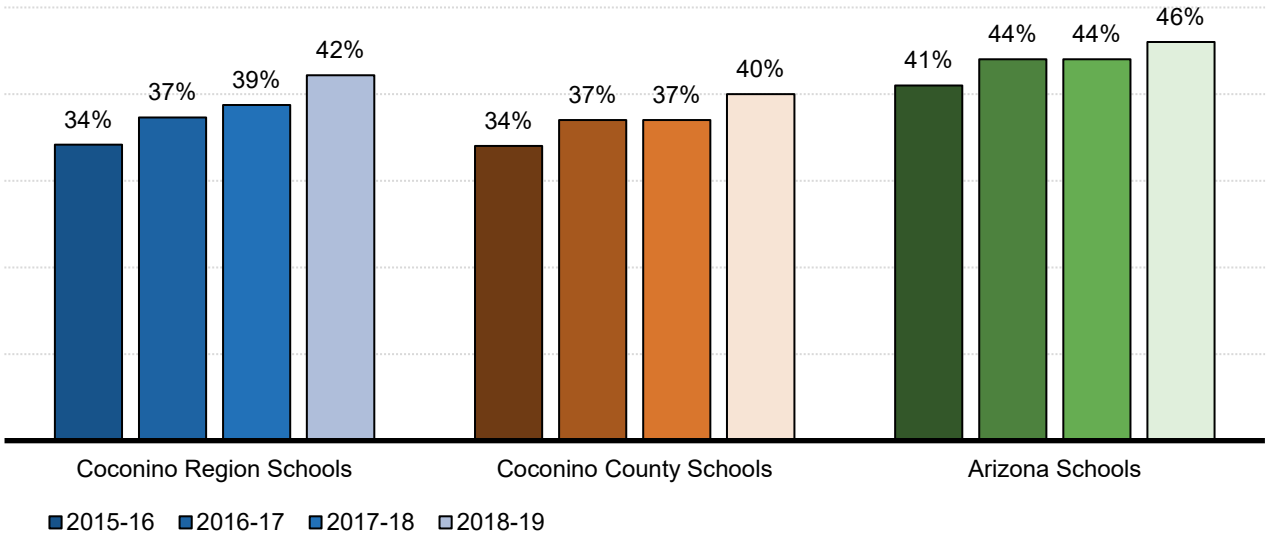
Achievement on Standardized Testing

A child's third grade reading skills have been identified as a critical indicator of future academic success.[177] Students who are at or above grade level reading in third grade are more likely to go on to graduate high school and attend college.[178] The link between poor reading skills and risk of dropping out of high school is even stronger for children living in poverty. More than a quarter (26%) of children who were living in poverty and not reading proficiently in third grade did not finish high school. This is more than six times the high-school dropout rate of proficient readers.[179]

As of 2019, the statewide assessment tool for English language arts (ELA), including reading and writing, was Arizona's Statewide Achievement Assessment for English Language Arts and Math

(AzM2, formerly called AzMERIT).[xvii,180,181] In March 2020, Arizona cancelled statewide AzM2 testing and other statewide assessments for the 2019-20 school year.[182] Thus, the most recent data available for this report are from the 2018-19 school year, when the AzMERIT assessment was administered. In the 2018-19 school year, only 42% percent of Coconino Region 3rd grade students achieved passing scores on the third grade ELA assessment, which was lower than across Arizona as a whole (46%) (Figure 40). However, this was an improvement over previous years in the region, increasing from 34% achieving passing scores on the ELA assessment in the 2015-16 school year. Variation also was present across school districts and charter schools in the region, with multiple charter schools and Maine Consolidated School District (55%) having the majority of their third graders passing the ELA assessment (Figure 41). At several charter schools and in the Fredonia-Moccasin Unified District, fewer a quarter of 3rd graders passed the ELA assessment.

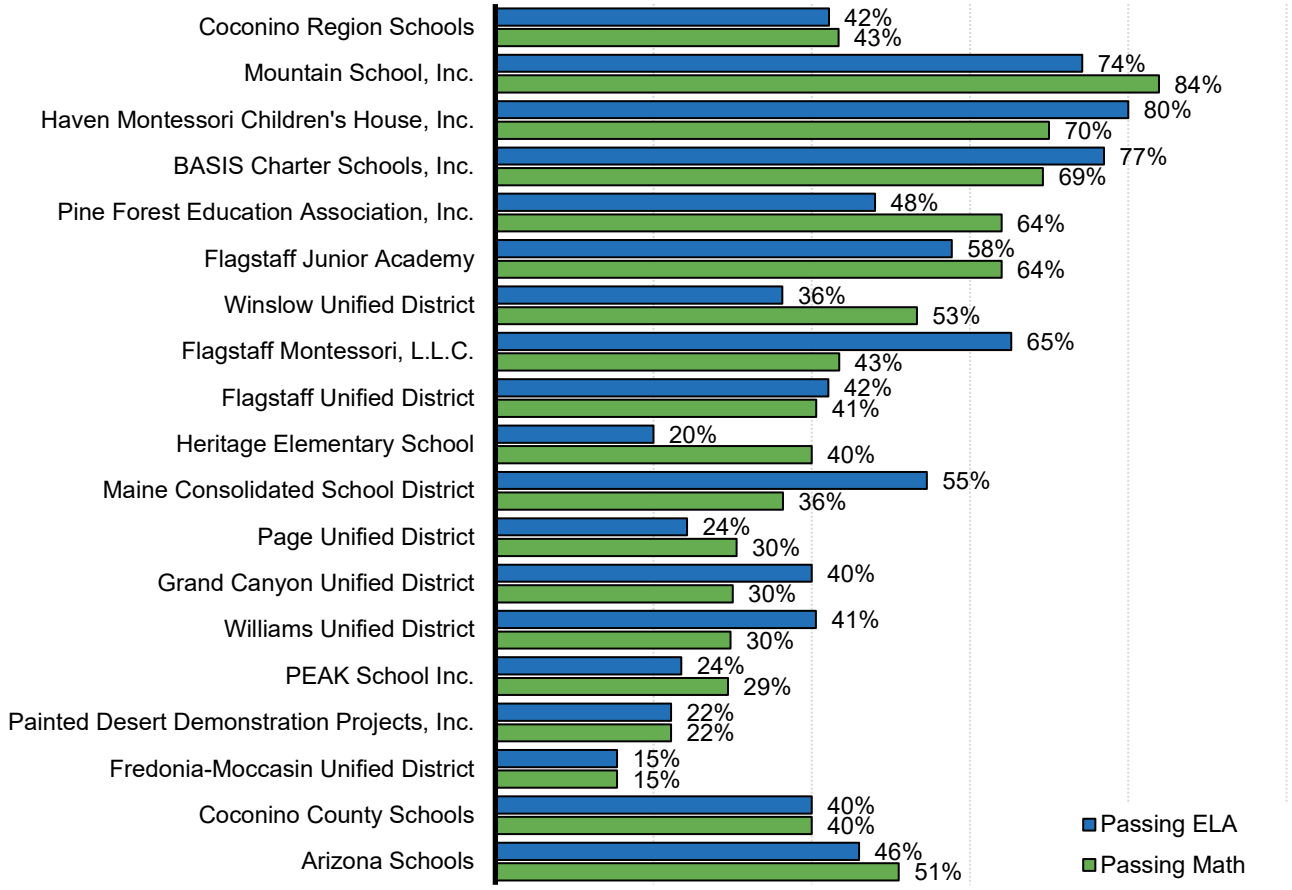
Figure 40. Trends in passing rates for AzMERIT 3rd Grade English Language Arts, 2015-16 to 2018-19



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

[xvii] *AzMERIT was renamed to AzM2 during the 2019-2020 school year. In 2022, AzM2 will be replaced by AASA (Arizona's Academic Standards Assessment).*

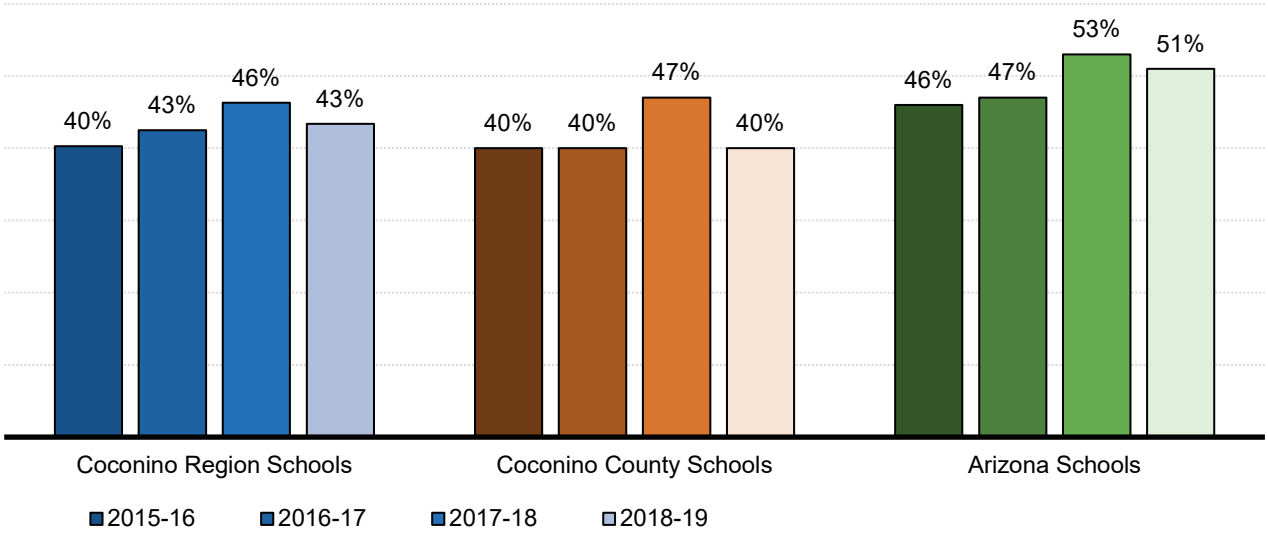
Figure 41. Passing rates for 3rd grade AzMERIT Assessments, 2018-19



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

Performance on the math test was slightly better than ELA performance, with 43% of Coconino Region 3rd grade students achieving passing scores in the 2018-19 school year, but this was still lower than the passing rate across the state (51%) (Figure 42). Unlike the trajectory of improvements seen for ELA passing rates, the passing rates for math peaked in 2017-18 at 46% then declined slightly in 2018-19. Again, variation in passing rates was present across districts and charter schools in the region, although in most districts more students passed math than ELA (Figure 41). In multiple charter schools as well as Winslow Unified District (53%) more than half of 3rd graders passed the math assessment. Only one charter school and one district had fewer than one in four students pass the math assessment: STAR School (22%), operated by Painted Desert Demonstration Projects, and Fredonia-Moccasin Unified District (15%) (Figure 41).

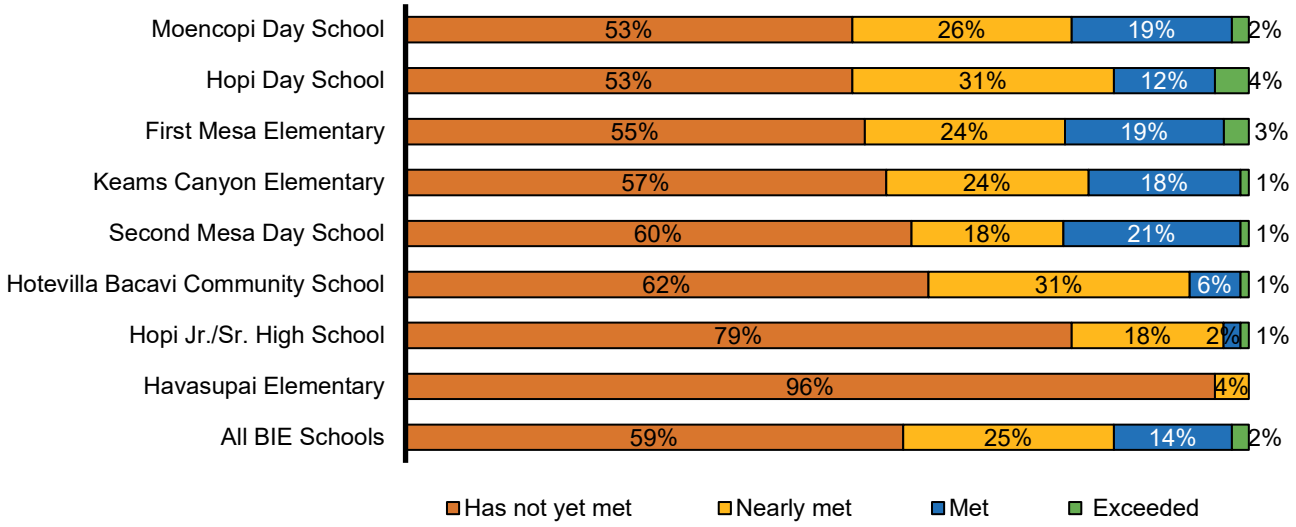
Figure 42. Trends in passing rates for AzMERIT 3rd Grade Math, 2015-16 to 2018-19



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

Assessment data were also available for BIE schools in the Coconino Region that serve students from the Hopi Tribe and Havasupai Tribe. These assessment results are for all students enrolled in these schools, not only third grade students. In 2018-19, compared to all BIE schools nationwide, a higher percentage of students met or exceeded the academic standards for the English/Language Arts assessment at four schools in the Hopi Tribe: Second Mesa Day school (22%), First Mesa Elementary (22%), Moencopi Day School (21%) and Keams Canyon Elementary (19%) (Figure 43). However, more than half of all students in Hopi Tribe BIE schools and BIE schools nationwide did not meet the standard. At Havasupai Elementary School, no students met the standard for English/Language Arts.

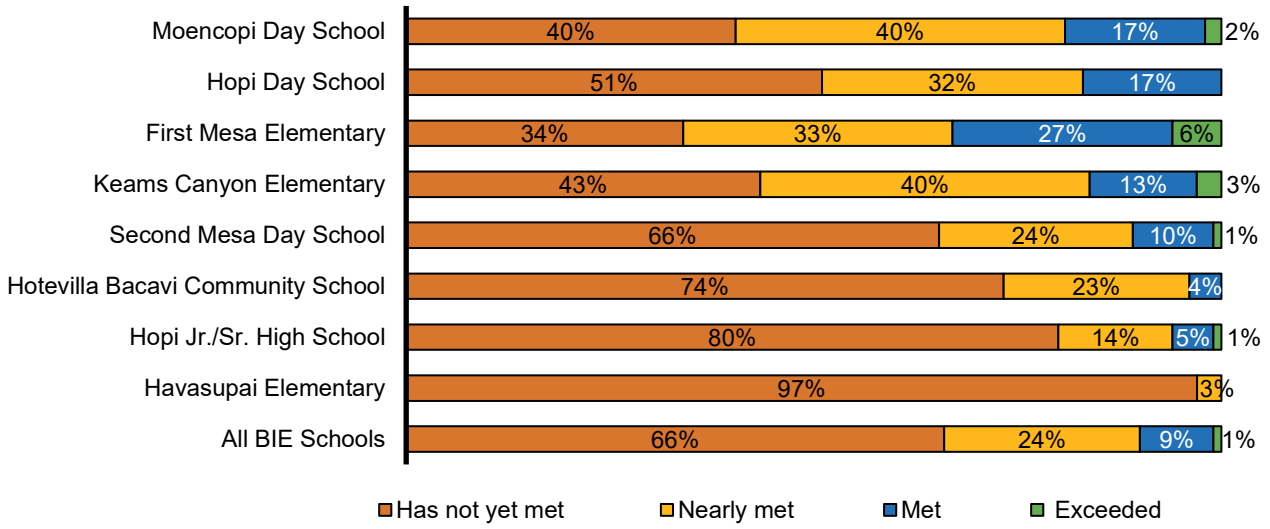
Figure 43. English/Language Arts assessment results for Hopi Tribe and Havasupai Tribe BIE Schools, 2018-19



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

At most schools, a lower percentage of students met or exceeded the standards for the Math assessment than English/Language Arts. One exception was First Mesa Elementary, where nearly a third of students (33%) met or exceeded the standards for math (Figure 44). Similar to English/Language Arts results, five Hopi BIE schools had students meeting or exceeding standards at higher rates than all BIE schools nationwide: First Mesa Elementary (33%), Moencopi Day School (19%), Hopi Day School (17%), Second Mesa Day School (11%) and Keams Canyon Elementary (16%). At Havasupai Elementary School, no students met the standard for Math.

Figure 44. Math assessment results for Hopi Tribe and Havasupai Tribe BIE Schools, 2018-19



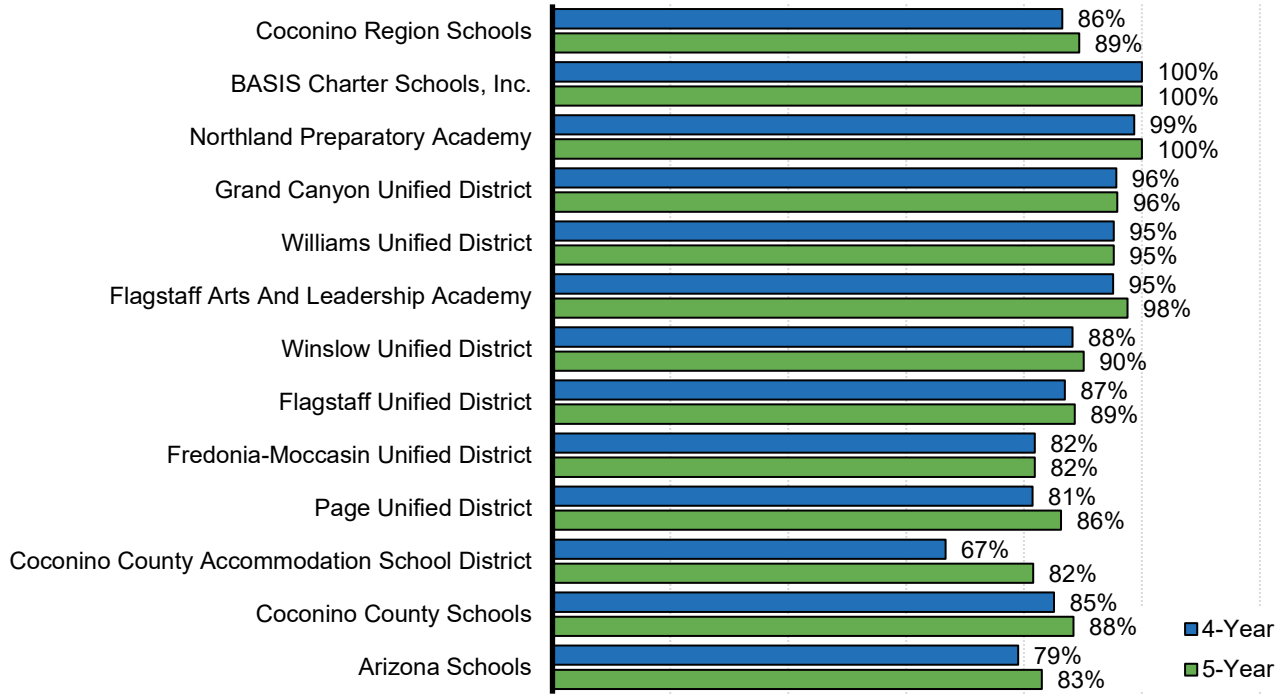
Source: Arizona Department of Education (2021). [AzMERIT Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Graduation Rates and Adult Educational Attainment

Understanding current high school graduation and dropout rates provides insight into the assets and challenges faced by a community and its future workforce. Adults who graduated from high school have better health and financial stability, lower risk for incarceration and better socio-emotional outcomes compared to adults who dropped out of high school.[183,184] Increasingly, a high school education is necessary for employment in the U.S., with nearly two-thirds of all jobs in 2020 requiring more than a high school education.[185] Adults with lower educational attainment also tended to experience more economic challenges during the pandemic, with adults with less than a high school diploma experiencing more than twice the unemployment rate of adults with a bachelor's degree or higher.[186]

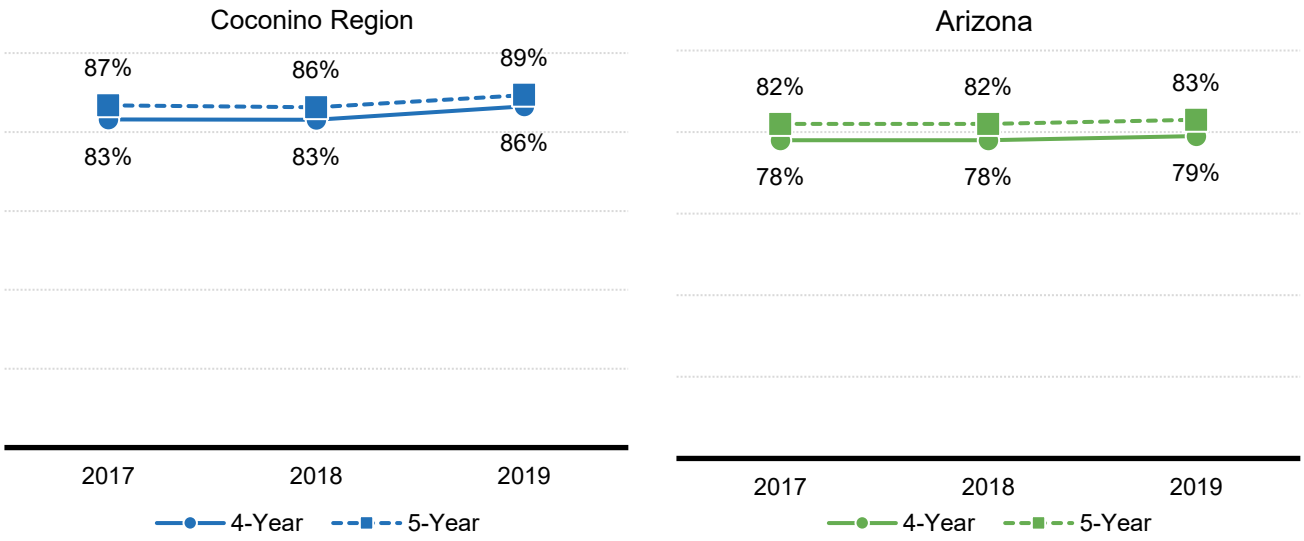
The 4-year and 5-year graduation rates in the Coconino Region in 2019 (86% and 89%) were much higher than across Arizona as whole (79% and 83%), and graduation rates exceeded the state rates in every district and charter school except for Coconino County Accommodation District (Figure 45). Both 4-year and 5-year graduation rates increased between 2017 and 2019 in both the Coconino Region and the state (Figure 46).

Figure 45. 4-year and 5-year graduation rates, 2019



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

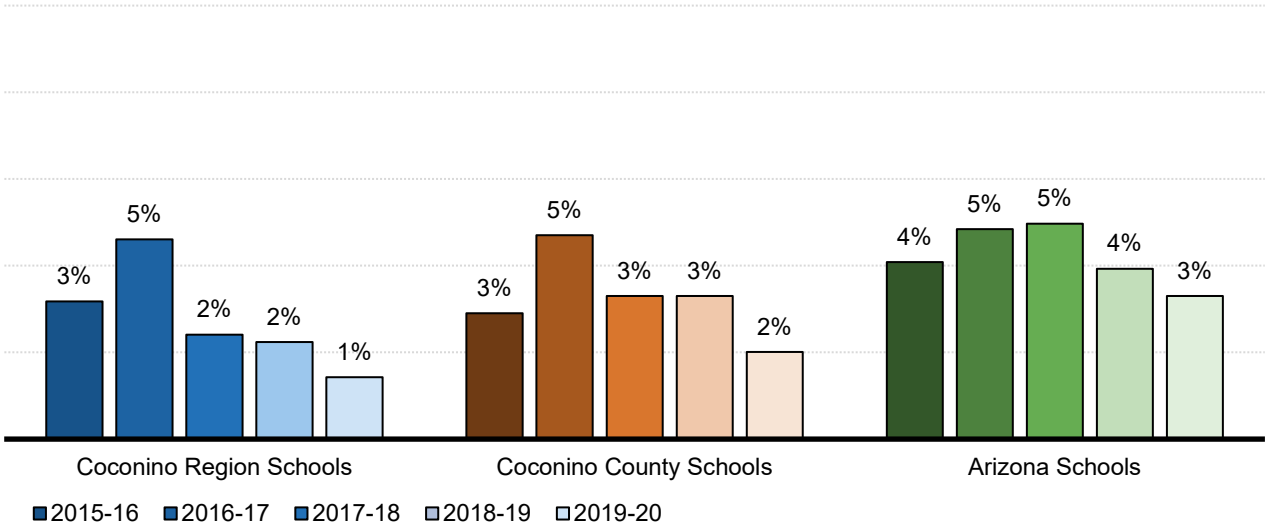
Figure 46. Trends in 4-year and 5-year graduation rates, 2017 to 2019



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

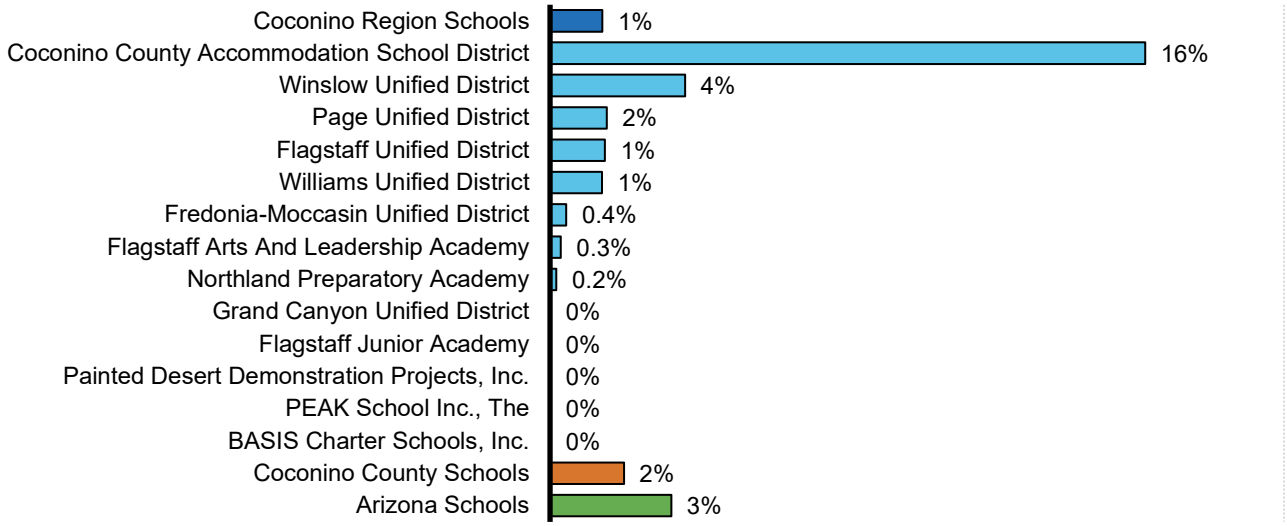
As graduation rates have climbed, dropout rates have declined in recent years. Specifically, in the Coconino Region they dropped from a recent high of 5% in 2016-17 to a low of 1% in 2019-20. This was a markedly larger drop than seen statewide, where rates declined from 5% to 3% in the same period. (Figure 47). As with graduation rates, nearly all district and charter schools in the region outperformed the state in terms of low dropout rates. Only Coconino County Accommodation School District (16%) and Winslow Unified District (4%) had dropout rates higher than those seen statewide (3%) (Figure 48).

Figure 47. Trends in 7th to 12th grade dropout rates, 2015-16 to 2019-20



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

Figure 48. 7th to 12th grade dropout rates, 2019-20

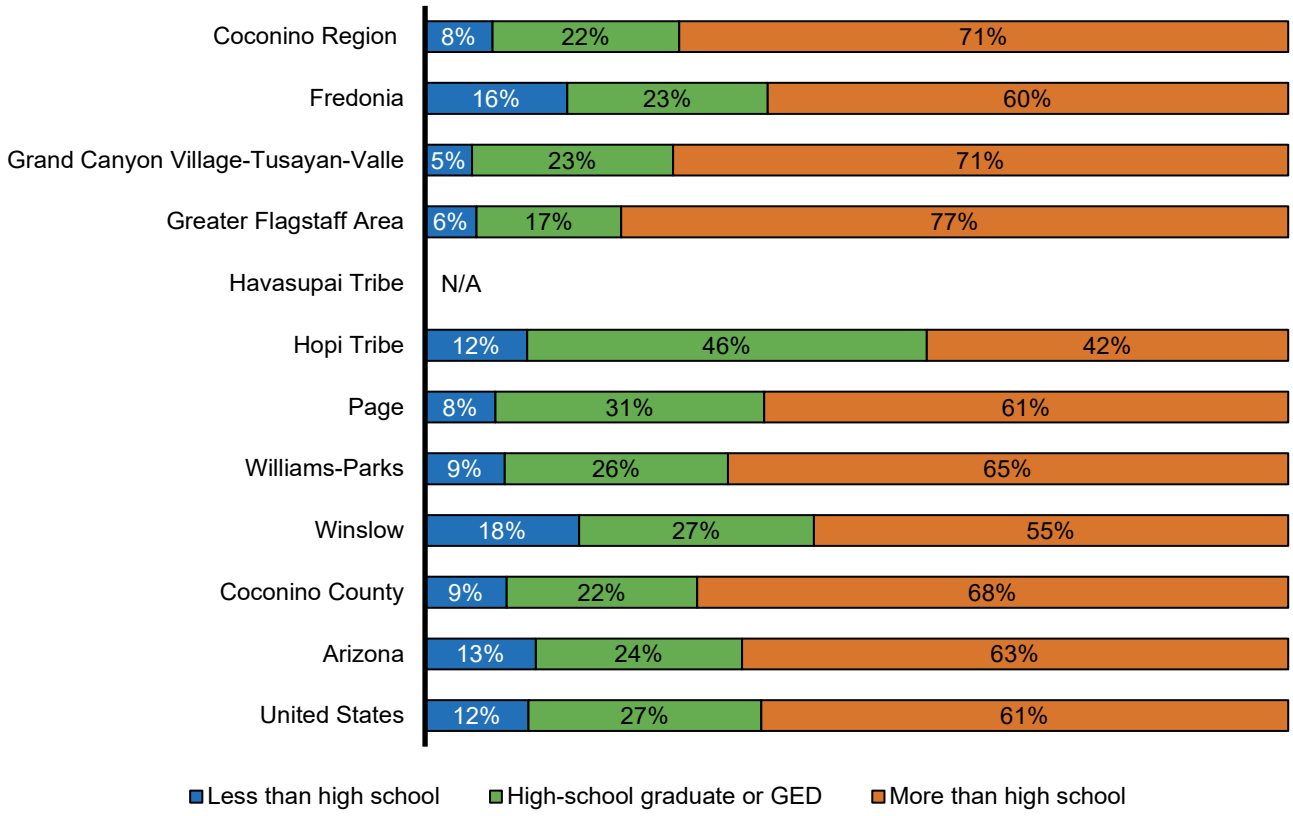


Source: Arizona Department of Education (2021). [Graduation Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

According to the American Community Survey, an estimated 8% of Coconino Region adults (ages 25 and older) have less than a high-school education (Figure 49). An additional 22% have a high-school diploma or a GED equivalent. The remaining 71% have at least some education beyond the high-school level. The Coconino Region as a whole has a higher proportion (93%) of adults aged 25 and older with

at least a high school education than the state (87%) or nation (88%) (Figure 49). However, educational attainment does vary by community. The greatest proportions of more highly-educated residents, i.e., those with some post-secondary education, reside in the Greater Flagstaff Area (77%) and Grand Canyon Village-Tusayan-Valle (71%). In three communities, including Winslow (18%), Fredonia (16%), and Hopi Tribe (12%), more than 1 in 10 adults did not complete high school. These areas may especially benefit from programs that aim to simultaneously serve both young children and their parents. Such *two-generation programs* are designed to provide family-centered supports to low-income parents and their young children by providing access to education and workforce development for parents and high-quality early education for young children.[187,188] Providing resources and programming to support parental and youth education can help grow the human capital of both. [189,190]

Figure 49. Level of education for the adult population (ages 25 and older)



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B15002

Note: The three percentages in each bar should sum to 100%, but may not because of rounding. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Parental educational attainment has been shown to influence child educational outcomes.[191] Education is also a key mechanism for upward mobility; parents with higher educational levels typically secure higher incomes to support their families.[192] Higher maternal education, in particular, is linked to both cognitive and socio-emotional development as well as general health in young children.[193] The majority of babies in the region in 2018 (61%) and 2019 (65%) were born to mothers who had more than a high-

school education, more than across the state (57% both years) (Table 11). About 1 in 10 (11%) babies were born to mothers who lacked a high-school education. Data on educational attainment for mothers were not available for single years by community for most of the region due to small numbers. However, combined 2017-2019 Vital Statistics data showed that while 72% of births in the Greater Flagstaff Area were to mothers with more than a high school education, this was only true for 44% of births in Winslow. For Hopi Tribe, 45% of births were to mothers who finished high school or had a GED and at least 35% of births were to mothers with some postsecondary education. In Havasupai tribe, there were no births to mothers with more than a high school education from 2017 to 2019.[194] These data demonstrate while overall educational attainment is high for mothers in the region, some communities could benefit from targeted two-generation approaches.

Table 11. Level of education for the mothers of babies born in 2018 and 2019

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
Coconino Region	**2018**	**1,331**	**11%**	**27%**	**61%**
	2019	**1,292**	**11%**	**24%**	**65%**
Coconino County	2018	1,500	12%	28%	60%
	2019	1,367	11%	26%	63%
ARIZONA	2018	80,539	17%	26%	57%
	2019	79,183	16%	27%	57%

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

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

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

EARLY LEARNING

EARLY LEARNING

Why it Matters

Early childhood is an exciting time of rapid physical, cognitive and social-emotional development. The experiences young children have during these early years are critical for healthy brain development and set the stage for lifelong learning and well-being. [195,196] Just as rich, stimulating environments can promote development, early negative experiences can have lasting effects. For example, gaps in language development between children from disadvantaged backgrounds and their more advantaged peers can be seen by two and a half years of age;[197] and those disparities that persist until kindergarten tend to predict later academic problems.[198]

Quality early care and education can positively influence children's overall development.[199,200] This is particularly true for children in poverty.[201] Access to quality child care and classroom environments can provide enriching experiences children might not have access to at home. Children who attend high-quality preschool programs repeat grades less frequently, obtain higher scores on standardized tests, experience fewer behavior problems and are more likely to graduate from high school.[202] Furthermore, early childhood programs help identify children with special needs and can provide targeted interventions that may reduce their risk of developmental delays and prevent preschool expulsion.[203, 204] Children with special health care needs may particularly benefits from high quality teacher-child interactions in classrooms,[205,206] as they are more likely to experience more adverse childhood experiences than typically developing children,[207] and are at an increased risk for maltreatment and neglect.[208,209]

A statewide early care and education system that is accessible, affordable and high-quality is essential for the social and economic health of Arizona. Not only does access to affordable, quality child care make a positive difference for children's health and development, it also allows parents to keep steady jobs and support their families.[210] Investment in programs for young children leads to increased education and employment, reduced crime and better overall health.[211,212] The investment in early childhood is also potentially one of the most productive investments a community can make, with experts estimating that society gets back about $8.60 for every $1 spent on early learning programs.[213]

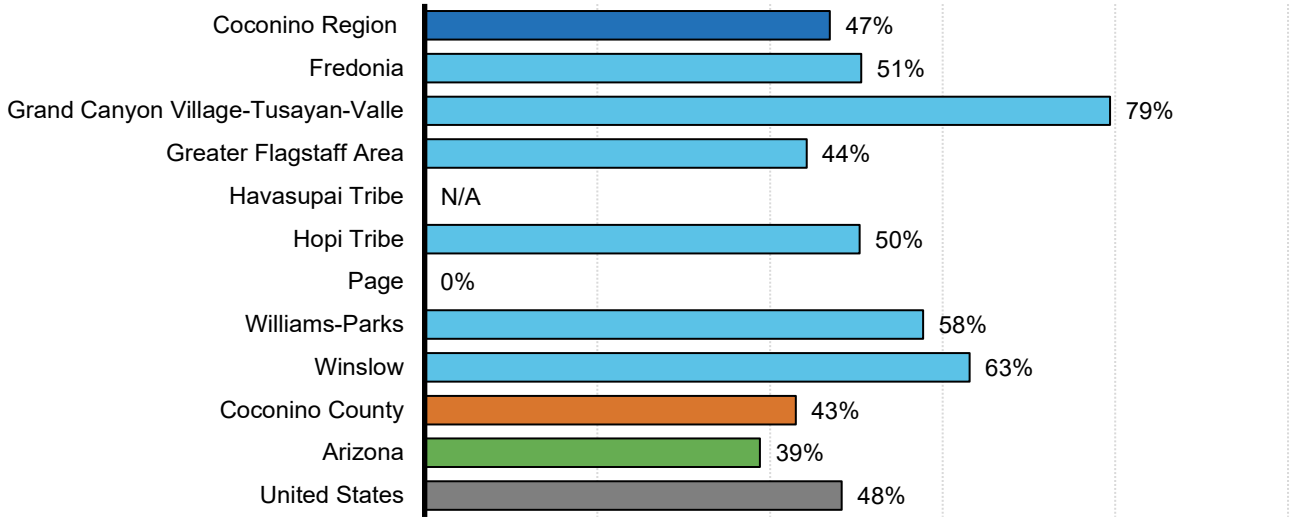
What the Data Tell Us

Early Care and Education Enrollment

Children who begin their education in high-quality preschool programs repeat grades less frequently, score higher on standardized tests, have fewer behavior problems and are more likely to graduate from high school.[214] 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.[215,216] American Community Survey (ACS) data indicate that about 47% of the region's

estimated 3,173 3- and 4-year-old children[xviii] were enrolled in some type of school, such as nursery school, preschool, or kindergarten. This is much higher than Arizona overall (39%) and nearly equal to the nation, where nearly half of children (48%) are in preschool (Figure 50). Half or more of 3- and 4-year-olds are estimated to be enrolled in preschool in Grand Canyon Village-Tusayan-Valle (79%), Williams-Park (58%) and Hopi Tribe (50%), while enrollment is lowest in the Greater Flagstaff Area (44%) and Page (0%), where no children are estimated to be enrolled in preschool.[xix]

Figure 50. School enrollment for children ages 3 to 4, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B14003

Note: In this table, "school" may include nursery school, preschool, or kindergarten. Reliable estimates were not available for Fredonia due to limitations in the size of the ACS sample. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Though high-quality early care and education can promote development, families often face barriers in accessing these opportunities for their children. Families in both urban and rural areas of Arizona face a gap between the number of young children and the availability of licensed child care, and this gap is larger in rural parts of the state.[217,218,219,220] As of 2019, Arizona needed an additional 76,740 licensed or registered early care and education slots to provide spaces for all young children in working families according to analyses by the Bipartisan Policy Center.[221] This highlights the need for additional, high-quality, affordable early care and education providers in Arizona.

[xviii] *The ACS does not report enrollment estimates for children younger than 3.*

[xix] *Please note that, as there are at least 5 early care and education providers in the Page community, this may reflect limitations of the ACS sample in reaching families with preschool-aged children in Page.*

In the Coconino Region, there are 71 registered early care and education providers approved to serve up to 4,106 children (Table 12).[xx] Providers in the region are most often child care centers (n=39), and these centers account for more than half of the capacity in the region. There are 21 Head Start and Early Head Start programs with capacity to serve 768 children. These programs are operated by Northern Arizona Council of Governments (N.A.C.O.G.), the Hopi Tribe, and the Havasupai Tribe. The 9 public schools with early childhood programs contribute just over 10% of total slots (443). There are only 2 registered home providers, both in the Winslow community. However, key informants indicated that the lack of registered home providers is not due to a lack of home-based care in the region, but rather that most home-based care providers are not registered with the Arizona Department of Economic Security (DES) or other licensing agencies in the state. Prior to 2017, the Association of Supportive Child Care (ASCC) operated a kith and kin provider training program to provide support for informal care providers in the Coconino Region, but this program has not been offered since 2018.[222]

Although it is one of the smaller communities in terms of population of young children, it is worth noting that there are no registered early care and education providers within Fredonia. Fredonia Head Start, operated by N.A.C.O.G., closed following the 2019-20 school year. Approximate provider locations are illustrated in Figure 51.

[xx] *Please note that these data were compiled by merging six different licensing and enrollment datasets from ADHS, DES, FTF, and Northern Arizona Council of Government, Hopi Tribe, and Havasupai Tribe Head Start programs. For a table highlighting only those registered with DES, please see the additional tables in Appendix 1.*

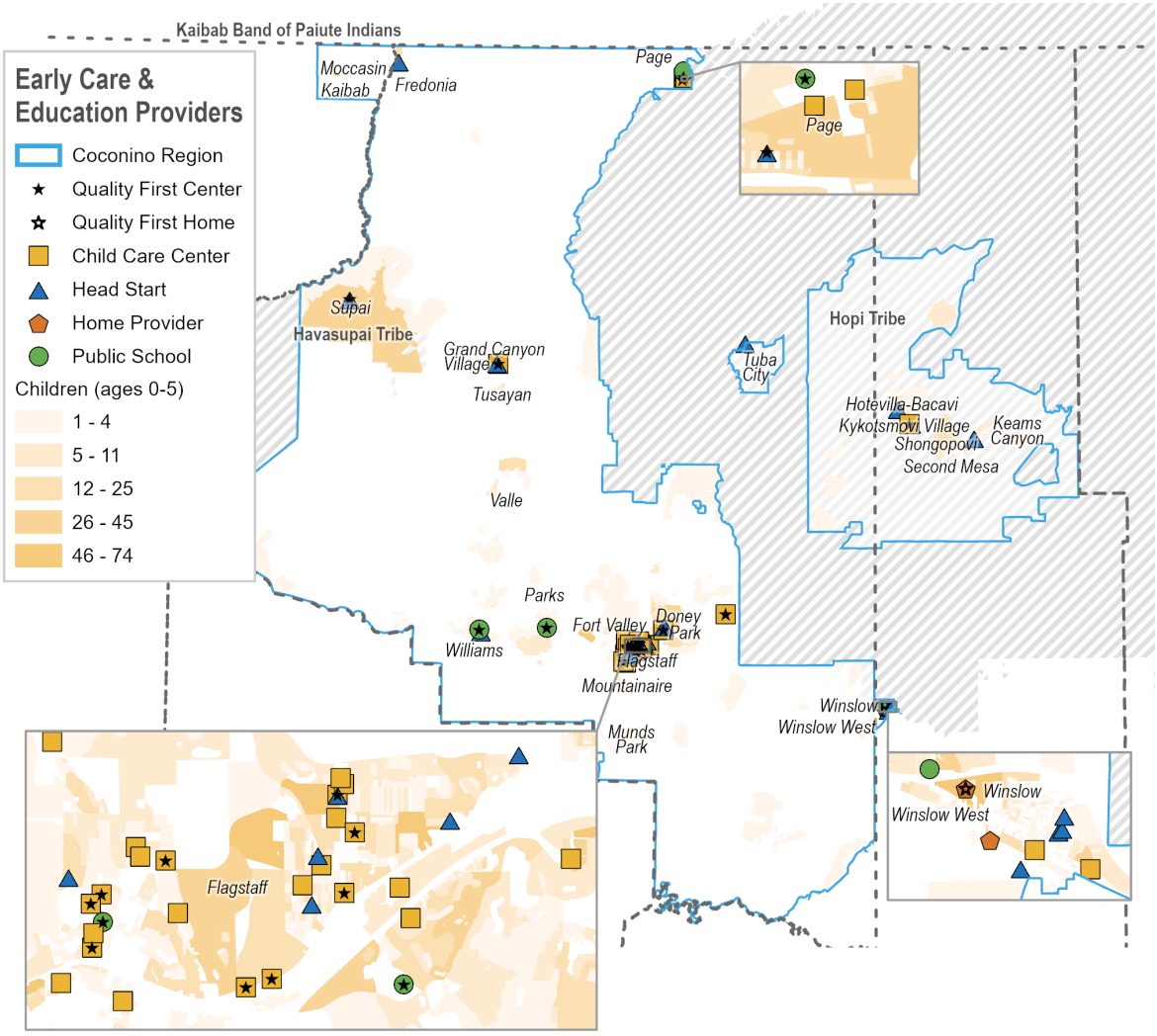
Table 12. Estimated Number and Capacity of Early Care & Education Providers, 2020-2021*

	Total ECE Providers		Child care centers		Head Start		Public Schools		Home Providers	
Geography	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
Coconino Region	71	4,106	39	2,881	21	768	9	443	2	14
Fredonia	0	0	0	0	0	0	0	0	0	0
Grand Canyon Village-Tusayan-Valle	3	196	1	159	1	22	1	15	0	0
Greater Flagstaff Area	41	2,839	32	2,461	7	274	2	104	0	0
Havasupai Tribe	2	36	0	0	2	36	0	0	0	0
Hopi Tribe	6	220	1	25	5	195	0	0	0	0
Page	5	325	2	87	1	54	2	184	0	0
Williams/Parks	3	106	0	0	1	25	2	81	0	0
Winslow	10	339	2	104	4	162	2	59	2	14
Coconino County	55	3,541	35	2707	13	450	7	384	0	0
Arizona	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Source: Arizona Department of Economic Security (2021). Child Care Administration [Dataset]. Data received by request. Arizona Department of Health Services (2021). Child Care Licensing [Dataset]. Data received by request. First Things First (2021). Quality First Data Center [Dataset]. Northern Arizona Council of Governments (2021). Head Start Program Data [Dataset]. Data received by request. Office of Head Start (2020). 2019 Program Information Report. Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/data/pir. Analyses conducted by the UArizona CRED Team.

Note: This table was compiled by merging six different licensing and enrollment datasets from ADHS, DES, FTF and N.A.C.O.G., Hopi Tribe and Havasupai Tribe Head Start programs. We removed all duplicate programs (based on name, phone number, and address) as well as program that only serve children ages 5-12, as these are typically before- & after-school programs that only serve school-age children. Head Start & Early Head Start programs are counted separately. Since these data rely on local data requests, comparison data are not available at the state-level.

Figure 51. Map of Early Care and Education Providers in the Coconino Region



Source: Arizona Department of Economic Security (2021). Child Care Administration [Dataset]. Data received by request. Arizona Department of Health Services (2021). Child Care Licensing [Dataset]. Data received by request. First Things First (2021). Quality First Data Center [Dataset]. Northern Arizona Council of Governments (2021). Head Start Program Data [Dataset]. Data received by request. Head Start Program Data [Dataset]. Data received by request. Office of Head Start (2020). 2019 Program Information Report. Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/data/pir. Analyses conducted by the UArizona CRED Team.

Note: This table was compiled by merging six different licensing and enrollment datasets from ADHS, DES, FTF and N.A.C.O.G., Hopi Tribe and Havasupai Tribe Head Start programs. We removed all duplicate programs (based on name, phone number, and address) as well as program that only serve children ages 5-12, as these are typically before- & after-school programs that only serve school-age children. Head Start & Early Head Start programs are counted separately. Since these data rely on local data requests, comparison data are not available at the state-level. Please note that providers licensed or operated by the Kaibab Band of Paiute Indians are not shown in this map.

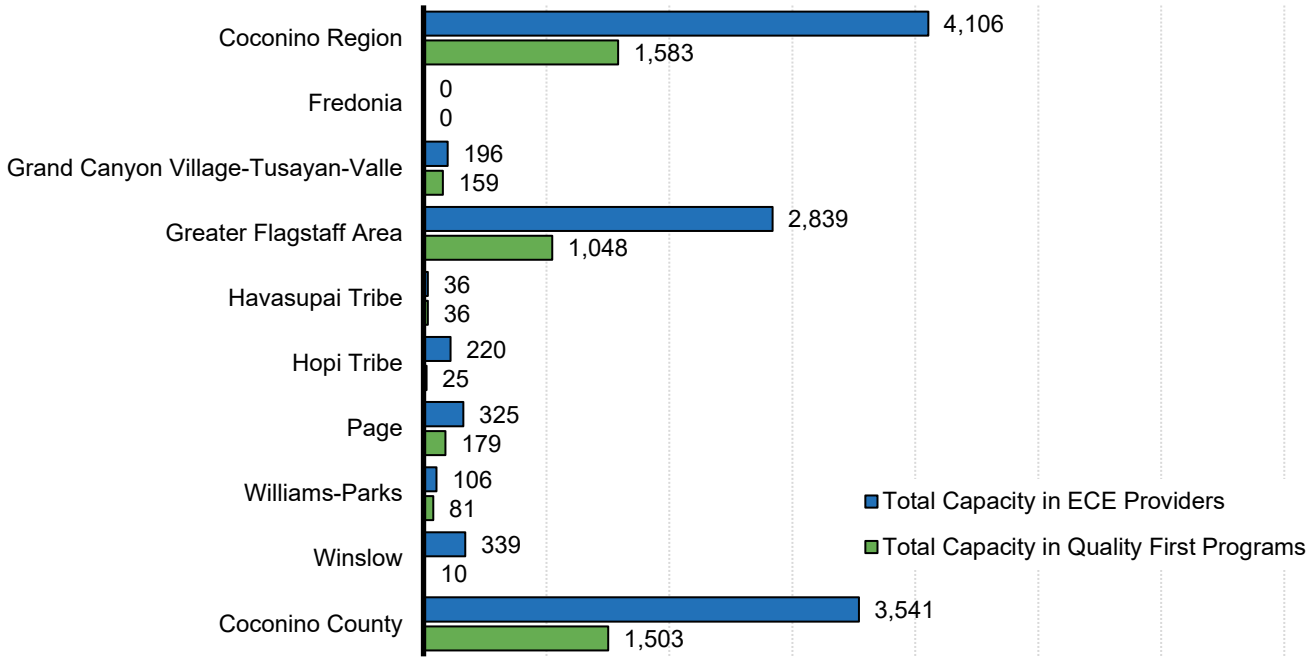
The Center for American Progress estimates that 48% of Arizonans live in a "child care desert," defined as an area where there are at least three times as many children as there are child care slots, meaning that the absence of accessible, affordable child care may be a barrier to employment.[223] In Arizona, the majority of rural families (67%), low-income families (59%) and Hispanic or Latino families (55%) live in a child care desert, making them disproportionately impacted by barriers to child care.[224] This is

slightly worse than in the U.S. as a whole, where 60% of rural families and 55% of low-income families live in child care deserts.

The child care shortage is also a clear issue in parts of the Coconino Region. Comparing the number of children birth to 5 to the number of available early care and education slots in the region overall, there are approximately 1,500 more children who have all parents in the labor force as there are regulated slots (Figure 52; Figure 53). About half of these children are in the Greater Flagstaff Area, where approximately 776 slots are needed to have one for every child with all parents in the workforce. The estimated gap between demand and supply is 328 for the Hopi Tribe, 286 for Williams-Parks, and 159 for Winslow. However, in a few communities, the population of young children and the number of registered child care slots are well-matched. In Grand Canyon Village-Tusayan-Valle, there are sufficient slots for all children whose parents are in the labor force, and in Page there is a gap of fewer than 10 children. The match between child care supply (mostly through the Kaibab Learning Center) and demand in Grand Canyon Village-Tusayan-Valle, combined with high parental labor force participation (see Table 22) may explain why preschool enrollment is so high in this community. Havasupai Tribe Head Start has the capacity to serve most, but not all, children ages 3-4 in the community, and with the opening of a new Early Head Start program in the 2020-21 school year, the program now can serve most infants and toddlers in the community as well. However, since Havasupai Tribe Head Start and Early Head Start cannot serve all young children in the community, key informants emphasized the importance of home visiting programs to provide early enrichment and education for young children not enrolled in Head Start or Early Head Start.

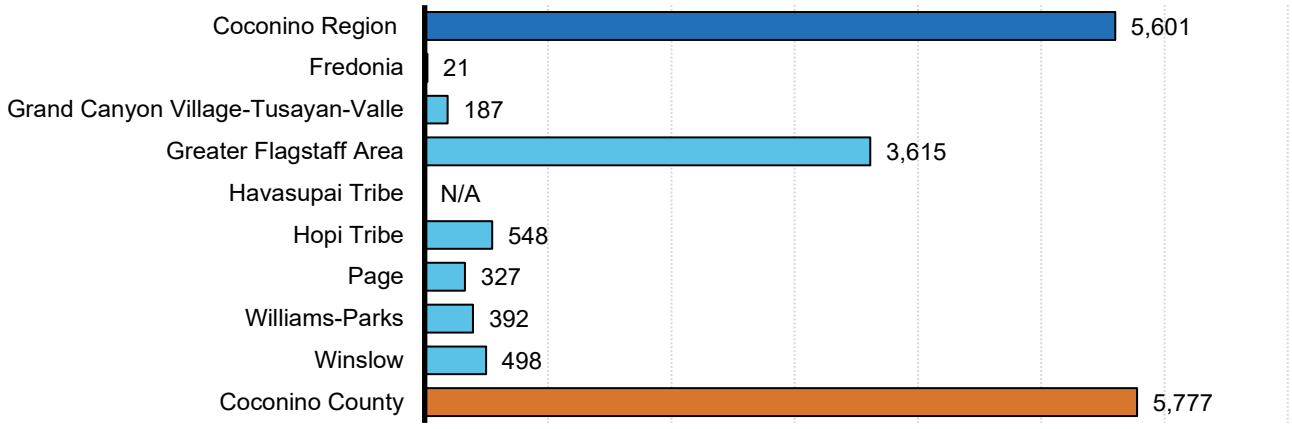
Access to Quality First programs also varies by community. While just over a third (38%) of total early care and education slots in the region are in Quality First-participating providers, in at least three communities, three out of every four early care and education slots are in Quality First providers: Havasupai Tribe (100%), Grand Canyon Village-Tusayan-Valle (81%) and Williams-Parks (76%). Conversely, only 3% of the total early care and education slots in Winslow are in Quality First providers. Taken together, this suggests that access to high quality early care and education is a strength in some communities, such as Havasupai Tribe and Grand Canyon Village-Tusayan-Valle, but there is a marked need for greater access to high quality care in other parts of the region, such as Winslow.

Figure 52. Estimated Number and Capacity of Early Care & Education (ECE) Providers, 2020-2021



Source: U.S. Census Bureau. (2012). 2010 Decennial Census, Table P14. U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Tables B05009 & B23008. Arizona Department of Economic Security (2021). Child Care Administration [Dataset]. Data received by request. Arizona Department of Health Services (2021). Child Care Licensing [Dataset]. Data received by request. First Things First (2021). Quality First Data Center [Dataset]. Northern Arizona Council of Governments (2021). Head Start Program Data [Dataset]. Data received by request. Office of Head Start (2020). 2019 Program Information Report. Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/data/pir. Analyses conducted by the UArizona CRED Team.

Figure 53. Children ages birth to 5 with all parents in the labor force, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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 stepparents.

Providers are considered quality educational environments by DES if they are accredited by a national organization, such as the Association for Early Learning Leaders or the National Association for the Education of Young Children (NAEYC),[225] or if they receive a Quality First 3-star rating or higher (see below). In the Coconino Region, just two providers (2%) listed with the Child Care Resource and Referral Guide have attained national accreditation. Both of these are centers in the Greater Flagstaff Area with a total capacity of 168 slots, meaning that they represent only 6% of the total slots in the Greater Flagstaff Area. There are no accredited providers outside the Flagstaff area according to the Child Care Resource and Referral Guide (Table 13). This lack of accredited providers means that Quality First plays an especially important role in helping families find high-quality care in the Coconino Region.

Table 13. Number and licensed capacity of accredited child care providers, December 2020

Geography	Number of accredited providers	Percent of providers who are accredited	Capacity in accredited providers	Percent of provider capacity which is with accredited providers
Coconino Region	2	4%	168	5%
Fredonia	0	0%	0	0%
Grand Canyon Village-Tusayan-Valle	0	0%	0	0%
Greater Flagstaff Area	2	6%	168	6%
Havasupai Tribe	0	0%	0	0%
Hopi Tribe	0	0%	0	0%
Page	0	0%	0	0%
Williams-Parks	0	0%	0	0%
Winslow	0	0%	0	0%
Coconino County	2	4%	168	5%
Arizona	233	9%	24,824	12%

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

Note: This table only includes data for providers listed in the National Data System for Child Care NACCRRAware database. These providers are listed through the Child Care Resource & Referral Guide to allow parents and caregivers to find child care and early education providers.

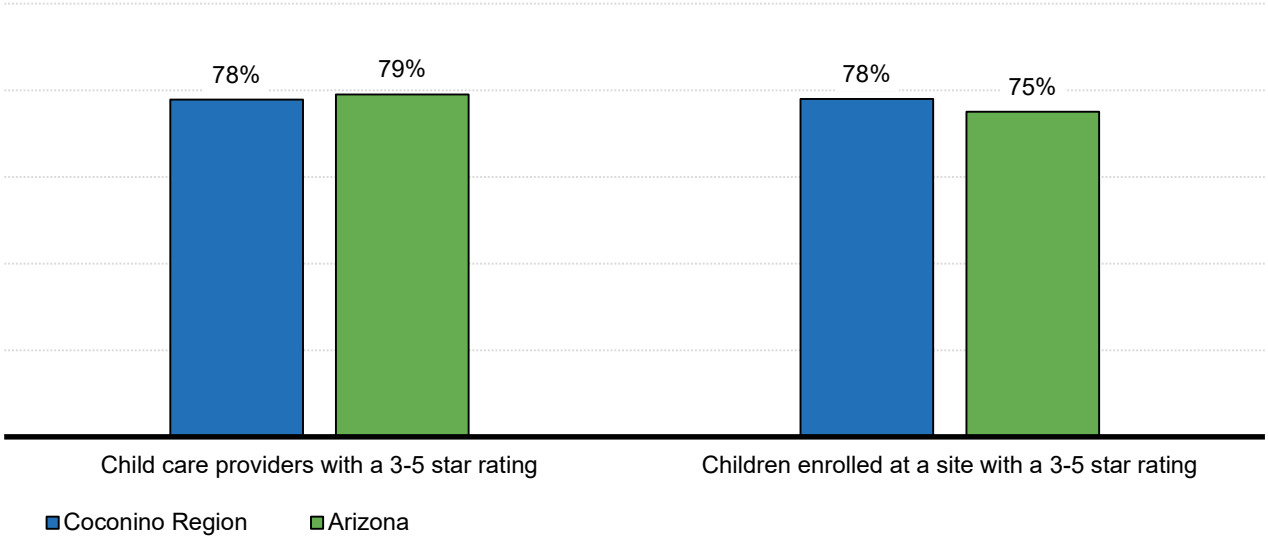
Quality First

Beyond the basic goal of being a safe place for children, there are a number of different ways for a child care program to enrich a child's experience. Quality standards help ensure these early environments support positive outcomes for children's well-being, academic achievement, and success later in life.[226] Quality First is Arizona's Quality Rating and Improvement System (QRIS) for early child care and

preschool providers.[227] The Quality First program describes quality settings as those that include teachers and staff who know how to work with young children and offer hands-on activities, create learning environments that nurture the development of every child, and foster positive, consistent relationships and interactions that give children the individual attention they need.[228] A Quality First star rating represents where along the continuum of quality (one to five stars) a program was rated and how they are implementing early childhood best practices. Through Quality First, child care health consultants also help provide health and safety guidance to providers.[229]

In 2020, the Coconino Region had 27 programs in the Quality First System, 21 of which (78%) had achieved a three-star rating or higher, indicating that they meet quality standards. This is a slightly lower proportion than participating Quality First programs statewide, where 79% have achieved a three-star rating or higher (Figure 54). In the Coconino Region, the 21 three-star or higher rated programs served 866 children, or just under 10% of the 9,600 young children in the region according to the 2010 Census (Table 14). Quality First also offers scholarships; 168 children were served through these in state fiscal year 2020.

Figure 54. Percent of Quality First programs with a 3-5 star rating and children enrolled in quality-level programs, state fiscal year 2020



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

Note: Quality First considers providers with a 3-star rating and above to be 'quality level.'

Table 14. Children enrolled in Quality First Programs, state fiscal year 2020

Geography	Children enrolled at a Quality First provider site	Children enrolled at a Quality First provider site with a 3-5 star rating	Percent of children in a quality-level setting (3-5 Stars)
Coconino Region	1,110	866	78%
Coconino County	N/A	N/A	N/A
Arizona	60,927	45,822	75%

Source: First Things First (2021). Quality First Summary Data. Unpublished data.

Looking forward, the 2022 state fiscal year budget includes $74 million specifically focused on increasing the number of quality child care and preschool settings in Arizona, which could add up to 800 additional Quality First providers statewide over the next three years. This investment, and others, will hopefully help to support the early childhood sector after the 2019 loss of $20 million in federal funding through the Preschool Development Block Grants (PDG) and Preschool Development Birth through Five Grants (PDG B-5).[230,231] Districts affected by the loss of PDG funding in the Coconino Region include Flagstaff Unified School District, Williams Unified School District and Page Unified School District.[232] Since public schools make up a substantial proportion of the early care and education slots in the region (see Table 12), loss of this funding could lead to greater shortages in available care, especially high quality care, without the offset of increased investment in Quality First.

Head Start

Head Start is a comprehensive early childhood education program for children whose families meet Department of Health and Human Services income eligibility guidelines. The program offers a broad range of individualized services in the areas of education and child development, special education, health services, nutrition and parent/family development. Preschool-aged children are served through Head Start programs, and infants and toddlers are served through Early Head Start. In the Coconino Region as of the 2020-21 school year, N.A.C.O.G. operated 11 Head Start and Early Head Start sites, two of which (Winslow and Ponderosa) have both Early Head Start and traditional Head Start programs. Fredonia Head Start and Cogdill Head Start closed following the 2019-20 school year, while Clear Creek Head Start, Puente de Hozho Head Start, and Ponderosa Head Start opened in the 2020-21 school year. The Hopi Tribe and Havasupai Tribe also operate their own Head Start and Early Head Start programs. The Hopi Tribe operates five Head Start centers throughout the community, with a funded enrollment to serve 195 preschool-age children in part-day Head Start. The Havasupai Tribe operates both a Head Start and Early Head Start program with funded enrollment for 20 preschool-age children in part-day Head Start and 16 infants and toddlers in Early Head Start as of 2020-21. Head Start slots, also known as *funded enrollment*, represents a program's capacity to serve children at a point in time.[233] N.A.C.O.G. programs had a funded enrollment of 728 in the Coconino Region in 2019-20, the most recent year of pre-pandemic data (Table 15). Of the funded slots in traditional Head Start, just under half

were in expanded duration programs (n=214) with the remainder in part day programs (n=238) (Figure 54). Additionally, 81 slots existed for N.A.C.O.G. Early Head Start programs in 2019-20; of these 66 were for home-based programs and 15 were center-based.

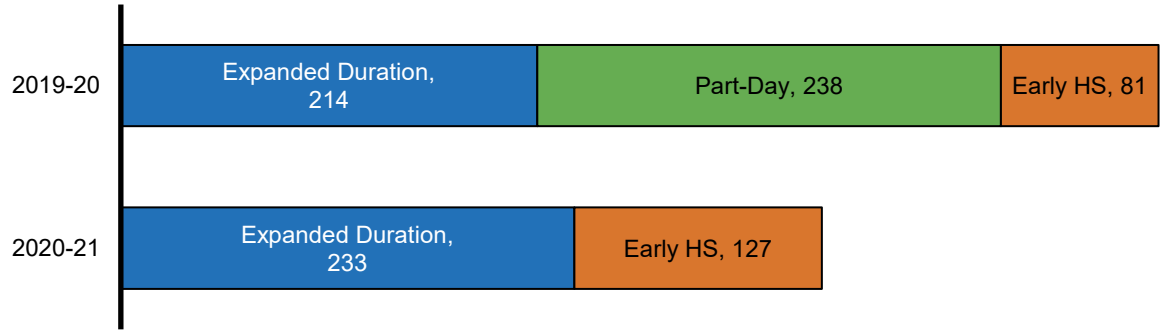
Table 15. Funded enrollment in Coconino Region Head Start programs, 2019-20

Center Name	Head Start- Expanded Day	Head Start- Part Day	Early Head Start
Coconino Region	**214**	**433**	**81**
Winslow Head Start (N.A.C.O.G)	29	70	0
Winslow Early Head Start (N.A.C.O.G)	0	0	27
Clear Creek Head Start (N.A.C.O.G)	N/A	N/A	N/A
Sunnyside Early Head Start (N.A.C.O.G)	0	0	19
Siler Homes Head Start (N.A.C.O.G)	29	36	0
Ponderosa Early Head Start (N.A.C.O.G)	N/A	N/A	N/A
Ponderosa Head Start (N.A.C.O.G)	36	68	0
Flagstaff Early Head Start (N.A.C.O.G)	0	0	35
Puente de Hozho Head Start (N.A.C.O.G)	N/A	N/A	N/A
Clark Homes Head Start (N.A.C.O.G)	18	36	0
Cromer Elementary Head Start (N.A.C.O.G)	18	0	0
Williams Early Head Start (N.A.C.O.G)	29	0	0
Page Head Start (N.A.C.O.G)	18	0	0
Cogdill Head Start (N.A.C.O.G)*	18	28	0
Fredonia Head Start (N.A.C.O.G)*	19	0	0
Hopi Tribe Head Start Programs**	0	195	0
Havasupai Tribe Head Start**	0	20	0*

Source: Northern Arizona Council of Governments (2021). Head Start Program Data [Dataset]. Data received by request. Office of Head Start (2021). 2019 & 2021 Program Information Reports. Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/data/pir

*Note: * These programs closed after the 2019-20 school year. **Hopi Tribe and Havasupai Tribe enrollment numbers are from 2018-19 as there was no Program Information Report required for 2019-20 and 2020-21 enrollments were heavily impacted by the pandemic. Havasupai Tribe opened an Early Head Start program in the 2020-21 school year with a funded enrollment of 16. "Expanded Day" refers to lengthening the hours of services that Head Start offers individual children and their families, with the goal of increasing children's learning and developmental outcomes by providing more hours of high-quality learning experiences. Longer hours also support families who are working or in school to pursue self-sufficiency while their children are in safe and nurturing early learning environments. Read more about this effort here: https://www.nhsa.org/knowledge-center/center-advocacy/top-issues/extended-duration/*

Figure 55. Funded enrollment in Coconino Region N.A.C.O.G. Head Start programs by type, 2019-20 and 2020-21

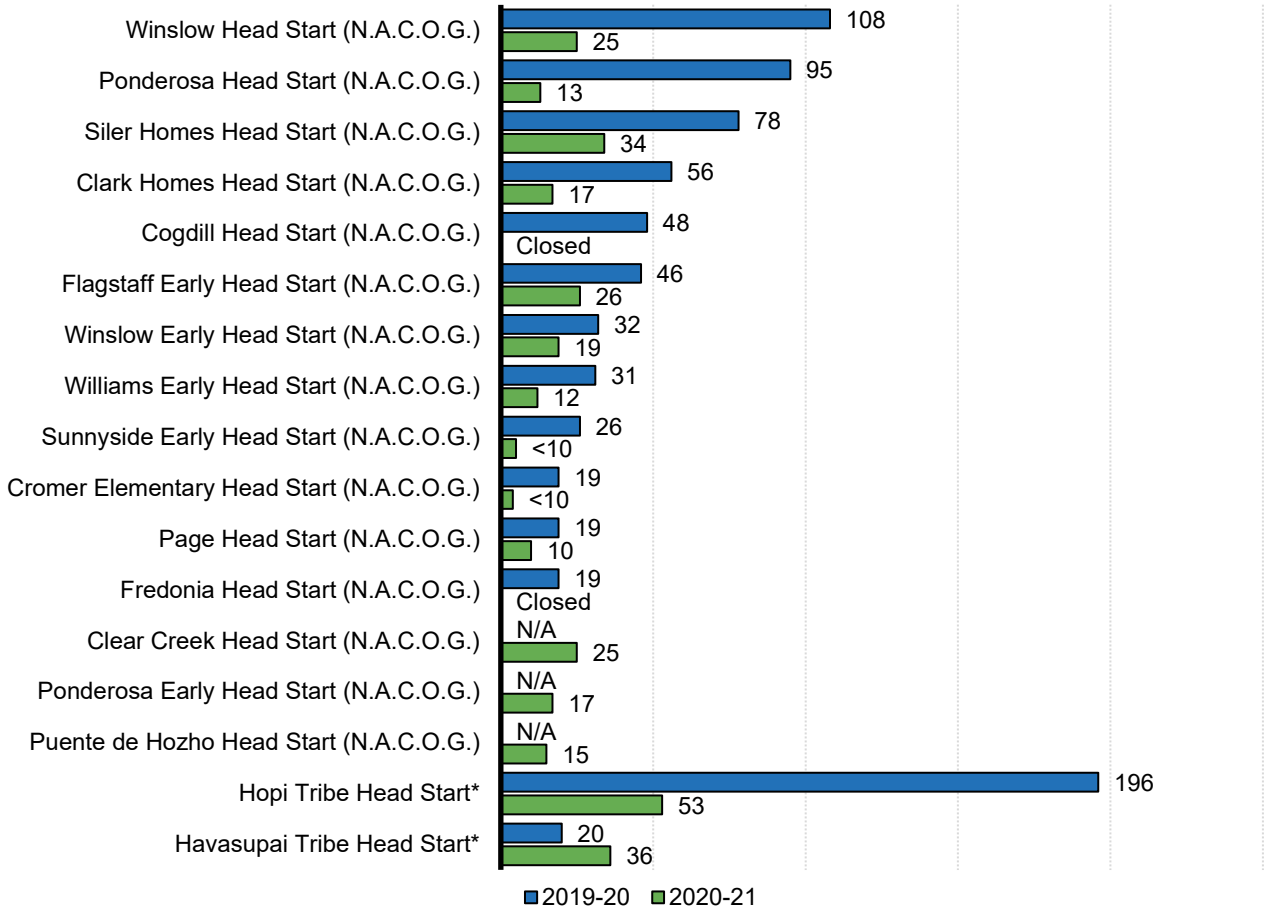


Source: Northern Arizona Council of Governments (2021). Head Start Program Data [Dataset]. Data received by request.

Note: "Expanded Day" refers to lengthening the hours of services that Head Start offers individual children and their families, with the goal of increasing children's learning and developmental outcomes by providing more hours of high-quality learning experiences. Longer hours also support families who are working or in school to pursue self-sufficiency while their children are in safe and nurturing early learning environments. Read more about this effort here: https://www.nhsa.org/knowledge-center/center-advocacy/top-issues/extended-duration/

The COVID-19 pandemic had a dramatic impact on Head Start programs in the Coconino Region. All Head Start programs closed in March 2020 due to the COVID-19 pandemic, and many programs, including most N.A.C.O.G. Head Start programs operated virtually through most of 2020 and into early 2021. Effects of the pandemic can be seen in the substantial drop in enrollment between the 2019-20 and 2020-21 school years (Figure 56). All existing N.A.C.O.G. programs saw enrollments decline by 40% or more. As Figure 55 shows, most of the drop was in part-day enrollment; Early Head Start enrollment actually increased due to the opening of a new program at Ponderosa and as home-based programs could more easily continue virtually. Cumulative enrollment in the Hopi Head Start Program in 2020-21 fell precipitously to only about a quarter of 2018-19 enrollment levels, due in large part to the challenges of operating virtually. Havasupai Head Start saw increased enrollment with the opening of the new Early Head Start program—while the community was closed to outsiders, children in the community were able to attend Head Start in-person during the 2020-21 school year.

Figure 56. Cumulative enrollment in Coconino Region Head Start programs, 2019-20 and 2020-21



Source: Northern Arizona Council of Governments (2021). Head Start Program Data [Dataset]. Data received by request. Office of Head Start (2021). 2019 & 2021 Program Information Reports. Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/data/pir

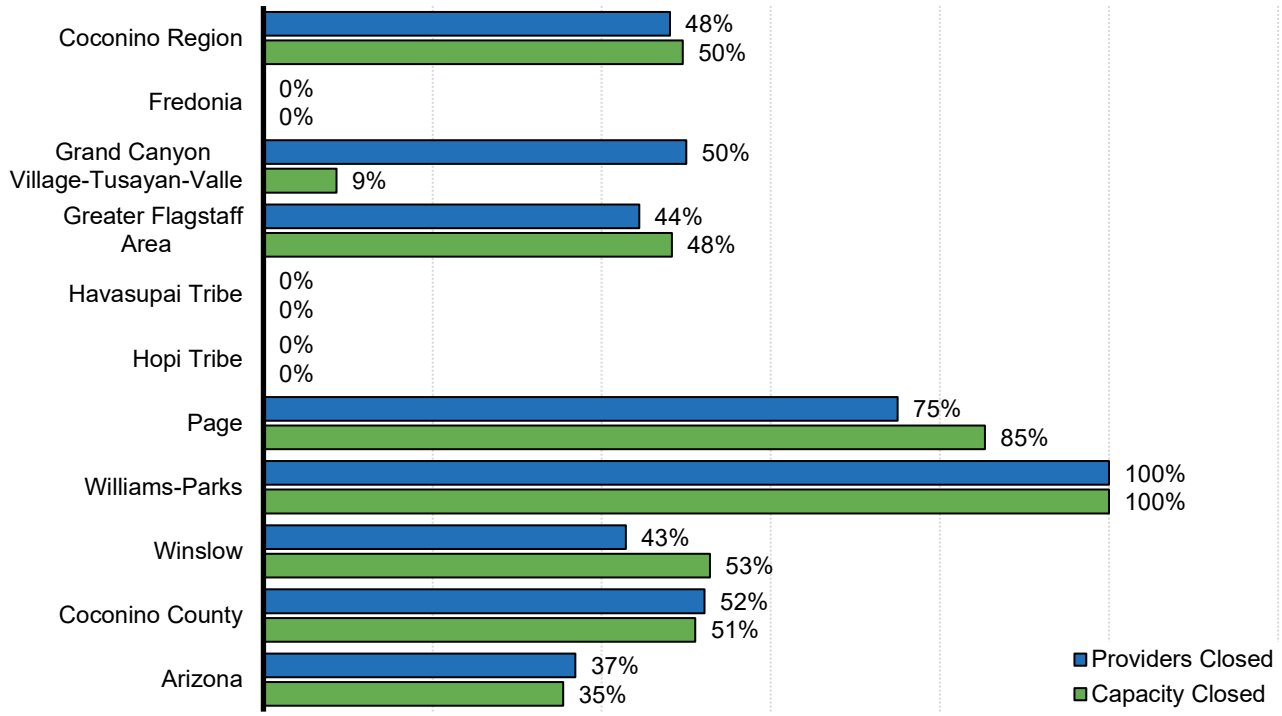
*Note: *Hopi Tribe and Havasupai Tribe enrollment numbers are from 2018-19 as there was no Program Information Report required for 2019-20; however given stable enrollment trends pre-pandemic, these numbers are likely very close to those seen during the 2019-20 school year before the onset of the pandemic in March 2020. Cumulative enrollment is the total number of students enrolled throughout the year; this number often exceeds funded enrollment as students enter and exit a program.*

Pandemic Effects for Early Care & Education Providers

The pandemic also had substantial impacts on early care and education providers beyond Head Start. The COVID-19 pandemic made child care even less accessible for many families. Many child care centers and homes closed in the early days of the pandemic due to concerns about safety of children, staff and families.[234,235] The pandemic's effect on out-of-home child care arrangements heightened stress for families and widened pre-existing inequities in work, income and well-being. In a nationally-representative survey in the summer of 2020, about half of families with young children (47%) reported that they lost their pre-pandemic child care arrangements, and the majority of parents and caregivers surveyed (70%) were worried about returning to prior arrangements.[236]

During the month of December 2020, statewide, more than one third (37%) of the regulated early care and education providers that were listed in the CCR&R guide were closed. These providers accounted for 36% of the known care capacity in the state. In the Coconino Region, of 52 listed providers, 25 (48%) were closed in December 2020, representing a loss of 1,673 slots or 50% of the previous capacity (Figure 57). Most early care and education providers who closed were either Head Start or school-based programs. The impact of closures varied substantially across the region. While one of the two providers were closed in Grand Canyon Village-Tusayan-Valle, because the larger provider was open, most capacity in the community was available. About half of all providers (44%) and capacity (48%) in the Greater Flagstaff Area were closed, with similar trends in Winslow. In Williams-Parks, all providers were closed, and in Page, the vast majority of providers (75%) and capacity (85%) were closed. While most Head Starts and public schools did offer some sort of virtual or distance learning for enrolled children, the closure of these providers to in-person attendance meant that many working parents of young children in the region had to balance both work and care of their young children at home.

Figure 57. Number and capacity of regulated early care and educational providers by operational status in December 2020



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

Note: This table only reflects providers registered with the Child Care Resource and Referral (CCR&R) Guide. Closure status for providers were gathered by CCR&R staff throughout the pandemic, who made a strong effort to keep this information up to date; however, these data may not reflect current closure status in the region.

To help communities during the pandemic, First Things First helped recruit providers to become Arizona Enrichment Centers.[237] The Arizona Enrichment Center program provided funding to licensed child care facilities in order to serve the children of essential workers during the pandemic in 2020 and provided scholarships to essential workers making less than $65,000 annually.[238, xxi] Two-thirds of all Arizona Enrichment Centers were Quality First participating providers (334 of 506 total enrichment centers).[239] In the Coconino Region, eight providers became Arizona Enrichment Centers, seven of which were located in the Greater Flagstaff Area and one in Winslow (Table 43). However, these providers were only approved to serve 15 children total.

Notably, even if child care centers remained opened during the pandemic, they had to shoulder additional costs related to cleaning and staffing changes, among others. Over half of centers (56%) surveyed by the National Association for the Education of Young Children (NAEYC) reported that they were losing money while operating in December 2020, and a quarter of home-based providers and a third of center-based providers surveyed indicated that they would close in the next 3 months without additional support.[240] While the extent that these costs are passed on to families remains to be seen, estimates indicate that child care operating costs increased by an average of 47% nationwide. In Arizona, costs were projected to jump substantially more, potentially increasing by 84% for center-based providers ($685 to $1,257) and 75% for family home providers ($732 to $1281).[241] Many providers are also facing significant staffing challenges and low enrollments. According to a survey by NAEYC in July 2021, most Arizona child care centers surveyed (84%) experienced staffing shortages, driven in large part by the low wages in the early education sector.[242]

For many providers, relief funds provided through the CARES Act, Coronavirus Response and Relief Supplemental Appropriations Act, and American Rescue Plan have been critical for reducing debt incurred during the pandemic.[243] These relief bills passed by Congress during the pandemic have allocated significant funds for child care providers, including $1.2 billion allocated for Arizona for the next three years.[244] Additionally, nearly $200 million dollars were allocated to Arizona's tribal governments for grants to tribal child care providers.[245, 246, 247]

Due to this federal funding, DES offered a Child Care COVID-19 grant program to help child care providers cover operational costs including but not limited to salaries, tuition relief for families, cleaning supplies and rent and utilities to safely remain open or reopen during the pandemic.[xxii] In the Coconino Region, 25 providers enrolled in this grant program offered through DES (Table 16). Most providers enrolled were located in the Greater Flagstaff Area (n=17). In more rural areas of the region, one out of the two providers in Grand Canyon Village-Tusayan-Valle enrolled in the program, as did three of the

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[xxi] *As of December 2020, this program transitioned to become the Essential Workers Relief Scholarship, which provided similar funds and scholarships through August 2021. More information can be found on the DES website: https://des.az.gov/services/child-and-family/child-care/emergency-child-care-scholarship-program*

[xxii] *For more information on the DES COVID-19 grant program please see https://des.az.gov/services/child-and-family/child-care/child-care-covid-19-grant-program*

five providers in Page, one of the three providers in Williams-Parks, and two of the ten providers in Winslow.

Table 16. Arizona Enrichment Centers and ECE providers who received COVID-19 grants, December 2020

Geography	Arizona Enrichment Centers	Number of children approved for enrollment	Percent of CCRR-listed providers that were AZ Enrichment Centers	Number of providers enrolled in COVID-19 grant program
Coconino Region	8	15	15%	25
Fredonia	0	0	N/A	0
Grand Canyon Village-Tusayan-Valle	0	0	N/A	1
Greater Flagstaff Area	7	15	19%	17
Havasupai Tribe	0	0	N/A	0
Hopi Tribe	0	0	N/A	0
Page	0	0	N/A	3
Williams-Parks	0	0	N/A	1
Winslow	1	0	14%	2
Coconino County	15	113	16%	23
Arizona	480	5,681	19%	1,808

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

Note: COVID-19 grantees include afterschool programs that serve children ages 5-12 as well as early childhood providers.

Additionally, many professional development programs for early care and education providers have adapted their services during the pandemic. The Association for Supportive Child Care (ASCC) transitioned their 2020 Northern Arizona Early Childhood Symposium from an in-person conference to a series of professional development trainings on an online learning platform.[248] ASCC provides professional development training sessions and series as well as Community of Practice for early childhood professionals, including one for child care center directors in Flagstaff and another for early literacy in Page. They have adapted their programing to a hybrid approach going forward to try to make these training and networks as accessible as possible during the pandemic.

Early Care and Education Affordability

In addition to issues of availability, the high cost of early care and education can place formalized care out of reach for many families. The average annual cost of full-time center-based care for a young child in Arizona is nearly equal to the cost of one year at a public college.[249,250] Without accounting for possible family discounts for families with multiple children at the same center, a family in the

Coconino Region with one preschooler and one infant can expect to pay about $1,384 per month for care in a licensed child care center (Figure 58). As a point of comparison, the median rent in Coconino County is $1,231,[251] meaning that formal child care arrangements may easily exceed what many families pay per month on housing.

The cost of care varies by the type of care and the age of the child receiving care. Care is typically more expensive for infants because the lower teacher-to-child ratio needed for infant care means higher staffing costs for providers. In 2018, in certified group homes in the Coconino Region, the median cost of full-time care across all age groups was lower relative to the cost of similar care across the state, and the cost in approved family homes was the same as that seen statewide (Figure 58). However, it is worth noting that there are very few registered home-based providers in the region—the only 2 DES-registered home providers are located in Winslow (Table 12). Most families seeking care in regulated providers in the region will therefore be enrolling children in center-based care. The cost of care in both the Coconino Region and the county are lower than seen statewide ($760/month for an infant vs. $861/month statewide; $624/month for a preschooler vs. $660/month statewide). Key informants in the region noted that the cost of care varies widely by community, with the highest costs seen in the Greater Flagstaff Area. While costs of care for infants are similar across the region, the monthly cost of care for a toddler or preschooler in Flagstaff exceeded that seen in Winslow or Page by $200 to $300 per month (see Table 75 in Appendix 1:

Early Childhood System).

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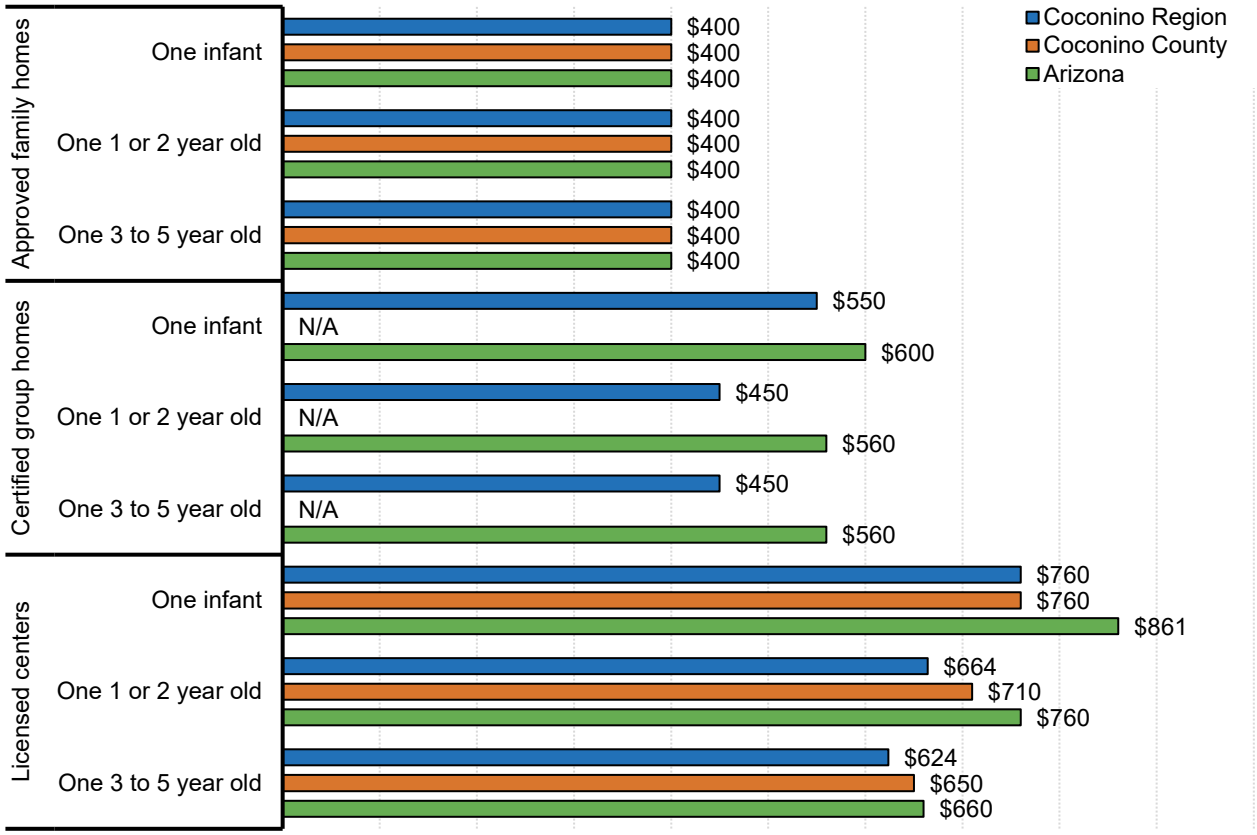
Figure 58. Median monthly charge for full-time child care, 2018



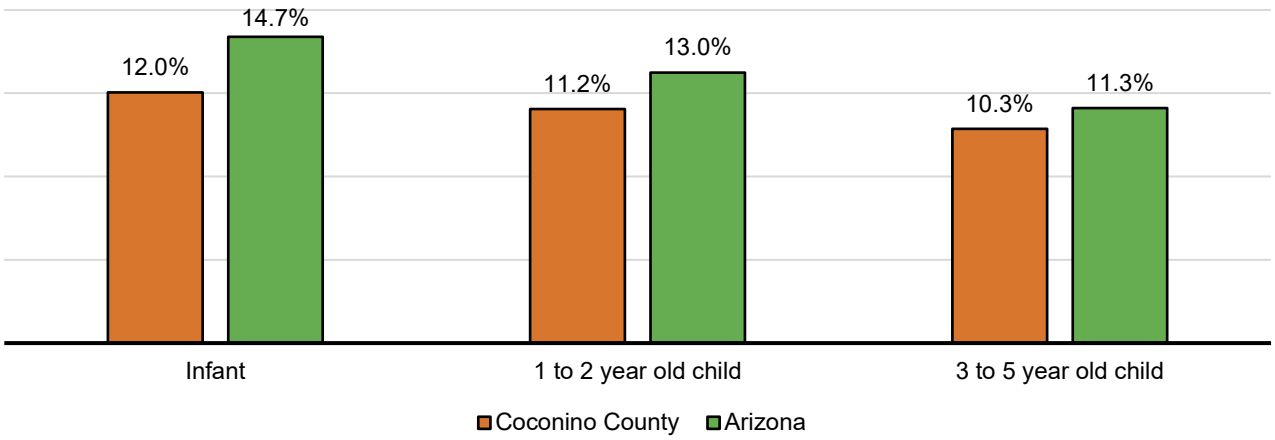
Source: Arizona Department of Economic Security (2021). [Child Care Administration dataset]. Unpublished data.

Note: Median monthly charges are calculated by multiplying the daily median cost of care by 20 to approximate a full month of care.

Due to the lower relative costs for center-based care as well as a higher median income, the cost of care as a percent of median family income is lower in Coconino County than in the state of Arizona. Based on a median family income of $75,800, families in Coconino County pay about 10-12% of their income for child care, depending on the child's age (Figure 59). Although this is slightly more affordable relative to other families statewide (11-15% of income a median $70,200 income), it still puts child care as a substantial cost for families, especially for families with multiple young children needing care. The U.S. Department of Health and Human Services recommends that parents spend no more than 10% of their family income on child care to avoid being financially overburdened. [252] Furthermore, these

proportions were calculated based on the median income for all families. Single-parent homes, particularly those led by a single-female householder, have a much lower median income (see Figure 14), resulting in a higher proportion of their income being spent on child care.

Figure 59. Cost of center-based child care for one child as a percent of income, 2018



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

Note: Annual costs of care are calculated by multiplying the median daily cost of care by 240 to approximate a full year of care.

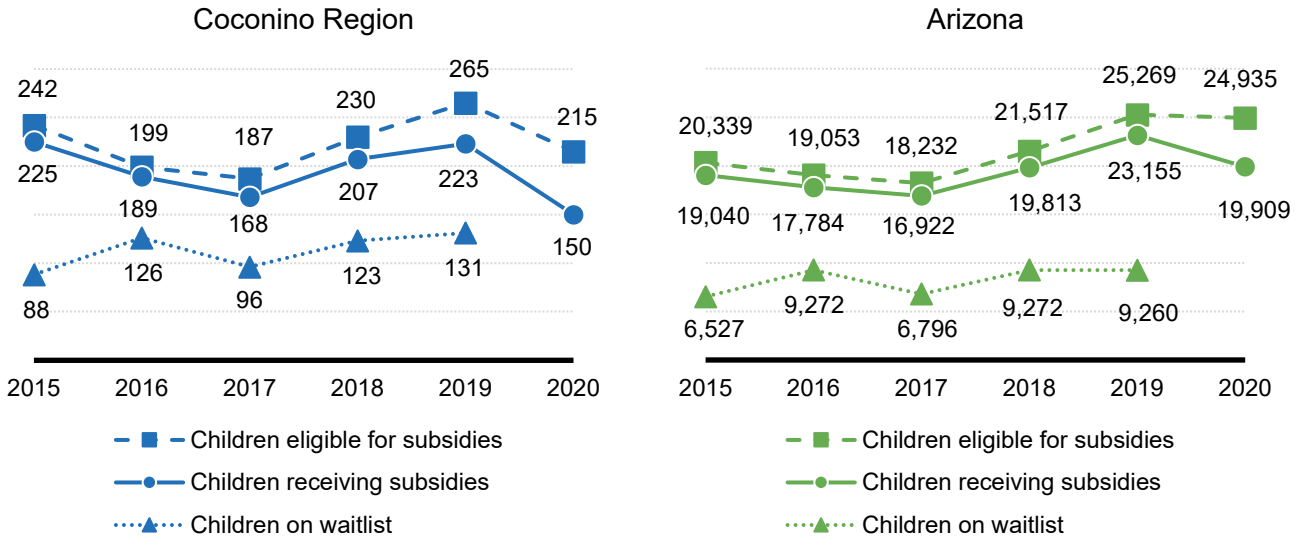
Child care subsidies provided by government agencies can help to offset families' child care costs, reducing financial barriers to accessing child care and ensuring parents can remain employed and provide for their family's needs.[xxiii] The number of children birth to 5 years eligible for DES child care subsidies in the Coconino Region increased steadily from 2017 (n=187) to 2019 (n=265) but fell in 2020 (n=215), likely due to the effects of the pandemic (Figure 60). The number of children receiving DES child care subsidies also tracked with the variations in eligibility numbers. Presumably as a result of the pandemic when many parents and caregivers ceased out-of-home care for their children,[253] 2020 saw a drop in the number of children using subsidies (Figure 60). The percent of eligible families in the region who were not using subsidies nearly doubled from 15% in 2019 to 27% in 2020, while similar increases from 8% to 18% were seen statewide (Figure 61).

Families in the Coconino Region are not alone in changing their child care arrangements during the pandemic. In a nationally representative survey in the summer of 2020, about half of families with young children (47%) reported that they lost their pre-pandemic child care arrangements, and the majority of parents and caregivers surveyed (70%) were worried about returning to prior arrangements.[254] Key informants in the region also noted that increases in wages have meant that more families are over the income eligibility criteria to qualify for subsidies, particularly in the Greater Flagstaff Area where wages have risen rapidly due to local legislation that raised the minimum wage.

[xxiii] For more information on child care subsidies see https://des.az.gov/services/child-and-family/child-care

Figure 60 also illustrates the suspension of the DES child care subsidy waiting list in June 2019. Prior to that, there had been over 100 young children in the region who were interested in the subsidy program but unable to promptly access that source of support. The suspension meant that for the first time since the start of the waitlist in 2009 during the Great Recession, all children who qualify for subsidies are able to receive them, assuming that they are able to find a provider.[255] This was due to $56 million in additional federal funds from the Child Care and Development Fund (CCDF) that was authorized by the Arizona State Legislature. The funding increase has also allowed DES to increase provider reimbursement rates, which may make it easier for families to use their child care subsidies.[256] The suspension of the waitlist has the potential to greatly increase access to subsidies in the region. However, the effects of the pandemic on the child care sector mean that more years of data will be needed to determine how more funding for subsidies affects access to care for families in the Coconino Region.

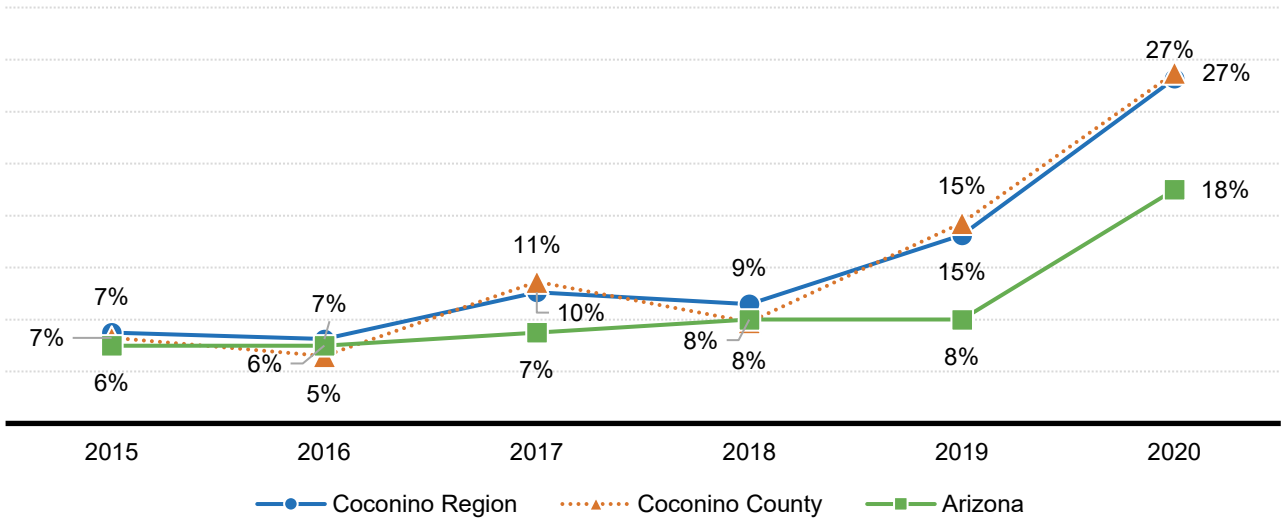
Figure 60. Children eligible for, receiving, and on waitlist for DES child care subsidies, 2015 to 2019



Sources: Arizona Department of Economic Security (2021). [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.

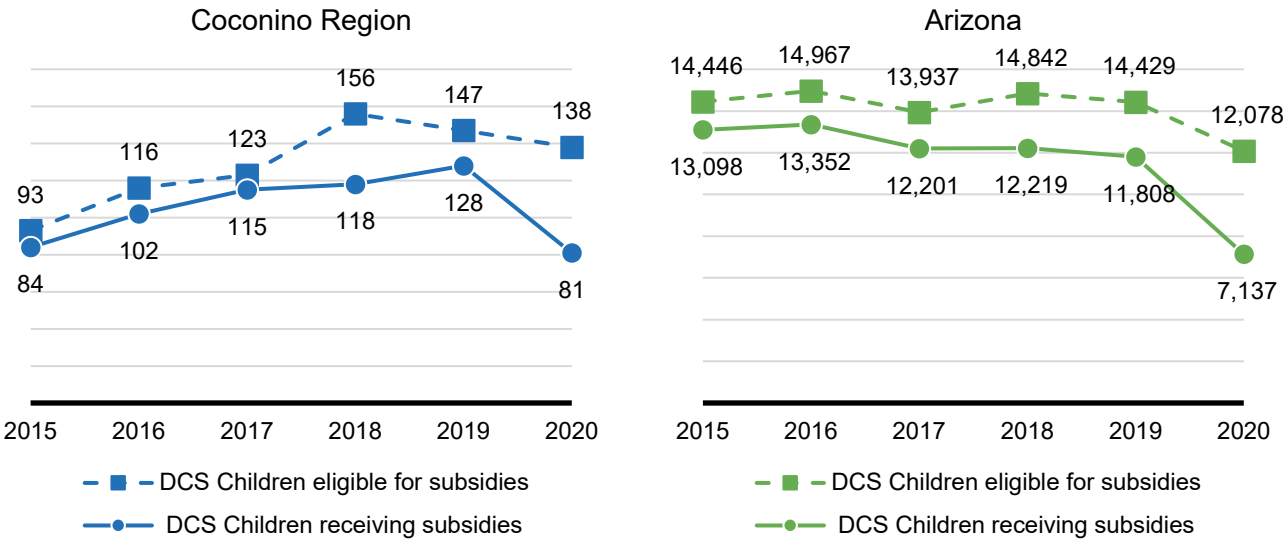
Figure 61. Eligible families not using DES child care subsidies, 2015 to 2020



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

The Department of Child Safety (DCS) has a special arrangement with DES to prioritize child care subsidies to DCS-involved families. This partnership aims to help protect children from abuse and neglect by reducing caregiver stress and providing opportunities for children to interact with adults outside of the family who could help alert DCS to potential concerns.[257] The number of DCS-involved children receiving DES child care subsidies was about 150 children annually in the years prior to the pandemic (Figure 62; note that these DCS-involved children are in addition to the non-DCS subsidy recipients). Then, as with the non-DCS-involved population, subsidy use dropped off considerably during the pandemic, both in the Coconino Region and statewide. The 81 DCS-involved children who used DES child care subsidies in 2020 represent 59% of those eligible. These children are in especially fragile families, where the stress of the pandemic coupled with the lack of outside support during quarantines and lockdowns could leave them particularly vulnerable. Nationwide, during the pandemic, reports of child maltreatment dropped – even as severity appeared to increase –as children were isolated at home, away from mandated reporters.[258,259] In the wake of the pandemic, additional efforts to support DCS-involved families may be warranted.

Figure 62. DCS-involved children eligible for, receiving, and on waitlist for DES child care subsidies, 2015 to 2019



Sources: Arizona Department of Economic Security (2021). [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.

Young Children with Special Needs

Timely and appropriate developmental screenings can help to identify children who may have special needs. By identifying these children early, intervention can help young children with, or at risk for, developmental delays to improve language, cognitive and socio-emotional development.[260,261] It also reduces educational costs by decreasing the need for special education.[262] In Arizona, services available to families with children with special needs include those provided through the Arizona Early Intervention Program (AzEIP),[xxiv] the Division of Developmental Disabilities (DDD),[xxv] and the Arizona Department of Education Early Childhood Special Education Program.[xxvi]

AzEIP is an interagency system of services and supports for families of young children (birth to 2) with disabilities or developmental delays in Arizona. The number of young children referred to AzEIP in the Coconino Region has varied over the past few years (Figure 63). Referrals increased between 2018 and 2019 in the region (307 and 340, respectively) and the state but dropped precipitously in 2020, with nearly 100 fewer children referred in the Coconino Region. Key informants in the Coconino Region noted that pediatric health care providers in the region have seen a steep decline in the number of children coming in for routine well-child visits, which may prevent early detection of disability or

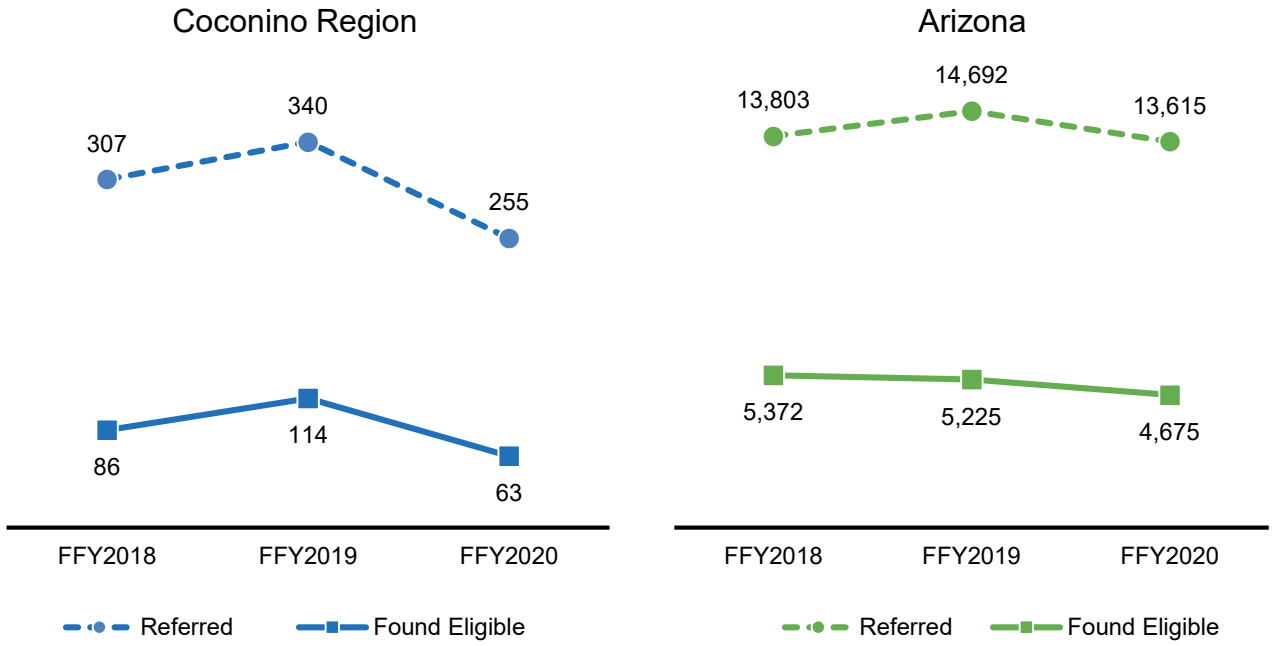
[xxiv] For more information on AzEIP, visit https://www.azdes.gov/azeip/

[xxv] For more information on DDD, visit https://des.az.gov/services/disabilities/developmental-disabilities

[xxvi] 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/

delays. Additionally, many healthcare providers switched to telemedicine appointments during the pandemic, which can hamper doing thorough developmental screenings.

Figure 63. Children ages birth to 2 referred to and found eligible for AzEIP, federal fiscal years 2018 to 2020

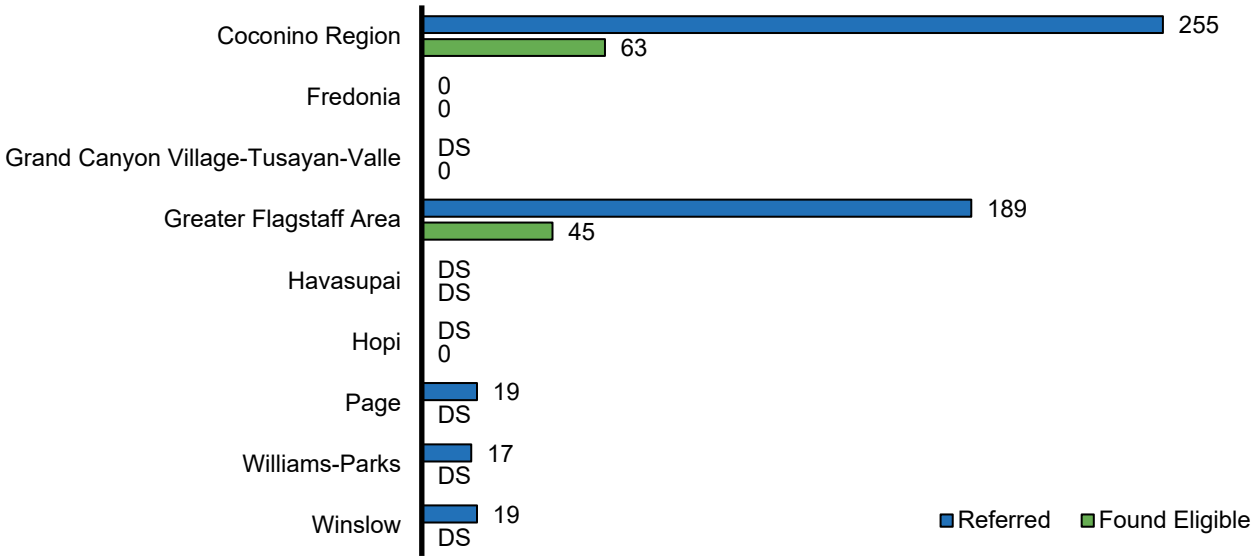


Sources: Arizona Department of Economic Security (2021). [Arizona Early Intervention Program dataset]. Unpublished data.

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

The majority of children referred to (n=189, 74%) and found eligible by AzEIP (n=45; 71%) reside in the Greater Flagstaff Area (Figure 64). When compared to the share of children by community (Figure 2), this suggests that children receiving AzEIP services are more concentrated in the Flagstaff area than would be expected based on the population and may indicate that children in more rural communities are less likely to access early intervention services, at least in 2020. Key informants noted that before the pandemic, Northland Rural Therapy Associates, the primary AzEIP service provider in the Coconino Region, traveled widely throughout the region to provide services to children in rural and isolated communities, but they transitioned to virtual services during the pandemic, which may have limited access for rural families, especially those in tribal communities with poor internet access.

Figure 64. Number of children (ages 0-5) receiving AzEIP services, state fiscal year 2020



Sources: Arizona Department of Economic Security (2021). [Arizona Early Intervention Program dataset]. Unpublished data.

The number of children found eligible largely followed the same trajectory as referrals, rising to a high of 114 in 2019 then falling by nearly 50% to 63 children found eligible in the region in 2020 (Figure 64). Only 25% of children referred in the region in 2020 were found eligible, which is substantially lower than the rate in the state overall (34% in 2020). The state of Arizona has some of the strictest eligibility requirements for early intervention services of any state in the U.S.[263] Providing early intervention services for young children has been shown to reduce the need for special education services later in childhood,[264] so assuring that children have access to timely and adequate screening and intervention services from birth to five can be key for helping children to be ready for kindergarten. That the Coconino Region has so few children qualifying for these services may be a cause for concern.

The pandemic caused widespread disruption to early intervention services. In spring 2020, AzEIP halted in-home and community services and switched to virtual visits (computer-or phone-based).[265] The transition to remote services was challenging for both service providers and families. Technology was a barrier to families receiving early intervention services, and the form of services often transitioned to more of a family-coaching approach rather than direct interaction with the child.[266] Key informants in the Coconino Region indicated that the switch to virtual visits was challenging for parents, and that many parents want in-person services for their children. Difficulties encountered in the transition to remote services often meant that service providers were triaging clients and focusing their efforts on providing services to the highest-need children, which may mean that young children with less severe delays were not able to access early intervention services.

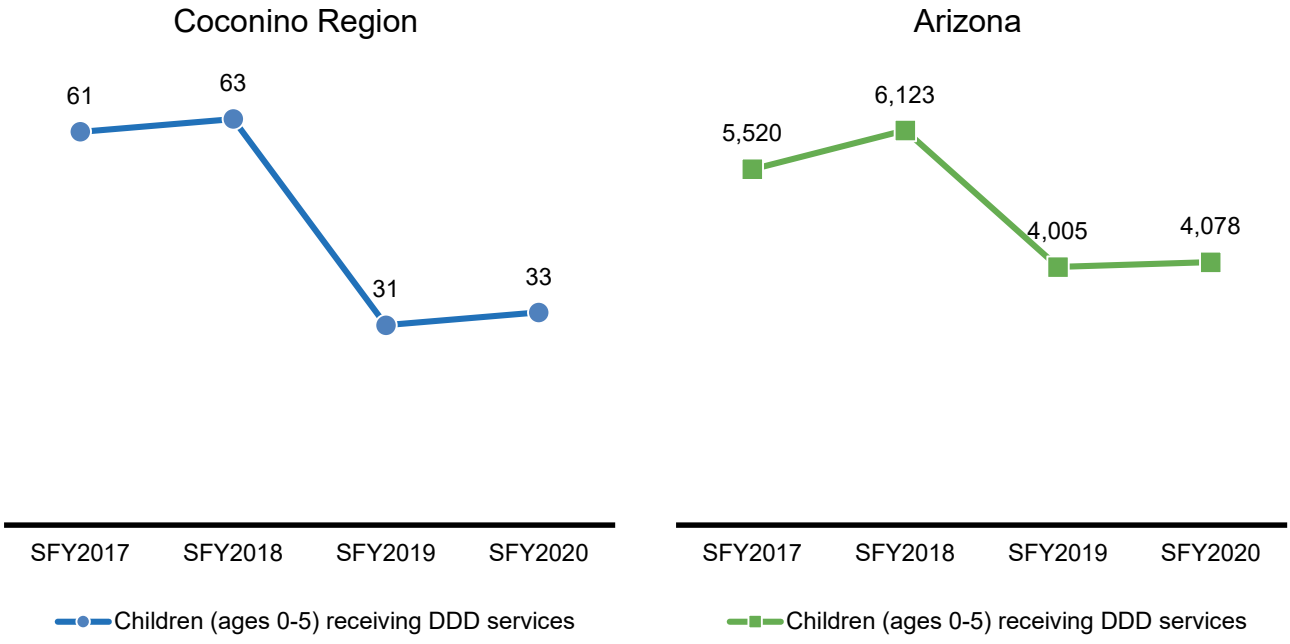
Given these added challenges, it is not surprising that families with young children with special needs also struggled more emotionally and psychologically through the pandemic. According to a nationally representative series of surveys throughout the pandemic, in households of children with disabilities,

both young children and their caregivers experience higher levels of stress and anxiety than households of typically developing children.[267,268]

AzEIP may refer families to the Division of Developmental Disabilities (DDD) if the child has or is at risk for developing a qualifying disability, including cerebral palsy, epilepsy, autism spectrum disorder or an intellectual or cognitive disability.[xxvii] DDD can provide services to individuals with qualifying disabilities through adulthood. Qualifying children may receive services from both AzEIP and DDD.

Recent years have seen a substantial decline (-46%) in the number of young children receiving DDD services across the Coconino Region (Figure 65). This pattern very similar to that seen across the state as a whole, and the reasons for the decline before the pandemic are unknown. Interestingly, the number of children being served by DDD increased very slightly from 2019 and 2020 in both the Coconino Region and across the state, despite the pandemic interruptions.

Figure 65. Number of children (ages 0-5) receiving DDD services, state fiscal years 2017 to 2020



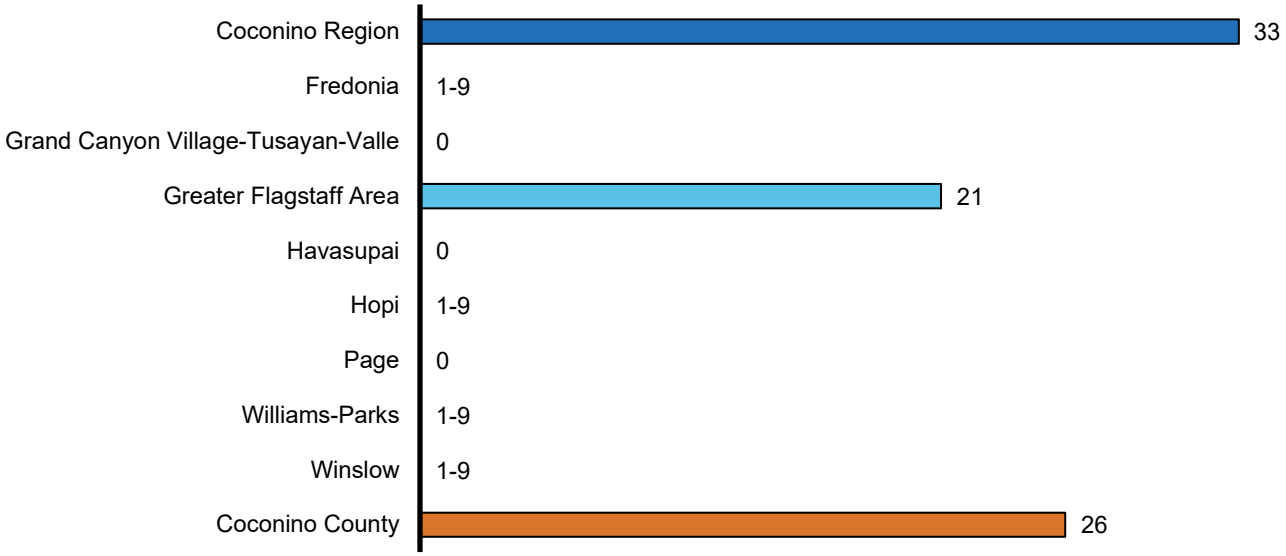
Sources: Arizona Department of Economic Security (2021). [Arizona Early Intervention Program dataset]. Unpublished data.

Similar to trends seen in AzEIP referrals and eligibility, most children birth to 5 receiving DDD services in 2020 (n=21; 63%) resided in the Greater Flagstaff Area (Figure 66). However, this is much closer to

[xxvii] For more information on the Division of Developmental Disabilities (DDD) eligibility see https://des.az.gov/services/disabilities/developmental-disabilities/determine-eligibility

the expected distribution of children across the region (Figure 2), indicating that DDD services may be more evenly distributed in both the Flagstaff and more rural parts of the region.

Figure 66. Number of children (ages 0-5) receiving DDD services, state fiscal year 2020



Sources: Arizona Department of Economic Security (2021). [Arizona Early Intervention Program dataset]. Unpublished data.

A 2008 study using nationally representative data estimates that approximately 13% of children ages 0-2 in the U.S. have developmental delays that could benefit from early intervention services, but only about 3% of children actually receive services.[269] Furthermore, Arizona has been among the bottom five states in terms of young children receiving early intervention services.[270] In the Coconino Region, the proportion of children receiving services is even lower than that that national estimate. An estimated 2.3% of children birth to 2 years[xxviii] were receiving services from AzEIP or DDD in 2020, which is a slightly higher than the proportion statewide (2.1%) (Table 17). While the region is slightly outperforming the state, these data suggest that there are likely many young children in the Coconino Region who would benefit from early intervention services but are not receiving them. The estimated percentage of children birth to 2 receiving services varied across the region from a low of 0% in Havasupai Tribe, where no children received AzEIP or DDD services in 2020, to 3.2% in Page.

Key informants in the Coconino Region identified multiple barriers to accessing early intervention services in the region. Child care providers may refer children to AzEIP, but accessing services requires parents to follow-through on the referral. Many parents find the process of accessing services overwhelming and need support to walk them through the process of who to call and what steps to take. Transportation is also a persistent barrier to accessing services and events for many families. One parent

[xxviii] *These estimates rely on 2010 Census data, so in areas with large growth in the population of families with young children in the last decade, these percentages would be an underestimate.*

educator noted that her organization had found that some parents found the transition to virtual services helped them access classes they otherwise would not have been able to attend were they held in person.

Table 17. Numbers of children (ages 0-2) receiving services from AzEIP, DDD, or both; state fiscal years 2019 and 2020

Geography	Children receiving AzEIP or DDD services, SFY 2019	Children receiving AzEIP or DDD services, SFY 2020	Percent change from 2019 to 2020	Population of Children (ages 0-2), 2010 Census	Estimated percent of children (ages 0-2) receiving AzEIP or DDD services, SFY 2020
Coconino Region	**97**	**108**	**+11%**	**4,759**	**2.3%**
Fredonia	0	[1-9]	DS	55	DS
Grand Canyon Village-Tusayan-Valle	[1-9]	[1-9]	DS	123	DS
Greater Flagstaff Area	64	68	+6%	3,122	2.2%
Havasupai	[1-9]	0	DS	35	0.0%
Hopi	11	10	-9%	402	2.5%
Page	10	11	+10%	339	3.2%
Williams-Parks	[1-9]	[1-9]	DS	236	DS
Winslow	[1-9]	10	DS	431	2.3%
Coconino County	94	99	+5%	5,350	1.9%
Arizona	6,376	5,721	-10%	270,519	2.1%

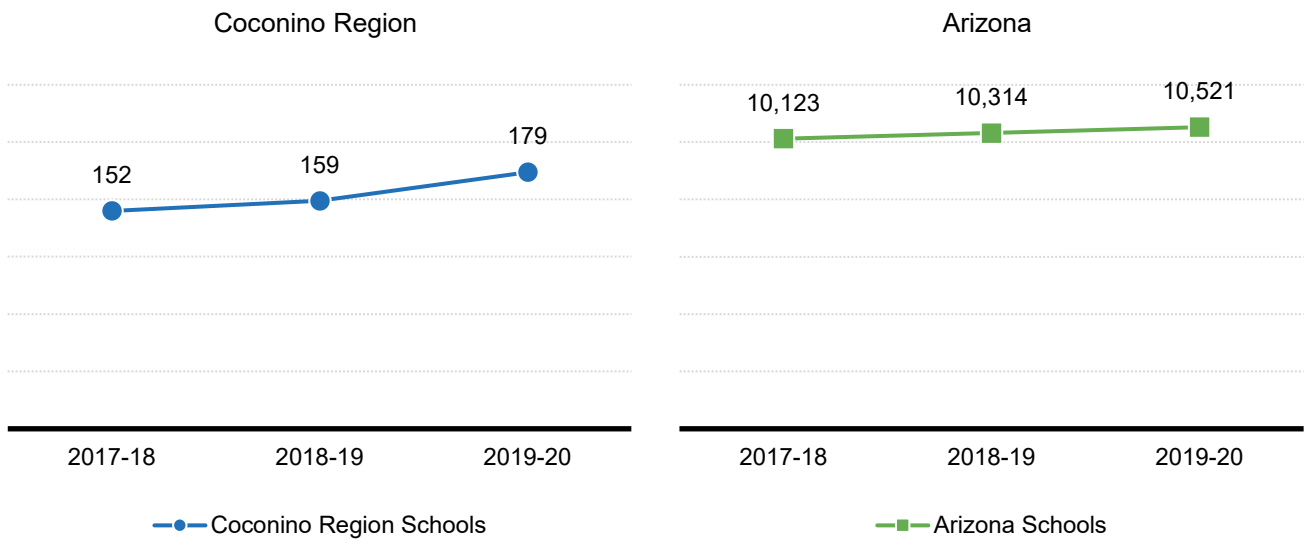
Source: Arizona Department of Economic Security (2021). [Arizona Early Intervention Program & Division of Developmental Disabilities datasets]. Unpublished data. U.S. Census Bureau (2010). Decennial Census, Table P14.

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

As a child with special needs approaches age 3, they transition from receiving services through AzEIP to receiving services from their local education authority (LEA). Data from the Arizona Department of Education show that the number of young children (ages 3 to 5) with special needs receiving services from LEAs in the Coconino Region has increased from 152 children in the 2017-18 school year to 179 children receiving services in 2019-20 (Figure 67).

The increases in the number of children ages 3-5 with special needs receiving services in the region and state match national trends. Nationwide, the number of children receiving special education services has been increasing over the past few years.[271,272,273] Providing early intervention services for young children has been shown to reduce the need for special education services later in childhood,[274] so assuring that children have access to timely and adequate screening and intervention services from birth to 5 can be key for helping children to be ready for kindergarten.

Figure 67. Trends in preschoolers with disabilities served by Local Education Authorities (LEAs), 2017-18 to 2019-20

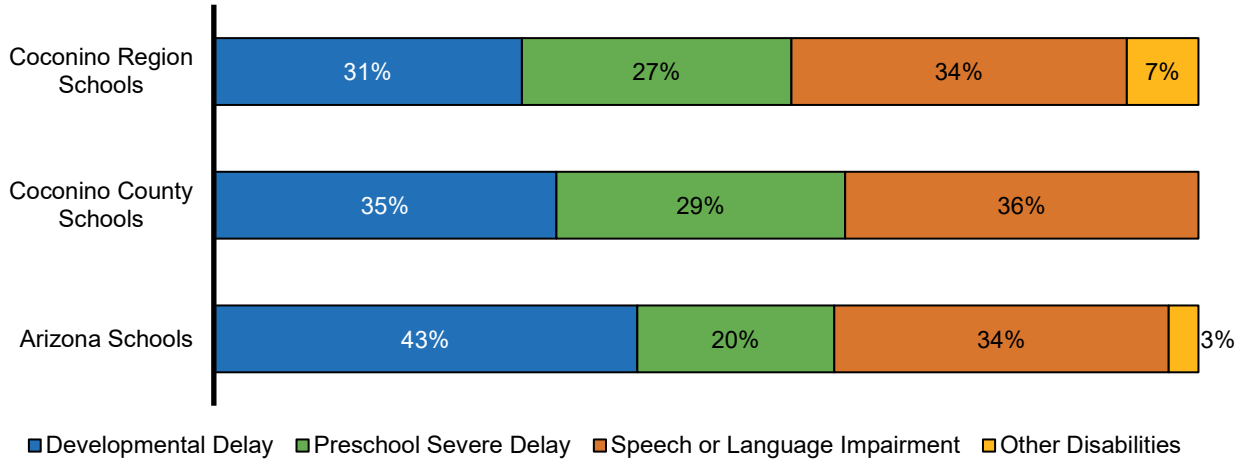


Source: Arizona Department of Education (2021). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

While the increase in children receiving services may indicate better identification of disabilities and delays, the availability of early learning opportunities and services for young children with special needs is an ongoing concern across Arizona, particularly in more geographically remote communities and some tribal communities. Beyond the existing challenges in serving these students, pandemic-related school closures greatly impacted children with special needs. In-person services for children offered through LEAs were disrupted and required transitions to remote modalities.[275] Young children with special needs may need additional supports to compensate for the challenges faced during these disruptions.

Among preschool-age children receiving services from LEAs in the Coconino Region, the majority have either a speech or language impairment (34%) or developmental delay (31%) (Figure 68, Table 18). The remainder either have a preschool severe delay (27%) or other disability (7%). The preschool severe delay category is defined by Arizona as a very low score on assessments of in one or more of these areas: cognitive development, physical development, communication development, social or emotional development, or adaptive development.[276] Compared to the state, the Coconino Region has a higher proportion of preschoolers with a preschool severe delay (27% vs. 20%) and a lower proportion of preschoolers with a developmental delay (31% vs. 43%).

Figure 68. Preschoolers with disabilities receiving services through Local Education Authorities (LEAs) by type of disability, 2019-20



Sources: Arizona Department of Economic Security (2021). [Arizona Early Intervention Program dataset]. Unpublished data.

Note: The Coconino Region Schools total includes children enrolled at the North Central Region campus of the Arizona State Schools for the Deaf and Blind (ASDB). ASDB is not included in county totals.

This pattern is not consistent across school districts where data are available. The Williams and Winslow Unified Districts have the highest proportion of preschoolers receiving services diagnosed with a speech or language impairment (86% and 53% respectively), representing more than half of all preschoolers receiving services (Table 18). Flagstaff Unified District has the highest proportion of preschoolers with a preschool severe delay (42%), and in Grand Canyon Unified District two out of three preschoolers receiving services (67%) have a developmental delay.

Table 18. Preschoolers with disabilities receiving services through Local Education Authorities by type of disability, 2019-20

Geography	Number of preschoolers enrolled	Developmental Delay	Preschool Severe Delay	Speech or Language Impairment	Other Disabilities
Coconino Region Schools	**179**	**31%**	**27%**	**34%**	**7%**
Flagstaff Unified District	88	36%	42%	22%	<2%
Williams Unified District	DS	14%	<2%	86%	<2%
Grand Canyon Unified District	DS	67%	<2%	33%	<2%
Fredonia-Moccasin Unified District	DS	DS	DS	DS	DS
Page Unified District	31	45%	6%	48%	<2%
Maine Consolidated School District	DS	>98%	<2%	<2%	<2%
Winslow Unified District	DS	21%	26%	53%	<2%
Coconino County Schools	184	35%	29%	36%	<2%
Arizona Schools	10,521	43%	20%	34%	3%

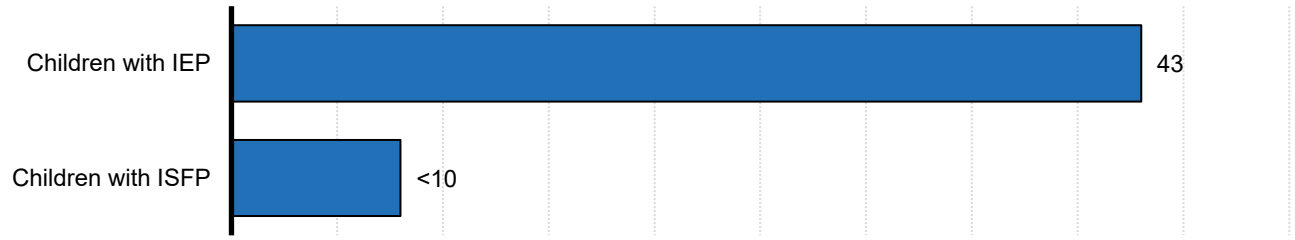
Source: Arizona Department of Education (2021). [Graduation Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: The Coconino Region Schools total includes children enrolled at the North Central Region campus of the Arizona State Schools for the Deaf and Blind (ASDB). ASDB is not included in county totals.

Head Start programs also serve young children with special needs. In 2019-20, Head Start programs operated by N.A.C.O.G. served 43 Head Start participants through individualized education plans (IEPs), and fewer than 10 Early Head Start participants with individualized family service plans (IFSPs)[xxix] (Figure 69). However, the total number of children with IEPs and IFSPs fell to 10 in 2020-21 due to the pandemic. Among the children with disabilities served by N.A.C.O.G. Head Start in 2019-20 (pre-pandemic), 69% had developmental delays and 18% had speech impairments (Figure 70). The Havasupai Tribe Head Start and Early Head Start programs had fewer than 10 enrolled children with IEPs or ISFPs in the 2018-19 and 2020-21 school years.[277] The Hopi Tribe Head Start Program had 15 children with IEPs in the 2018-19 school year, but this number fell to fewer than 10 in the 2020-21 school year due to the pandemic.[278]

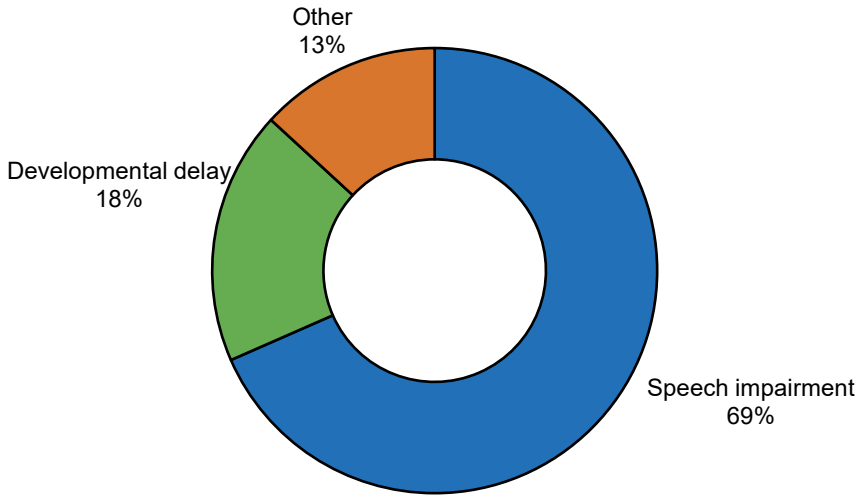
[xxix] *For more information on IEPs vs IFSPs: https://eclkc.ohs.acf.hhs.gov/publication/services-children-who-do-not-qualify-idea-fact-sheet*

Figure 69. Children with disabilities served by Coconino Region N.A.C.O.G. Head Start, 2019-20



Source: Northern Arizona Council of Governments (2021). Head Start Program Data [Dataset]. Data received by request.

Figure 70. Children with disabilities by Coconino Region N.A.C.O.G. Head Start by type of disability, 2019-20



Source: Northern Arizona Council of Governments (2021). Head Start Program Data [Dataset]. Data received by request.

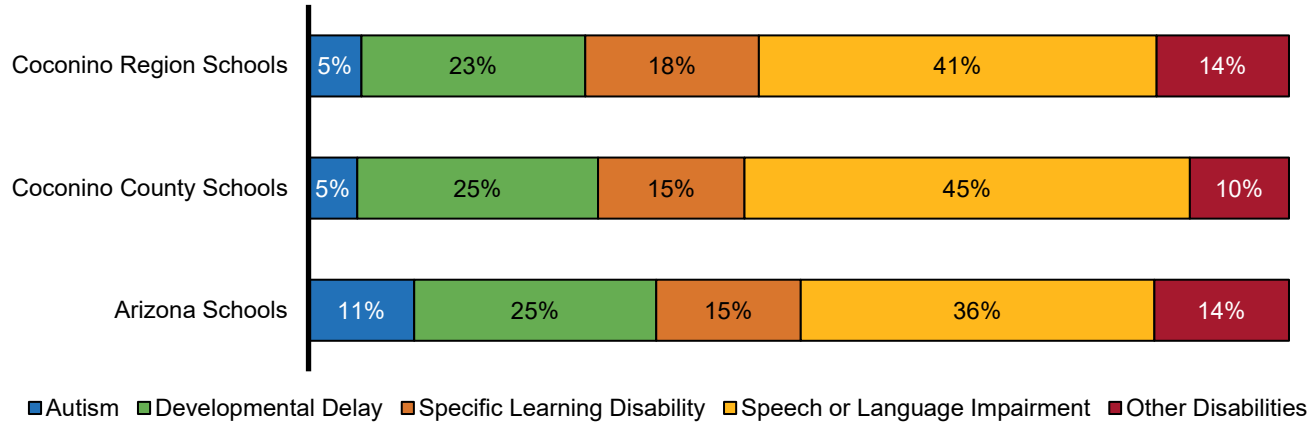
These numbers reiterate that the disruptions to schooling and early education have been severe for children with special needs and their families. Children with special health care needs may particularly benefit from high quality teacher-child interactions in classrooms,[279,280] as they are more likely to experience more adverse childhood experiences than typically developing children,[281] and are at an increased risk for maltreatment and neglect.[282,283] Pandemic-related school closures greatly reduced the opportunity for these interactions.[284] Thus as early care and education providers and schools resume more normal activities, there is an acute need for additional supports for children with special needs who were especially affected by the pandemic.

For older children in the region (enrolled in kindergarten through third grade), the number of children enrolled in special education services in public or charter schools has remained steady over the past three years. In the 2019-2020 school year, there were 662 kindergarten to third grade students enrolled in special education in public and charter schools in the Coconino Region (Table 19). This is more than six times the number of children birth to 2 in the region being served by early intervention services (108 served by AzEIP and DDD in 2020). Even accounting for the wider age range served in elementary school, there are relatively more students being served through schools than early intervention programs. It may be that children with delays are being identified and diagnosed when they are older, potentially missing the opportunity for earlier intervention that can be more effective and less costly.

Of those kindergarten through third grade students enrolled in special education in public and charter schools in the Coconino Region, most have a primary disability of a speech or language impairment (41%) or developmental delay (23%) (Figure 71). Less often these children have a primary disability of specific learning disability (18%), other disabilities (14%) or autism (5%). Compared to the state, there is a smaller proportion of children with autism as a primary disability (5% vs. 11%), and a higher proportion of children with specific learning disabilities and speech or language impairments.

School-based services for older children with special needs were also significantly impacted, with remote learning creating barriers to fulfilling students' Individualized Education Plans (IEPs) resulting, for some, in a loss of academic, social and physical skills that will require targeted support to address.[285] As schools return to in-person learning, students with special needs may need additional supports to build skills and recover unfinished learning over the past year and a half.

Figure 71. Kindergarten to 3rd grade students enrolled in special education in public and charter schools by primary disability, 2019-20



Sources: Arizona Department of Economic Security (2021). [Arizona Early Intervention Program dataset]. Unpublished data.

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.

Table 19. Kindergarten to 3rd grade students enrolled in special education in public and charter schools by primary disability, 2019-20

Geography	Number of K-3 students enrolled	Autism	Developmental Delay	Specific Learning Disability	Speech or Language Impairment	Other Disabilities
Coconino Region Schools	662	**5%**	**23%**	**18%**	**41%**	**14%**
Flagstaff Unified District	270	4%	25%	16%	47%	9%
Williams Unified District	22	16%	16%	9%	53%	6%
Grand Canyon Unified District	16	<2%	35%	25%	25%	15%
Fredonia-Moccasin Unified District	DS	13%	<2%	6%	81%	<2%
Page Unified District	73	3%	41%	17%	29%	11%
Maine Consolidated School District	DS	10%	20%	50%	20%	<2%
Winslow Unified District	[79-89]	9%	16%	40%	14%	21%
Pine Forest Education Association, Inc.	DS	9%	18%	<2%	73%	<2%
Mountain School, Inc.	DS	7%	7%	<2%	71%	14%
Flagstaff Montessori, L.L.C.	DS	<2%	<2%	33%	44%	22%
Flagstaff Junior Academy	DS	<2%	<2%	67%	33%	<2%
Painted Desert Demonstration Projects, Inc.	DS	<2%	<2%	17%	83%	<2%
PEAK School Inc., The	DS	<2%	25%	13%	63%	<2%
Heritage Elementary School	DS	33%	<2%	<2%	67%	<2%
Haven Montessori Children's House, Inc.	DS	<2%	<2%	<2%	>98%	<2%
BASIS Charter Schools, Inc.	14	19%	13%	6%	50%	13%
Arizona State School for the Deaf & Blind, North Central Regional Cooperative	24	<2%	<2%	<2%	<2%	>98%
Coconino County Schools	643	5%	25%	15%	45%	10%
Arizona Schools	39,071	11%	25%	15%	36%	14%

Source: Arizona Department of Education (2021). [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 Childhood System* can be found in Appendix 1 at the end of this report.

CHILD HEALTH

CHILD HEALTH

Why it Matters

The physical and mental health of both children and their parents are important for optimal child development and well-being. Early childhood health, and even maternal health before pregnancy, has lasting impacts on an individual's quality of life.[286,287] Experiences during the prenatal and early childhood period can result in lifelong impacts on immune functioning, brain development and risk for chronic diseases.[288,289] Early health also has lasting impacts on long-term economic well-being of individuals and the well-being of their future children, with poor childhood health potentially perpetuating the harmful cycle of intergenerational poverty.[290,291] Therefore, adequate access to health insurance, preventive care and treatment services is not only vital to support a child's current health but also their long-term development and future success.[292,293,294]

One useful set of metrics for evaluating child health are the Healthy People objectives. These science-based objectives define priorities for improving the nation's health and are updated every 10 years. Understanding where Arizona children and mothers fall in relation to these national benchmarks (Healthy People 2020)[xxx,xxxi] can help highlight areas of strength in relation to young children's health and those in need of improvement. The Arizona Department of Health Services monitors state level progress towards a number of Healthy People maternal, infant and child health objectives for which data are available at the county and community levels, including increasing the proportion of pregnant women who receive prenatal care in the first trimester, reducing low birth weight, reducing preterm births and increasing abstinence from cigarette smoking among pregnant women.[295]

What the Data Tell Us

Access to care

The ability to obtain health care is critical for supporting the health of pregnant mothers and young children. Health care during pregnancy, i.e., prenatal care, can reduce maternal and infant mortality and complications during pregnancy.[296,297] In the early years of a child's life, well-baby and well-child visits allow clinicians to assess and monitor the child's development and offer developmentally appropriate information and guidance to parents.[298] Families without health insurance are more likely to skip these visits, and are less likely to receive preventive care for their children or care for health conditions and chronic diseases.[299,300] Access to health insurance is also an important indicator of children's access to health services. Children who lack health insurance are more likely to be hospitalized and to miss school.[301]

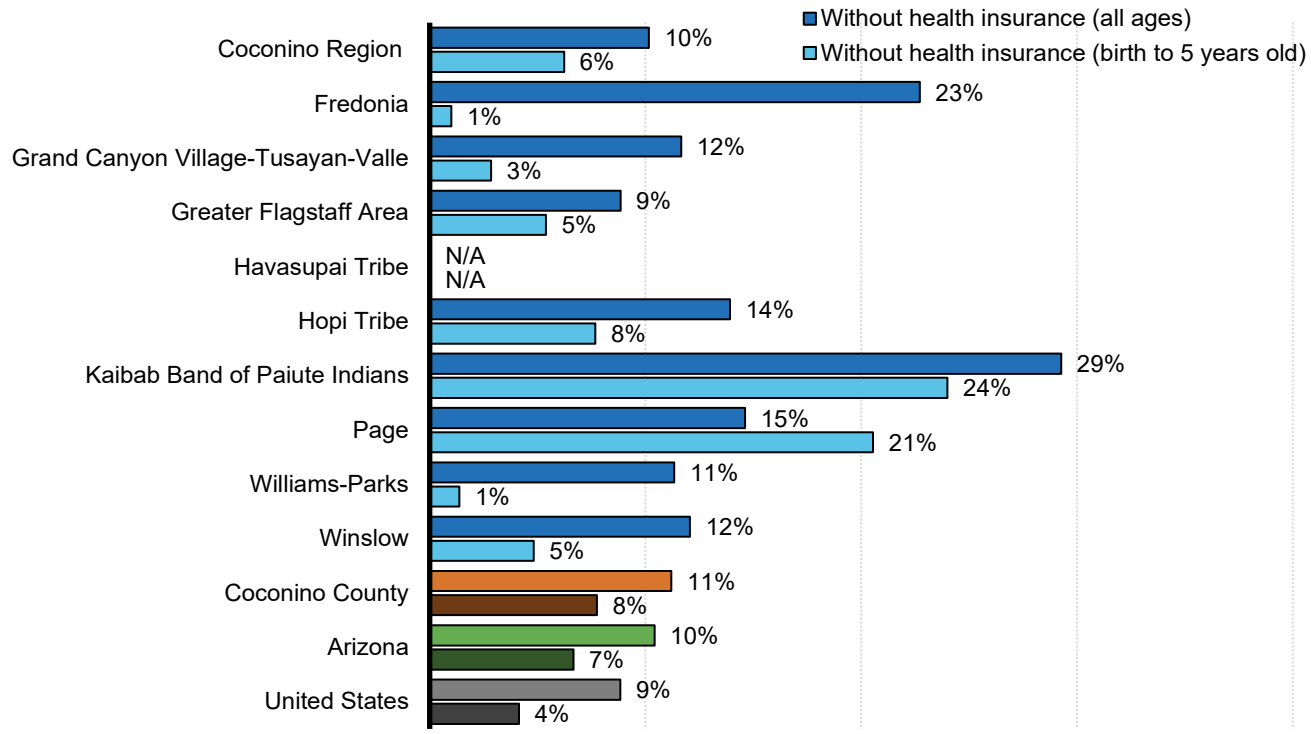
[xxx] *Data included in this report are presented alongside Healthy People 2020 benchmarks because data are available through 2019. However, new Healthy People 2030 benchmarks have now been released and are noted where appropriate. For more information about Healthy People 2030 visit https://health.gov/healthypeople*

[xxxi] *For more information about the Healthy People 2020 objectives, visit https://www.healthypeople.gov/2020/*

In the Coconino Region, according to American Community Survey (ACS) data averaged over the five years from 2015 to 2019, an estimated 10% of the overall population do not have health insurance coverage, the same percentage seen in statewide (10%) (Figure 72). Coverage is slightly higher for young children under 6, with only 6% of young children in the region uninsured, slightly lower than the state (7%), but higher than across the U.S. as a whole (4%). Health insurance coverage varies by community, with Fredonia having the highest percentage of people of all ages who are uninsured (23%), but one of the lowest percentages of uninsured young children (1%). Page (15%), Hopi Tribe (14%), Grand Canyon Village-Tusayan-Valle (12%), Winslow (12%) and Williams-Parks (11%) all have higher percentages of the population who are uninsured than the region or state as a whole. Please note that the ACS considers persons who are eligible to receive health services from the Indian Health Service (IHS) uninsured.[302] IHS provides health services to American Indians and Alaska Natives under the U.S. federal governments' treaty obligations to members of federally-recognized tribes. Page has the highest percentage of uninsured young children (21%), more than five times the national rate, though again, young children in the community may have access to health care through IHS facilities or tribally-operated health systems if they are affiliated with a federally-recognized tribe.

IHS health care facilities located in the Coconino Region include Supai Canyon Health Station, which serves the Havasupai Tribe community; Hopi Health Care Center, which serves the Hopi Tribe community; and Kaibab-Paiute Health Station, serving the Kaibab Band of Paiute Indians. Residents of these communities may also travel to other facilities to receive care, including Tuba City Regional Health Care Corporation, a tribally-operated independent health system with a hospital located in Tuba City that serves both the Navajo and Hopi communities, or Winslow Indian Health Care Corporation, another tribally-operated health care facility located in Winslow. Data provided by IHS indicate that in fiscal year 2019, 62 unique children (ages 0-5) from the Havasupai Tribe and 507 unique children (ages 0-5) from the Hopi Tribe were served at IHS health care facilities (see Table 83). These data suggest that nearly all young children in the Havasupai Tribe and the majority of young children (66% of the 2010 Census estimate) in the Hopi Tribe communities access care through IHS facilities.

Figure 72. Health insurance coverage, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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 access to health care through the Indian Health Service (IHS) are considered "uninsured" by the U.S. Census Bureau. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Table 20. Active users seen at Indian Health Services facilities, fiscal year 2019

Geography	Active Users (All Ages)	Active Users (Ages 0-5)
Havasupai Tribe	62	521
Hopi Tribe	507	6,375

Source: Indian Health Service, Phoenix Area (2021). [Child health dataset]. Unpublished data received by request

Federal relief efforts during the pandemic have included expansion of subsidies for health insurance purchased on Affordable Care Act marketplaces as well as special and expanded enrollment periods for insurance through these marketplaces.[303] These efforts helped prevent losses of insurance for many Americans despite the enormous number of jobs lost and may make health insurance more accessible for families in Arizona.[304] The Coronavirus Aid, Relief, and Economic Security (CARES) Act, Families First Coronavirus Response Act (FFCRA), and American Rescue Plan (ARP) also included several billion dollars of funding for IHS. Though much of this funding was directed toward immediate

response to the COVID-19 pandemic in Indian Country, some of the funding was allocated for updating facilities, funding community health representative and public health nursing programs and supporting mental health care and substance abuse programs.[305, 306]

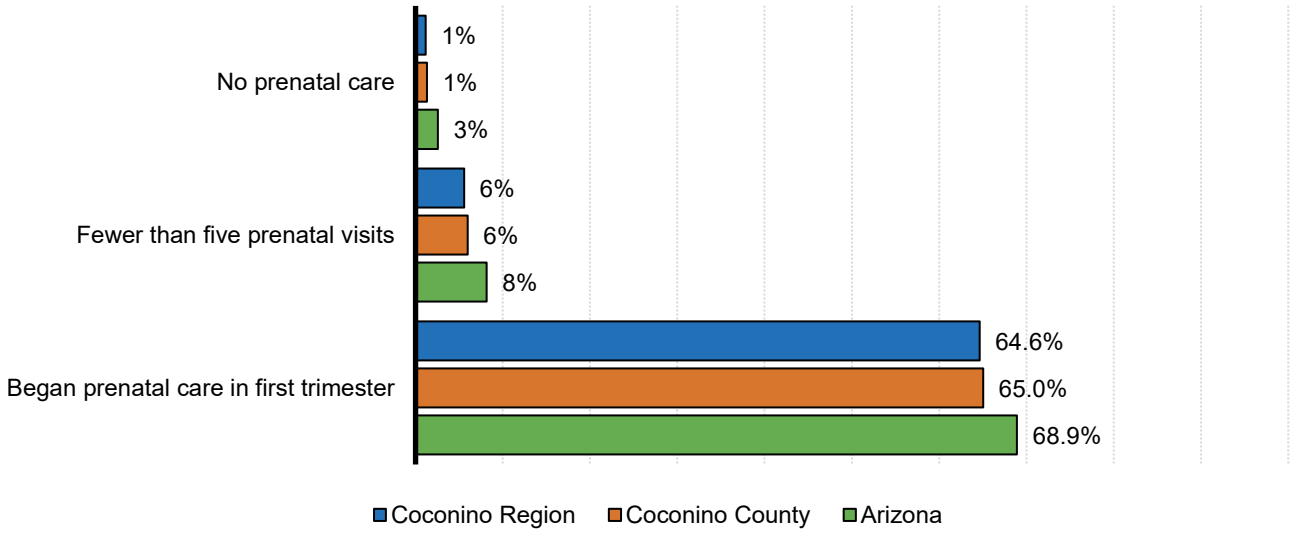
Prenatal care

Consistent and accessible health care during and after pregnancy is critical for supporting pregnant mothers and young children. Prenatal care, starting early in pregnancy and continuing at regular intervals to delivery, can improve health outcomes for mothers and infants and reduces the risk of prenatal smoking, pregnancy complications, prematurity and maternal and infant mortality.[307,308,309,310]

In 2019, there were 1,292 births in the Coconino Region (Figure 3). Among these births, less than two-thirds (64.6%) were to mothers who began prenatal care in their first trimester, which is both lower than the state overall (68.9%) and well below the Healthy People 2020 target of 84.8% (Figure 73). However, while early prenatal care lags in the region, the share of births to mothers who received no prenatal care or minimal prenatal care (fewer than five visits) fell in the Coconino Region to 6% with minimal care and 1% with no care (Figure 74), which is lower than rates in the state (8% and 3%, respectively). This suggests that most women do receive prenatal care, just not as early as is recommended.

Rates of births to mothers receiving prenatal care in the first trimester did vary by community (Figure 75). Over the past three years, 88.9% of births were to mothers who received first trimester prenatal care in Fredonia, meeting the Healthy People 2020 target, while approximately three out of four births in Grand Canyon Village-Tusayan-Valle, Page, and the Greater Flagstaff Area were to mothers who received first trimester care, which is below the target but well above the regional rate. By contrast, only 56.4% of births in the Hopi Region were to mothers began prenatal care in the first trimester. Further, among mothers enrolled in the Hopi Tribe WIC program, 15% reported receiving no medical care at all during pregnancy in 2018.[311] Given the impacts of inadequate prenatal care on birth outcomes, targeted efforts to engage more women in timely prenatal care could help improve the health of mothers and babies.

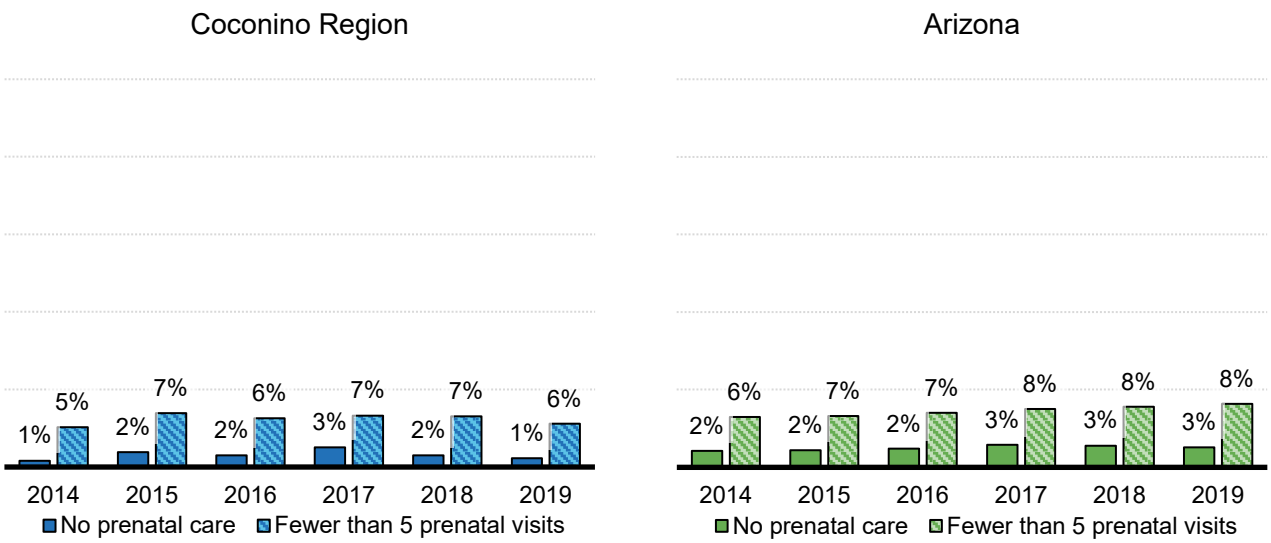
Figure 73. Prenatal care for the mothers of babies born in 2019



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

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

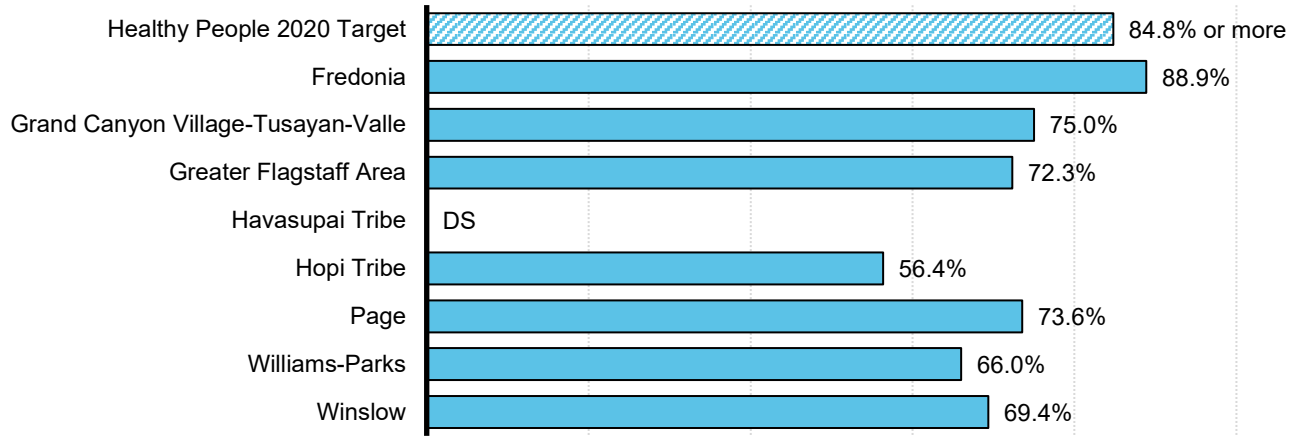
Figure 74. Births to mothers with inadequate prenatal care, 2014 to 2019



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

Note: Mothers of twins are counted twice in these figures

Figure 75. Prenatal care in the first trimester by community, 2017-2019 combined



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

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

Maternal characteristics

Certain maternal characteristics can increase the risk of poor health outcomes for both mothers and their babies. A mother's health status before, during and after pregnancy influences her child's health. A mother's use of substances, such as drugs and alcohol, has implications for her baby. Pregnancy during the teen years is also associated with a number of health concerns for children, including neonatal death, sudden infant death syndrome and child abuse and neglect.[312]

In 2019, the percent of births to teenaged mothers in the Coconino Region was the same as the percent statewide (5%) (Table 21). In addition, about half (49%) of births in the region were to mothers relying on Arizona Health Care Cost Containment System (AHCCCS) coverage or care through the Indian Health Service (IHS), again nearly identical to the statewide proportion (50%). A slightly higher percentage of births in the region (10%) and county (11%) were to mothers with gestational diabetes in 2019 than in the state (9%), while slightly fewer were to mothers with pre-pregnancy obesity (29% in the region vs 30% in the state).

Table 21. Selected characteristics of mothers giving birth, 2018 to 2019

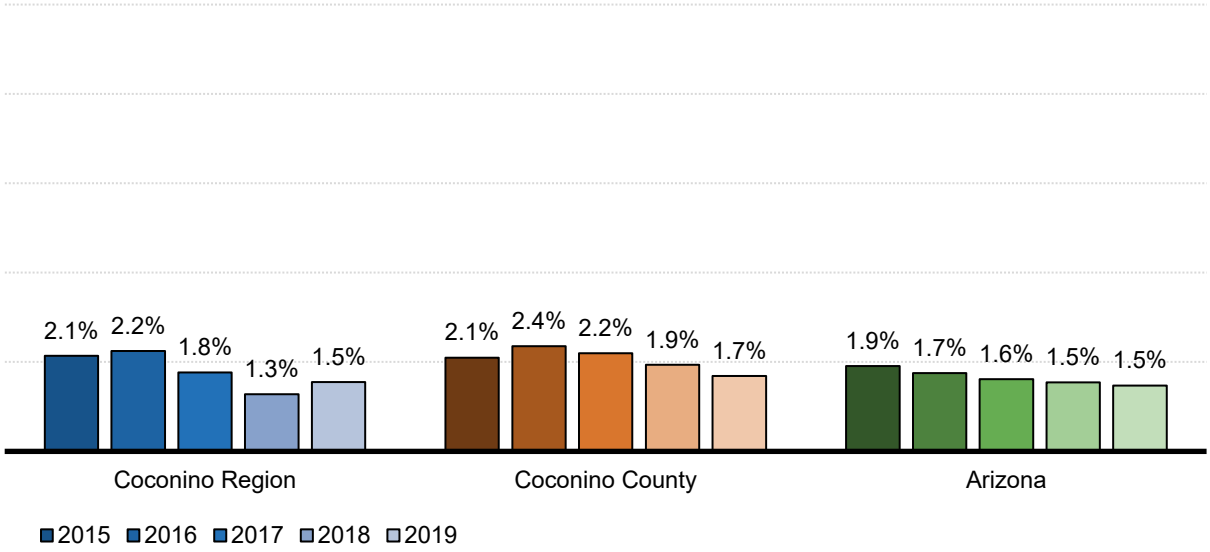
Geography	Calendar year	Number of births	Mother was younger than 18	Mother was younger than 20	Birth was covered by AHCCCS or IHS	Mother had gestational diabetes	Mother had pre-pregnancy obesity	Mother used tobacco during pregnancy
Coconino Region	**2018**	**1,331**	**1%**	**5%**	**54%**	**8%**	**26%**	**3.6%**
	2019	**1,292**	**2%**	**5%**	**49%**	**10%**	**29%**	**3.7%**
Coconino County	2018	1,500	2%	6%	56%	10%	29%	2.5%
	2019	1,367	2%	5%	52%	11%	30%	2.9%
Arizona	2018	80,539	2%	6%	51%	8%	29%	4.5%
	2019	79,183	1%	5%	50%	9%	30%	4.3%
Healthy People 2020 Targets								1.4%

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

Note: Mothers of twins are counted twice in the age, payor, and tobacco columns of this table. Most birth covered by public payors in the Coconino Region were covered by AHCCCS; only 3% of birth in 2018 and 1% in 2019 were paid for by IHS. The Healthy People 2030 target for maternal use of tobacco during pregnancy was increased to no more than 4.3% of women giving birth reporting smoking during pregnancy, or alternatively 95.7% of women reporting abstaining from smoking during pregnancy

Examining trends in maternal characteristics in the Coconino Region over time shows both strengths and challenges for maternal and infant health. Encouragingly, the percent of births to teenaged mothers in the region has fallen from 2.1% in 2015 to 1.5% in 2019, which now matches the state rate (1.5%) and mirrors the decline statewide (Figure 76). Teenaged parents are less likely to complete high school or college and more likely to require public assistance and live in poverty than their peers who are not parents.[313,314,315]

Figure 76. Births to mothers younger than 18, 2015 to 2019

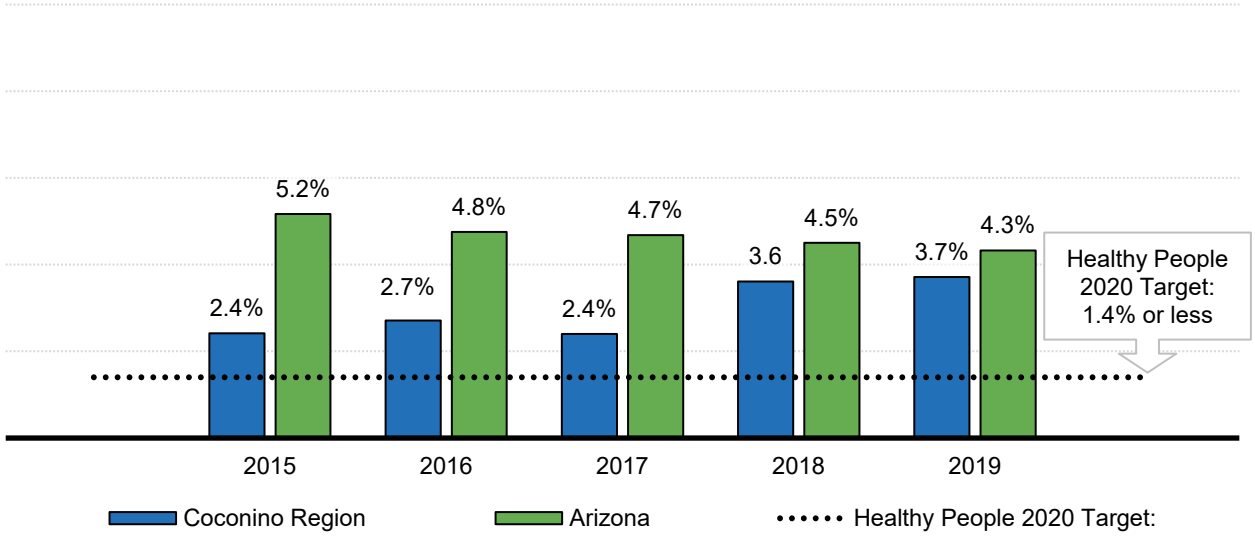


Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data.

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

However, the percent of births to mothers who reported using tobacco during pregnancy has been steadily increasing in the region, rising from 2.4% in 2015 to 3.7% in 2019 (Figure 77). Regional percentages remain below the statewide rate of 4.3% of births to mothers who used tobacco in 2019, but neither the state nor the region met the Health People 2020 goal of less than 1.4% of births to mothers who smoked during pregnancy. Babies born to mothers who smoke are more likely to be born early (pre-term), have low birth weight, die from sudden unexpected infant death (SUID) and have weaker lungs than babies born to mothers who do not smoke.[316, 317]

Figure 77. Births to mothers who used tobacco during pregnancy, 2014 to 2019

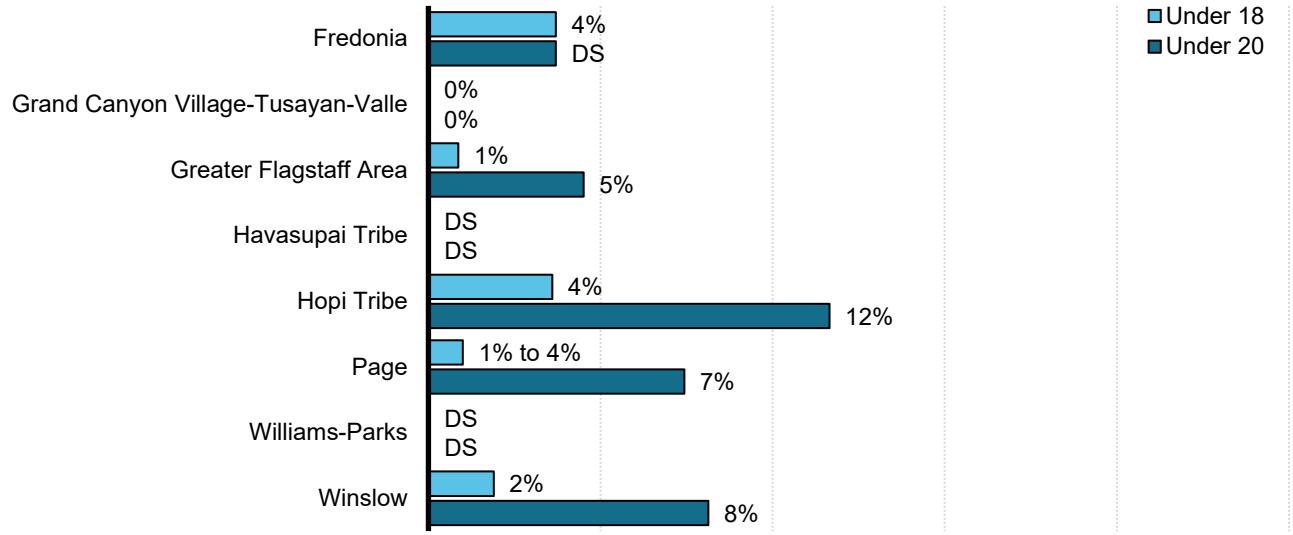


Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data.

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

Rates of births to teenaged mothers and tobacco use in pregnancy also varied by subregion. In the most recent three year period (2017-2019), the percentage of births to mothers younger than 20 was lowest in Fredonia (4%) and highest in the Hopi Tribe (12%), Winslow (8%) and Page (8%) (Figure 78). The prevalence of young parents in these communities suggests a particular need for parent education and additional support to help parents of young children complete high school and pursue higher education or further job training.

Figure 78. Births to teenaged mothers by community, 2017-2019 combined

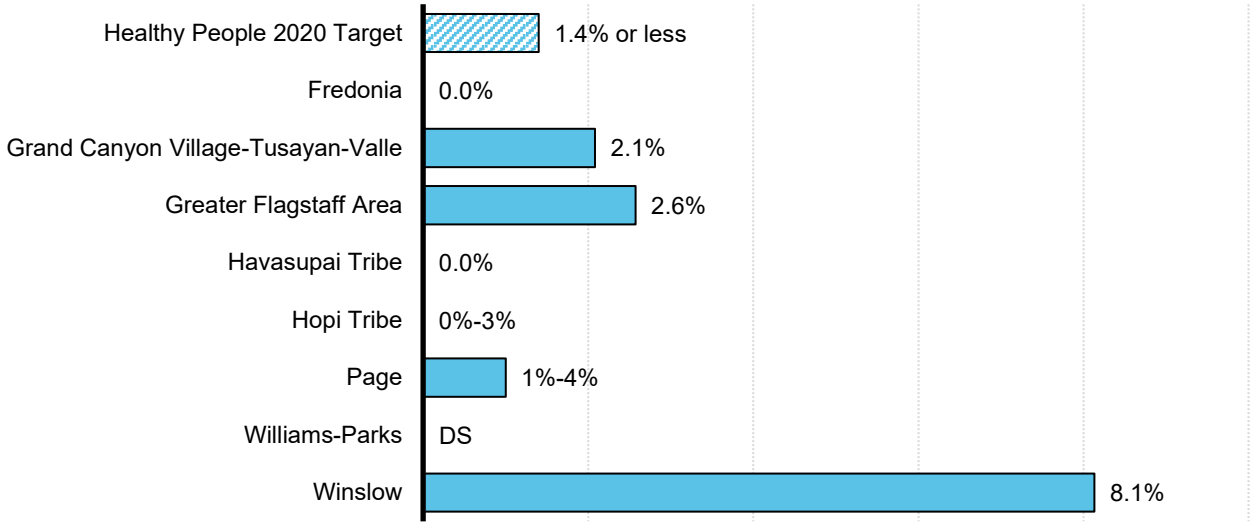


Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data.

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

Similarly, the percentages of mothers who reported using tobacco during pregnancy ranged from no reported tobacco use among mothers in Fredonia and Havasupai Tribe to 8.1% in Winslow (Figure 79). Given that any smoking during pregnancy is estimated to double the risk of sudden unexpected infant death (SUID),[318] prenatal education on the risks of tobacco use in pregnancy and support for smoking cessation for mothers may be needed in this community.

Figure 79. Births to mothers who reported using tobacco in pregnancy by community, 2017-2019 combined



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

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

Maternal obesity is associated with increased risk of birth complications and neonatal and infant mortality. [319,320] In addition to health implications early in life, babies of mothers who are obese are at an increased risk for chronic conditions in childhood and adulthood, including asthma, diabetes and heart disease.[321]

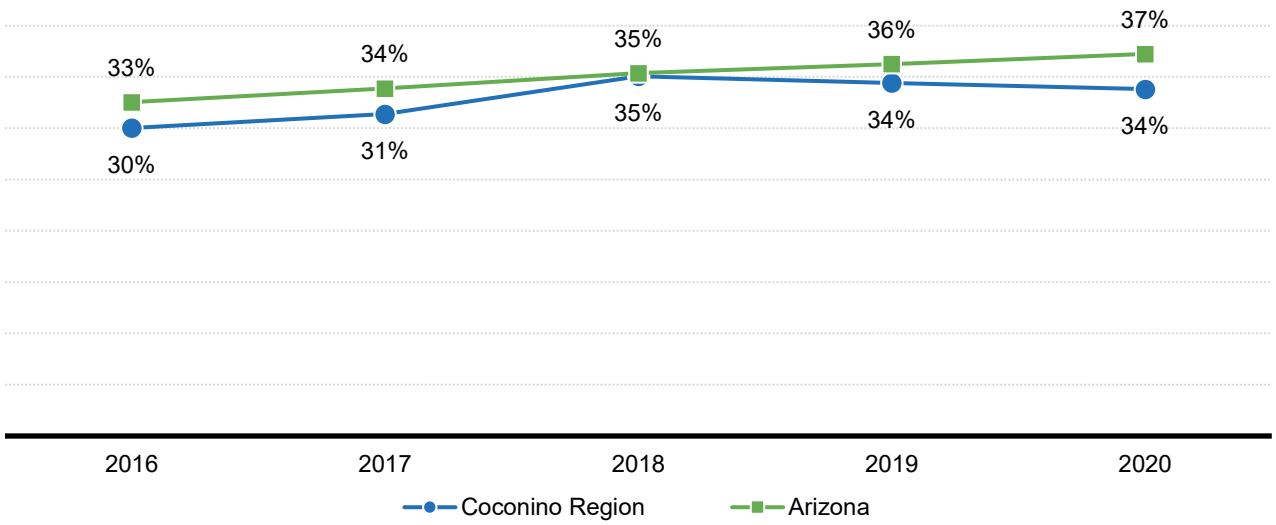
Among women who were enrolled in WIC in 2020, slightly less in the Coconino Region (34%) than Arizona (37%) were obese before pregnancy (Table 22). The proportion of WIC enrolled women in the Coconino Region with pre-pregnancy obesity remained stable at about 34% over the late two years (Figure 80). Across the state, pre-pregnancy obesity has risen at a consistent rate between 2016 and 2020.

Table 22. WIC-enrolled women with pre-pregnancy obesity, 2019 to 2020

Geography	Women for whom pre-pregnancy weight is known, 2019	Women with pre-pregnancy obesity, 2019	Percent with pre-pregnancy obesity, 2019	Women for whom pre-pregnancy weight is known, 2020	Women with pre-pregnancy obesity, 2020	Percent with pre-pregnancy obesity, 2020
Coconino Region	**369**	**127**	**34%**	**142**	**48**	**34%**
Coconino County	367	119	32%	131	43	33%
Arizona	32,816	11,893	36%	14,640	5,449	**37%**

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

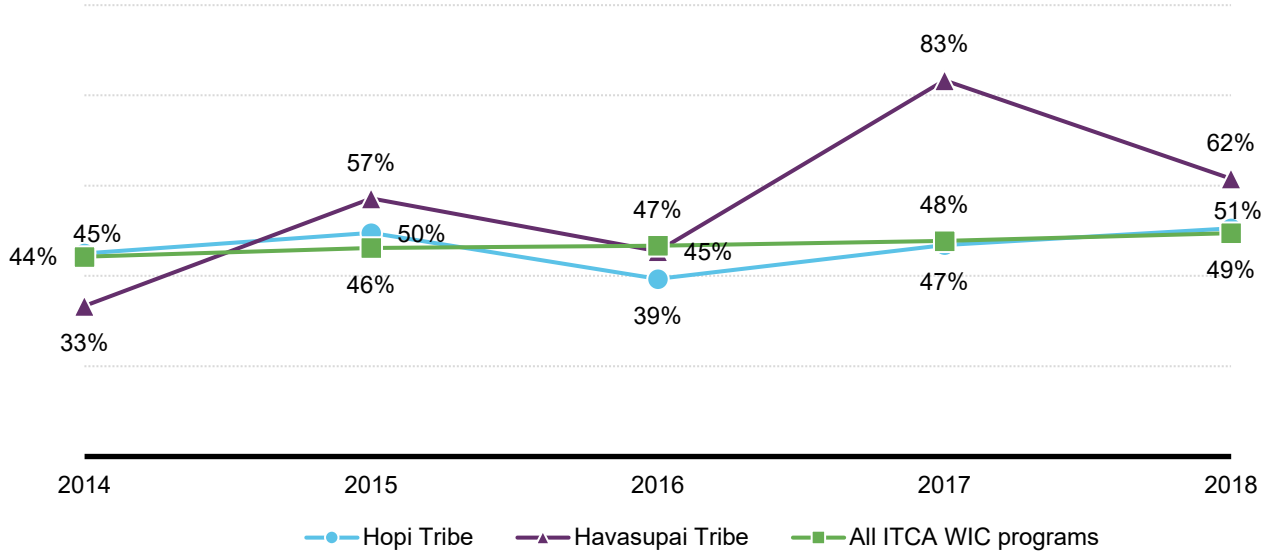
Figure 80. Pre-pregnancy obesity rate for WIC-enrolled women, 2016 to 2020



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

Pre-pregnancy obesity rates were higher among mothers enrolled in the Hopi Tribe and Havasupai Tribe WIC programs in the most recent 5 years of data available from the Inter-Tribal Council of Arizona (Figure 81). Rates of pre-pregnancy obesity among mothers in the Hopi Tribe WIC program were near 50% most years between 2014 and 2018. However, rates of pre-pregnancy obesity among mothers enrolled in the Havasupai Tribe WIC program notably increased in 2017 to 83%, and nearly two in three enrolled mothers had obesity prior to pregnancy in 2018. As obesity increases risk of birth complications, this highlights potential challenges for mothers in this community in access to the level of obstetric care needed for safe delivery of their infants. Mothers from Supai area must travel to nearby cities such as Flagstaff or Kingman for labor and delivery services.

Figure 81. Pre-pregnancy obesity rate for WIC-enrolled women in the Havasupai Tribe and Hopi Tribe WIC programs, 2014 to 2018



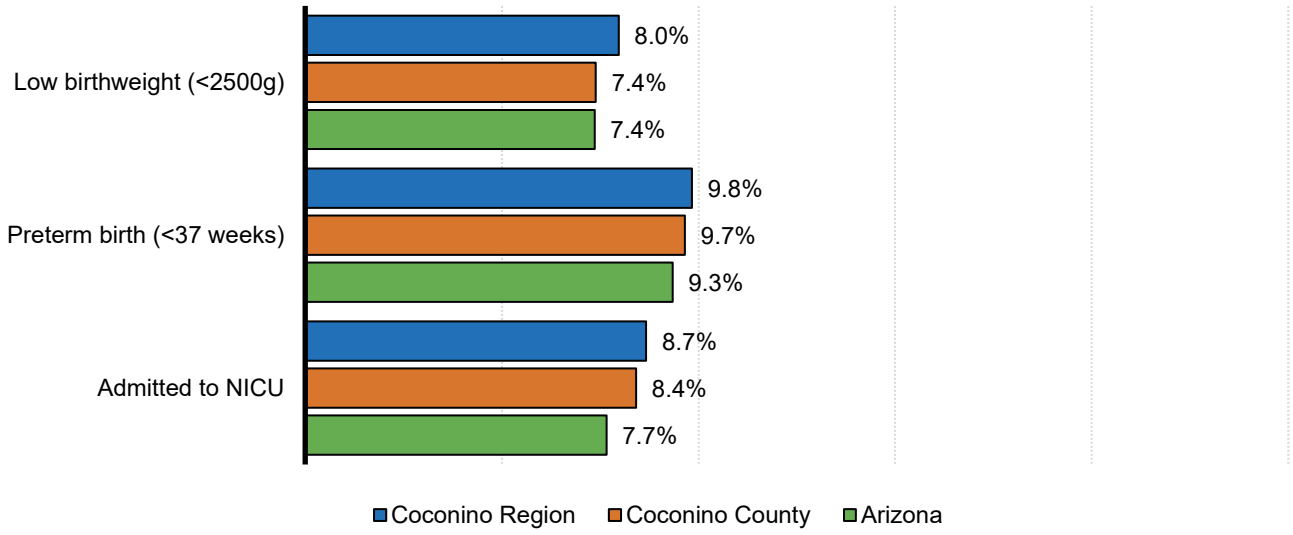
Source: Inter-Tribal Council of Arizona (2021). [WIC dataset]. Unpublished data.

Birth outcomes

Preterm birth, birth at less than 37 weeks of gestation, is associated with higher infant and child mortality and often results in longer hospitalization, increased health care costs and longer-term impacts such as physical and developmental impairments. [322,323] Babies born at a low birth weight (less than 5 pounds, 8 ounces) are at increased risk of infant mortality and longer-term health problems such as diabetes, hypertension and cardiac disease.[324,325] Babies born in the Coconino Region are slightly more likely to be born at low birth weight (8.0% in 2019) or preterm (9.8% in 2019) than across the state as a whole (7.4% and 9.3% respectively) (Figure 82). The region did not meet the Healthy People 2020 targets of less than 7.8% of babies born at low birth weight and less than 9.4% born preterm in 2019, and there was little variation across communities with regard to these birth outcomes.

Newborns are admitted into neonatal intensive care units (NICUs) for numerous reasons that can vary across medical providers and have implications for the short and long-term health of babies.[326] While 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.[327] The Coconino Region had higher percentages of newborns admitted to a NICU in 2019 (8.7%) than Arizona overall (7.7%), which may be due to the higher rates of low birthweight and preterm births (Figure 82).

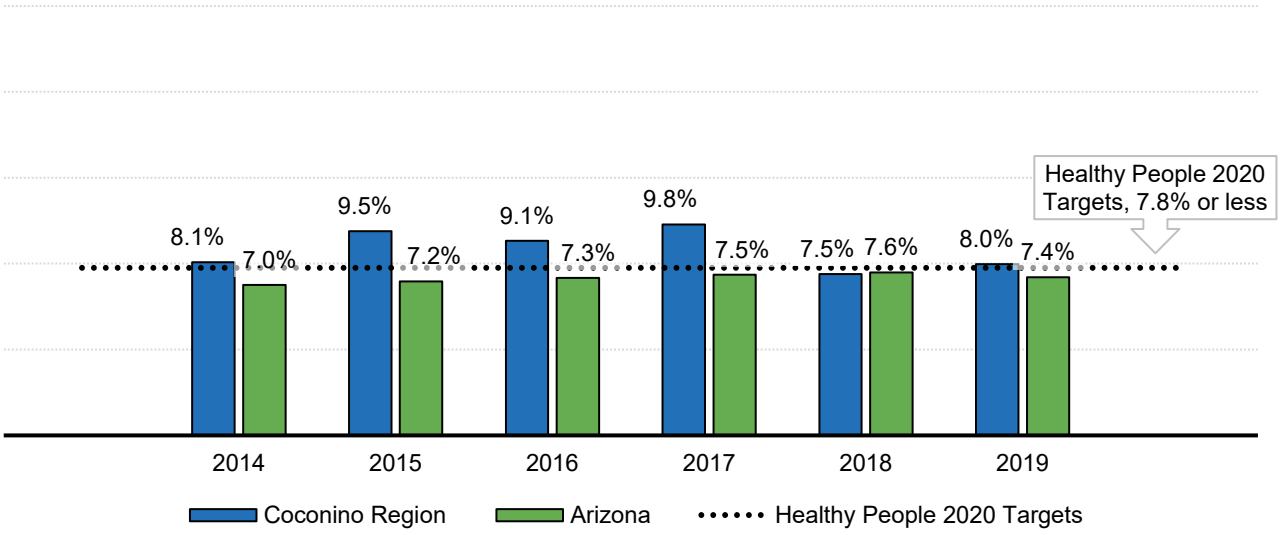
Figure 82. Selected birth outcomes, 2019



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

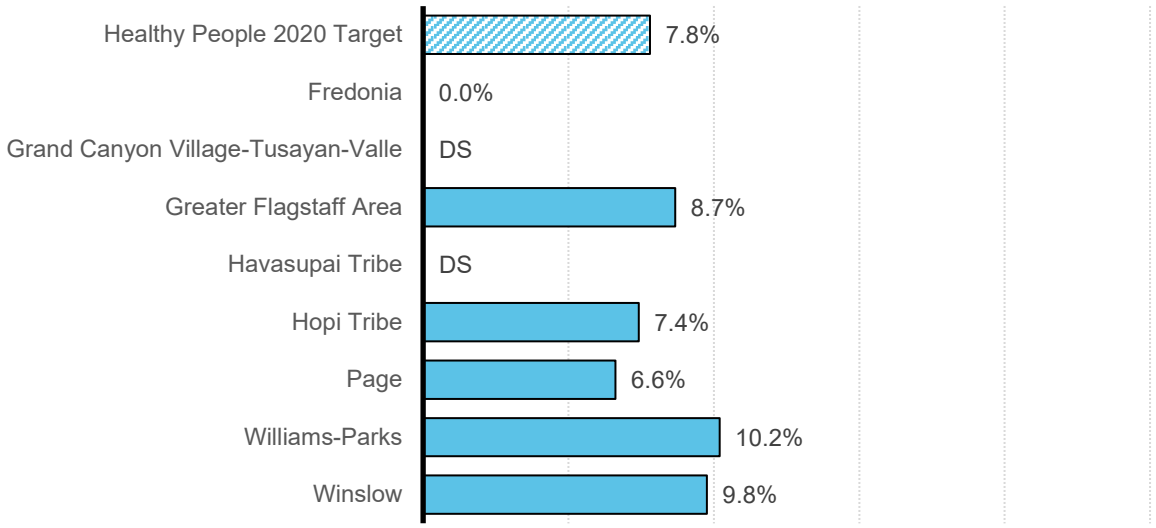
However, looking at trend data over the past 5 years shows improvement in birth outcomes in the region. Rates of low birthweight births in the Coconino Region fell from a high of 9.8% in 2017 to a low of 7.5% in 2018 (Figure 83). Given the high altitude of much of the Coconino Region, higher rates of low birthweight births are not surprising, given that studies have shown that high altitude is associated with lower infant birthweights.[328] Over the most recent 3 years of data, rates of low birthweight births were highest in Williams-Parks (10.2%) and Winslow (9.8%) and lowest in Fredonia (0.0%) and Page (6.4%) (Figure 84).

Figure 83. Low birthweight births (less than 2,500 grams), 2014 to 2019



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

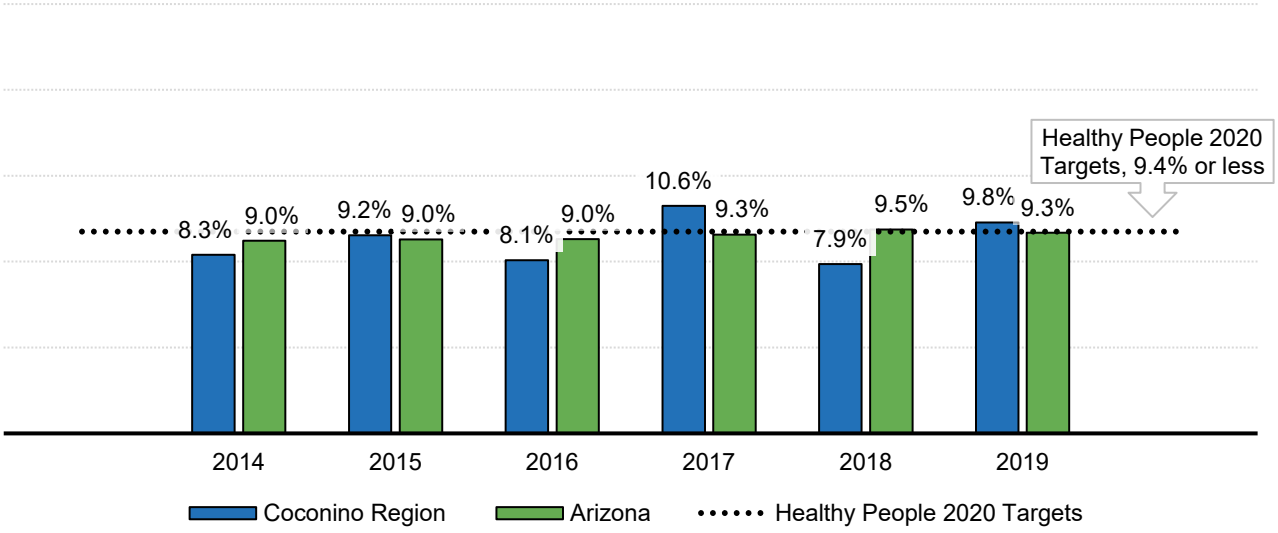
Figure 84. Low birthweight births (less than 2,500 grams) by community, 2017-2019 combined



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

Rates of preterm births were more variable in the Coconino Region year-over year, ranging from a low of 7.9% in 2018 to a high of 10.6% in 2017 (Figure 85). By comparison, statewide rates have been much more consistent around 9.0% to 9.3%. There was no substantial variation in rates of preterm births by community.

Figure 85. Preterm births (less than 37 weeks gestation), 2014 to 2020



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

Note: The Healthy People 2030 target for preterm births remains 9.4% or fewer of live births

A mother's use of substances such as drugs and alcohol also have implications for her baby. Opiate use during pregnancy, either illegal or prescribed, has been associated with neonatal abstinence syndrome (NAS), a group of conditions that causes infants exposed to these substances in the womb to be born exhibiting withdrawal symptoms.[329] This can create longer hospital stays, increase health care costs and increase complications for infants born with NAS. Infants exposed to cannabis (marijuana) in utero often have lower birth weights and are more likely to be placed in neonatal intensive care compared to infants whose mothers had not used the drug during pregnancy.[330] In the Coconino Region, there were 106 newborns hospitalized because of maternal drug use during pregnancy between January 2016 and June 2020 (Table 23).

Table 23. Newborns hospitalized because of maternal drug use during pregnancy, Jan 2016-Jun 2020

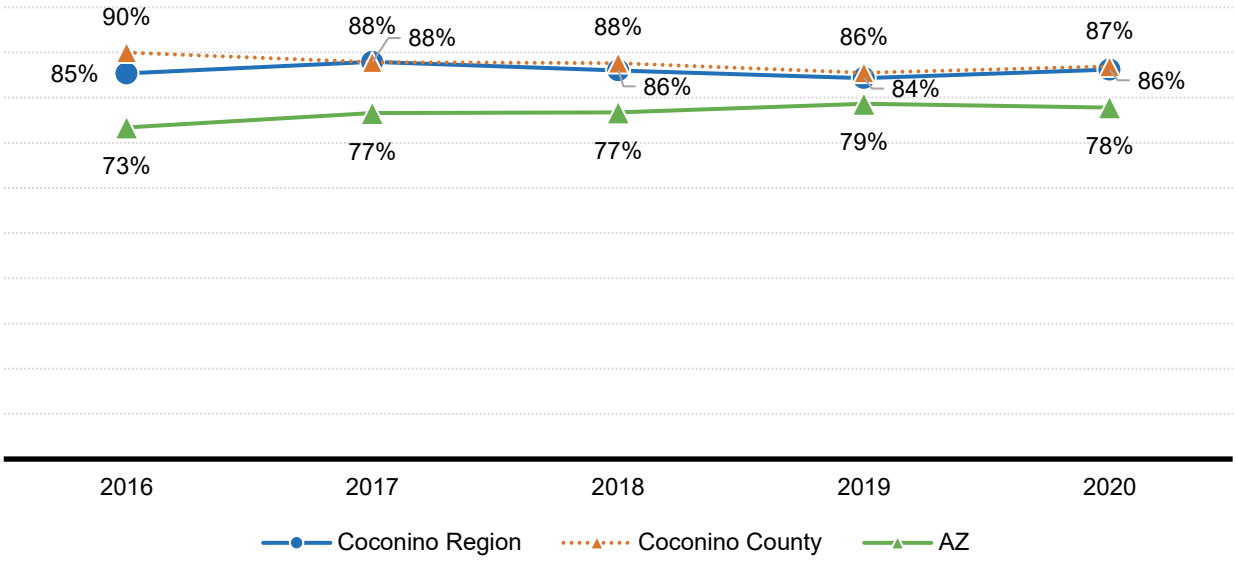
Geography	Newborns hospitalized	Average length of stay (days)
Coconino Region	**106**	**6.4**
Coconino County	123	7.2
Arizona	11,027	6.0

Source: Arizona Department of Health Services (2021). [Hospital Discharge dataset]. Unpublished data.

Nutrition and Weight Status

After birth, a number of factors have been associated with improved health outcomes for infants and young children. One factor is breastfeeding, which has been shown to reduce the risk of ear, respiratory and gastrointestinal infections, SUID, overweight and type 2 diabetes.[331] The American Academy of Pediatrics recommends exclusive breastfeeding for about 6 months, and continuing to breastfeed as new foods are introduced for one year or longer.[332] The percent of WIC-enrolled infants ever breastfed in the Coconino Region increased slightly between 2016 (85%) and 2020 (86%), and breastfeeding rates in the region have consistently exceeded those seen statewide (Figure 86).

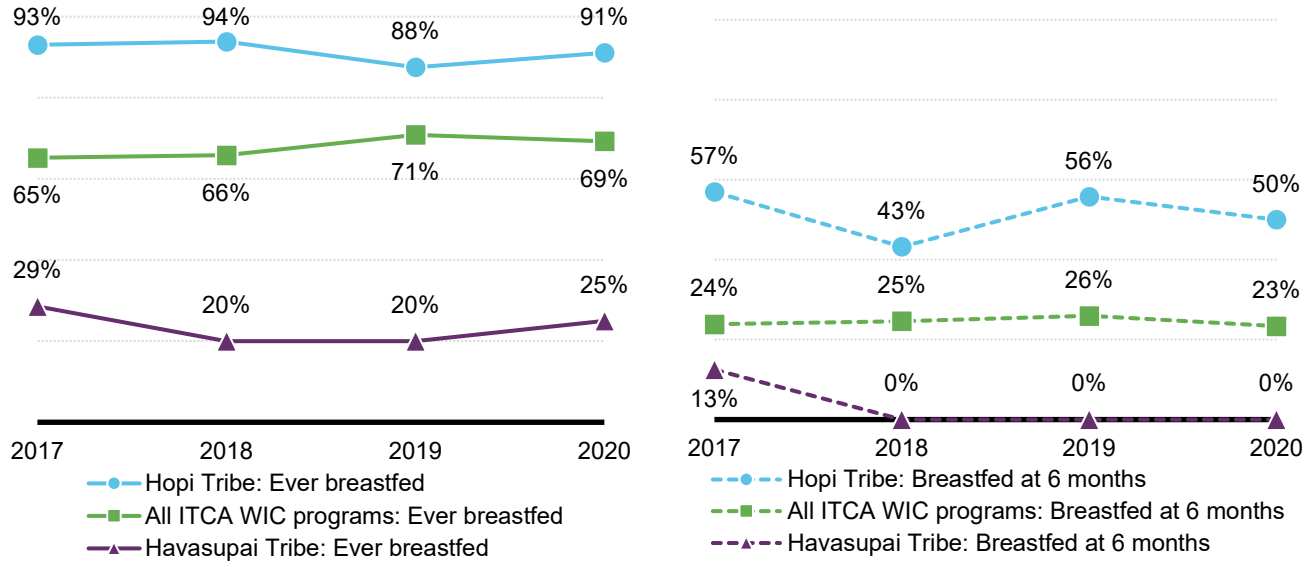
Figure 86. Percent of WIC-enrolled infants ever breastfed, 2016 to 2020



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

In the Hopi Tribe and Havasupai Tribe WIC programs, recent rates of breastfeeding are very different in the two programs. Over the past four years, infants enrolled in the Hopi Tribe WIC program have consistently been breastfed at very high rates— 9 out of every 10 infants enrolled had breastfeeding initiated, and approximately half were still breastfed at 6 months in 2020 (Figure 87). This far exceeds the breastfeeding rates seen in all ITCA WIC program across the state in the same time period. Rates of breastfeeding initiation in the Havasupai Tribe WIC program have ranged from 20% to 29% in recent years, and across the past three years, no infants were reported to still be breastfed at 6 months of age.

Figure 87. Percent of WIC-enrolled infants ever breastfed and breastfed at 6 months in Hopi Tribe and Havasupai Tribe WIC Programs, 2016 to 2020



Source: Inter Tribal Council of Arizona (2021). [WIC dataset]. Unpublished data.

A child's weight status can have long-term impacts on health and well-being. Nationwide, an estimated 19% of children (ages 2-19) are obese and 4% are underweight, numbers that have both increased in recent years.[333,334] Obesity can have negative consequences on physical, social and psychological well-being that begin in childhood and continue into and throughout adulthood.[335] Higher birth weight and higher infancy weight, as well as lower-socioeconomic status and low-quality mother-child relationships, have all been shown to be related to higher childhood weight and increased risk for obesity and metabolic syndrome (which is linked to an increase risk of heart disease, stroke and diabetes).[336, 337] Child underweight, or low weight-for-age, can be caused by chronic undernutrition or infectious disease and can lead to long-term impacts on cognitive and physical development.[338]

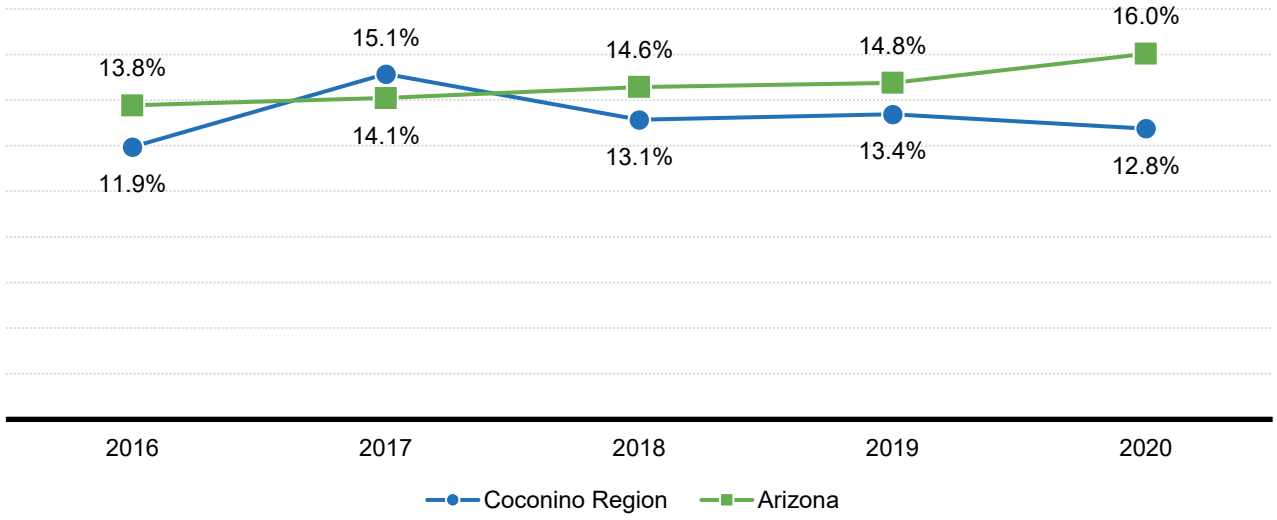
In 2020, 13% of WIC-enrolled children aged 2-4 in the Coconino Region had obesity, and 4% were underweight (Table 24). Obesity rates among young children have declined in the region from 15.1% in 2017 to 12.8% in 2020, a trend that is the opposite of rising obesity rates seen statewide (Figure 88). Please note that due to the pandemic, far fewer children had known weight status in 2020, likely due to fewer health visits.

Table 24. Weight status of WIC-enrolled children ages 2-4, 2020

Geography	Children ages 2-4 with known weight status	Children who are underweight	Percent underweight	Children with obesity	Percent with obesity
Coconino Region	**298**	**12**	**4%**	**38**	**13%**
Coconino County	287	11	4%	34	12%
Arizona	26,929	1,148	4%	4,318	16%

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

Figure 88. Obesity rates for WIC-enrolled children ages 2-4, 2016 to 2020

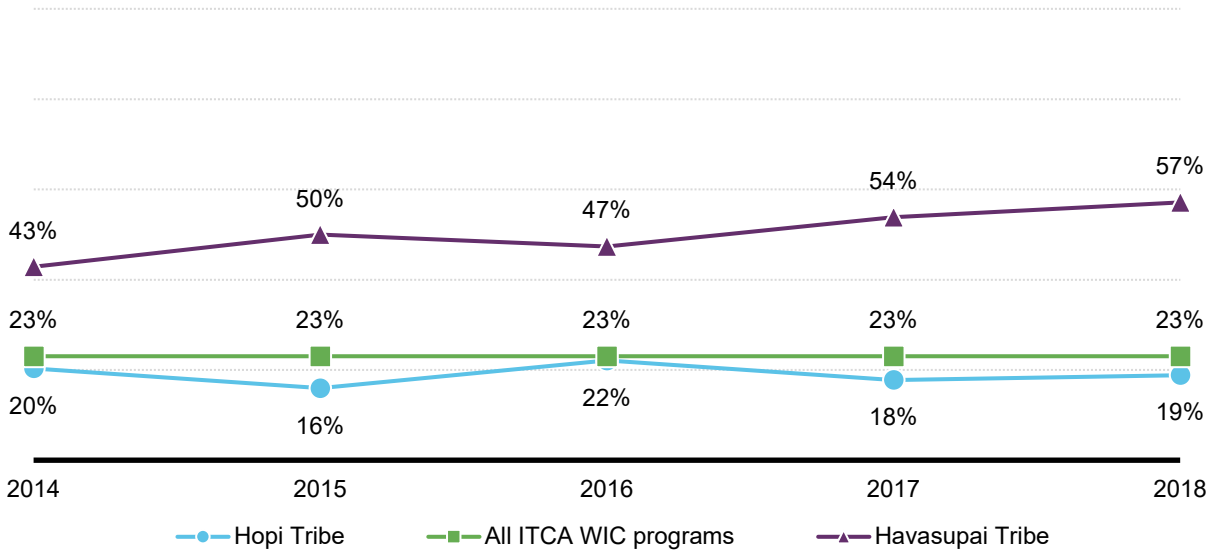


Source: Arizona Department of Health Services (2021). [WIC dataset]. Unpublished data.

Note: The number of children for whom weight status was determined in 2020 dropped substantially, so changes in the obesity rate in 2020 may be more reflective of interruptions in WIC-related health visits rather than actual increase in the obesity rate.

In the Hopi Tribe and Havasupai Tribe WIC programs, obesity rates among enrolled children ages 2-4 have consistently exceeded those seen in the Coconino Region's county-based WIC program (Figure 89). Between 2014 and 2018, the rate of obesity for young children in the Hopi Tribe WIC program has fluctuated between 16% and 22%, which is consistently lower than the rate seen in all ITCA WIC programs in the same period. Rates of obesity among young children in the Havasupai Tribe WIC program steadily increased from 43% in 2014 to 57% in 2018.

Figure 89. Obesity rates for WIC-enrolled children ages 2-4 in the Hopi Tribe and Havasupai Tribe WIC Programs, 2014 to 2018



Source: Inter Tribal Council of Arizona (2021). [WIC dataset]. Unpublished data.

However, data from IHS on early childhood obesity among children ages 2-5 seen at IHS facilities suggests that obesity rates among all children, not just those enrolled in WIC, may be a bit lower in the Havasupai Tribe community. In fiscal year 2020, 22.2% of young children from Havasupai Tribe and 27.7% of young children from Hopi Tribe seen at IHS facilities had obesity. IHS set a target of a 22.6% or lower obesity rate for young children, meaning that Havasupai Tribe met this target in FY 2020 and had an obesity rate below that seen in the IHS system overall (22.7% in 2020).[339]

Oral Health

Oral health and good oral hygiene practices are important to children's overall health. Tooth decay and early childhood cavities can have short- and long -term consequences including pain, poor appetite, disturbed sleep, lost school days, and reduced ability to learn and concentrate.[340] A national study showed that low-income children were more likely than higher-income children to have untreated cavities.[341] Despite high percentages of young Arizona children who have preventative dental care visits (68.4%) compared to the national average (57.8%), there is a relatively high percentage who have had decayed teeth or cavities (11.1%) compared to those across the nation overall (7.7%).[342] Low-income children in Arizona, specifically, are more likely to have untreated cavities and less likely to have had an annual dental visit than their higher-income peers.[343]

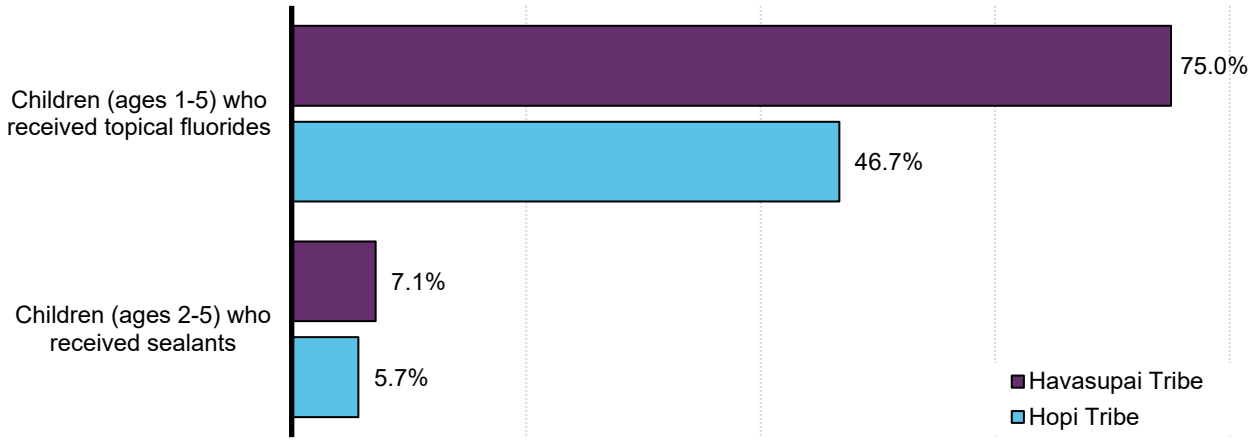
Oral health is an area of particular focus in many tribal nations. In 2010, the Indian Health Service (IHS) implemented an ongoing oral health surveillance system to monitor the oral health of American Indian and Alaska Native (AI/AN) children.[344] Historically, this population has seen the highest rates of tooth decay in the United States, and it continues today at a rate that is three times than that of White children. The most recent data available from the 2018-19 IHS oral health survey of children ages 1 to 5 found

that rates of cavities and untreated tooth decay are declining for AI/AN children nationwide. Despite this improvement, more than half of young children ages 1 to 5 (54%) have early childhood cavities. Rates were slightly lower in the IHS Phoenix Service Area, which includes the Hopi Tribe and Havasupai Tribe, at 42.5% in 2018-19.345

According to the Inter Tribal Council of Arizona's Oral Health Surveillance report, access to dental care for active IHS users of all ages in Arizona remained steady between 2013 and 2018 with nearly 80% having at least one dental encounter. Access to care, however, was generally lower for children birth to 5 and decreased over time from 68% in 2013 to 53% in 2018. Dental sealant encounters for young IHS active users in Arizona also decreased in this time period, especially for children ages birth to 2, who had the lowest percentage of sealant encounters all of age groups and decreased from 23% in 2013 to 1% in 2018. Topical fluoride is another common tooth decay prevention method. Among Arizona young IHS users, about two-thirds of children ages 3 to 5 received at least one topical fluoride treatment each year between 2013 and 2018. In that same period, however, the proportion of children birth to 2 receiving topical fluoride treatments decreased sharply from 61% to 40%.[346] These data suggest that there remains a strong need for focused oral health efforts on primary prevention in tribal nations across the state.

Young children in the Havasupai Tribe and Hopi Tribe communities can access oral health care at IHS facilities. In FY 2020, three out of every four children ages 1 to 5 (75.0%) in Havasupai Tribe and nearly one in two children in Hopi Tribe had received topical fluorides at IHS facilities (Figure 90). Far fewer children received dental sealants, with 7.1% of children ages 2 to 5 in Havasupai Tribe and 5.7% in Hopi Tribe receiving sealants in FY 2020.

Figure 90. Children (ages 1-5) receiving oral health care at IHS facilities, fiscal year 2020



Source: Indian Health Service, Phoenix Area (2021). [Child health dataset]. Unpublished data.

Immunizations and Infectious Disease

Vaccination against preventable diseases protects children and the surrounding community from illness and potentially death. Childhood vaccinations also have long-term effects on the physical, social and

economic welfare of children, their families and their communities.[347] In order to attend licensed child care programs and schools, children must obtain all required vaccinations or obtain an official exemption, which can be requested based on a specific medical condition or based on personal or religious beliefs.[348]

The pandemic has impacted young children's access to vaccinations for preventable diseases. Among children under 2 enrolled in Medicaid/CHIP nationally, vaccination rates dropped 34% between January 2020 and May 2020.[349] In addition, a separate national study of eight U.S. health systems in six states found that a lower proportion of children under 2 were up to date with all age-specific recommended vaccines compared to prior to the pandemic, with just 74% of young children (age 7 months) considered up-to-date in September 2020 compared to 81% in September 2019.[350] These trends are worrisome because in order to assure community immunity against preventable infectious diseases, which helps to protect children and adults who cannot be vaccinated for health reasons, vaccination rates need to remain high.[351]

Although immunization rates vary by vaccine, over 90% of children in child care in the Coconino Region had completed each of the three major (DTaP, polio, and MMR) vaccine series, and regional rates were similar to the state, though slightly lower for DTaP and polio (Table 25). The Healthy People 2020 target for vaccination coverage for children ages 19-35 months for these vaccines is 90 percent, suggesting the region is meeting this goal. However, despite relatively high regional rates, several communities within the region have very low rates of immunization and high rates of vaccine exemptions. In Fredonia, more than one in every three children (36.8%) enrolled in child care is exempt from all required vaccines, as are 12.1% of children in child care in Williams-Parks. Immunization rates for the MMR vaccine are below 90% in both of these communities, which is concerning because between 90 and 95% of children need to be vaccinated for measles in order to prevent the disease spreading if one child becomes infected.[352]

Table 25. Children in child care with selected required immunizations, 2019-20

Geography	Number Enrolled	DTaP	Polio	MMR	Religious Exemption	Medical Exemption	Exempt from Every Required Vaccine
Coconino Region	**1,644**	**90.9%**	**91.5%**	**94.0%**	**6.1%**	**1.5%**	**4.3%**
Fredonia	19	63.2%	63.2%	63.2%	36.8%	0%	36.8%
Grand Canyon Village-Tusayan-Valle	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Greater Flagstaff Area	1,468	91.3%	92.0%	94.3%	5.8%	1.5%	3.9%
Havasupai Tribe	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hopi Tribe	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Page	66	98.5%	98.5%	100.0%	3.0%	0%	0%
Williams-Parks	33	66.7%	69.7%	87.9%	15.2%	0%	12.1%
Winslow	58	94.8%	94.8%	94.8%	3.4%	3.4%	3.4%
Coconino County	1,647	91.0%	91.7%	94.2%	6.0%	1.3%	4.1%
Arizona	83,851	91.9%	93.4%	93.9%	5.0%	0.6%	3.1%
Healthy People 2020 Targets		90.0%	90.0%	90.0%			

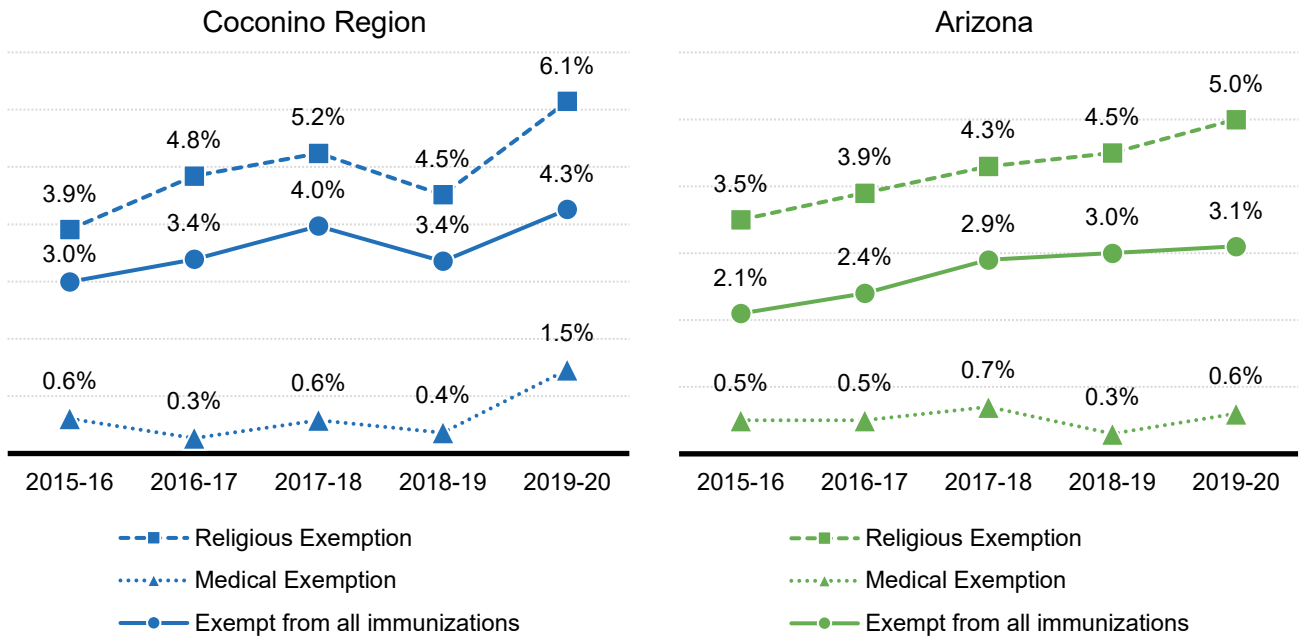
Source: Arizona Department of Health Services (2021). Childcare Immunization Coverage, 2019-2020 School Year. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2020). Childcare Immunization Coverage by County, 2019-2020 School Year. Retrieved from https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage

Data from IHS facilities shows highly variable immunization rates in the Havasupai Tribe and Hopi Tribe communities in FY 2020. While 71.8% of toddlers (ages 19-35 months) from the Hopi Tribe had their complete vaccine series,[xxxii] this was only true for 16.7% of toddlers from the Havasupai Tribe.[353] The target set by IHS for toddlers with a complete vaccine series in this age range in FY 2020 was 45.9%, which meant that rates in the Hopi Tribe community exceeded this national target. Low rates in Havasupai may reflect that children are receiving immunizations on a delayed schedule. Among children enrolled in Havasupai Tribe Head Start and Early Head Start programs, while only 69% of children ages birth to 4 were up-to-date on immunizations at the start of the 2020-21 school year, all children were up-to-date on immunizations by the end of the year.[354] Similarly, nearly all children ages 3-5 (99%) enrolled in Hopi Tribe Head Start programs were up-to-date on immunizations by the end of the 2020-21 school year.[355]

[xxxii] The complete vaccine series for this age group is 4 or more doses of Diphtheria, Tetanus and Pertussis (DTaP), 3 or more doses of Polio, 1 or more doses of measles, mumps and rubella (MMR) vaccine, 3 or more doses of Haemophilus influenzae type B (hib) vaccine, 3 or more doses of hepatitis B vaccine, 1 or more dose of Varicella vaccine and 4 or more doses of Pneumococcal conjugate vaccine (PCV).

Vaccine exemption rates have been increasing in the Coconino Region over the past 5 years, mirroring the consistent increase in exemptions seen across the state (Figure 91). Notably, the rate of religious exemptions jumped from 4.5% in the 2018-19 school year to 6.5% in 2019-20, and the rate of medical exemptions more than tripled in the same time period.

Figure 91. Child care immunization exemption rates, 2015-16 to 2019-20



Source: Arizona Department of Health Services (2021). Childcare Immunization Coverage, 2015-2016 to 2019-2020 School Years. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2021). Childcare Immunization Coverage by County, 2015-2016 through 2019-2020 School Years. Retrieved from: https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage

Rates for the three major vaccine series (DTAP, polio, and MMR) for children in kindergarten (93.2%, 93.5%, 92.8%) were very similar to rates seen statewide in the 2019-20 school year (Table 26). These rates did not meet the Healthy People 2020 target of 95%. Again, there was substantial variability in rates across communities, with particularly low immunization rates in Williams-Parks and Grand Canyon Village-Tusayan-Valle. Nearly a quarter of kindergarteners in Williams-Parks (23.5%) were exempt from all required vaccines.

Table 26. Kindergarteners with selected required immunizations, 2019-20

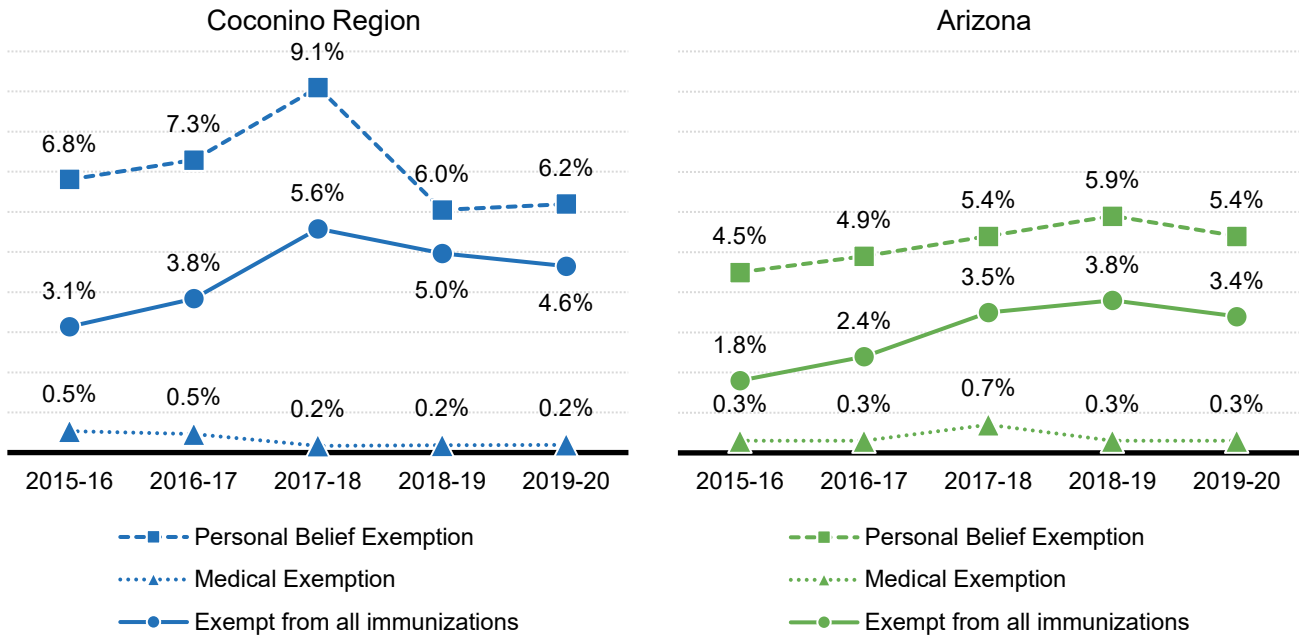
Geography	Number Enrolled	DTaP	Polio	MMR	Personal Belief Exemption	Medical Exemption	Exempt from Every Required Vaccine
Coconino Region	**1,033**	**93.2%**	**93.5%**	**92.8%**	**6.2%**	**0.2%**	**4.6%**
Fredonia	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grand Canyon Village-Tusayan-Valle	25	80.0%	80.0%	92.0%	4.0%	4.0%	4.0%
Greater Flagstaff Area	836	92.9%	93.2%	92.2%	6.9%	0.1%	5.1%
Havasupai Tribe	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hopi Tribe	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Page	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Williams-Parks	17	70.6%	76.5%	70.6%	23.5%	0.0%	23.5%
Winslow	155	99.4%	99.4%	98.7%	0.6%	0.0%	0.0%
Coconino County	982	92.5%	93.0%	92.5%	6.4%	0.2%	4.9%
Arizona	82,358	93.2%	93.8%	93.5%	5.4%	0.3%	3.4%
Healthy People 2020 Targets		95.0%	95.0%	95.0%			

Source: Arizona Department of Health Services (2021). Kindergarten Immunization Coverage, 2019-2020 School Year. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2020). Kindergarten Immunization Coverage by County, 2019-2020 School Year. Retrieved from https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage

Note: The Healthy People 2030 target for immunization rates of children in kindergarten for the MMR vaccine remained at 95%; goals for DTaP and polio were not included.

Exemption rates in kindergarten in the Coconino Region have consistently exceeded rates seen statewide over the past 5 years (Figure 92). However, the percent of kindergarteners exempt from all required vaccines peaked in the 2017-18 school year and has declined slightly over the past two years, suggesting that progress has been made in communicating the importance of childhood vaccinations in the region. Ongoing parent education and consistent public health messaging will be important to continue to stress the importance of timely immunizations for the prevention of infectious disease.

Figure 92. Kindergarten immunization exemption rates, 2015-16 to 2019-20



Source: Arizona Department of Health Services (2021). Kindergarten Immunization Coverage, 2015-2016 to 2019-2020 School Years. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2021). Kindergarten Immunization Coverage by County, 2015-2016 through 2019-2020 School Years. Retrieved from: https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage

Throughout the COVID-19 pandemic, young children have largely been spared the worst effects of the disease. According to national data, COVID-19 cases among children ages birth to 4 only make up 2.3% of total COVID-19 cases, while this age group represents 6% of the U.S. population.[356] There have been fewer than 200 recorded deaths due to COVID-19 among children birth to 4 nationwide.[357] However, with the emergence of the Delta and Omicron variants, cases among children have been climbing. A study found that hospitalizations of children birth to 4 due to COVID-19 increased tenfold between June 26 and August 14, 2021.[358] The weekly incidence in COVID-19 cases among children birth to 4 also increased nearly ten-fold in that same period, from 13 cases per 100,000 young children in the week of June 26 to 115.4 cases per 100,000 young children in the week of August 14.[359] Since COVID-19 vaccines authorized for adults and older children have not yet been approved for young children, community public health measures are vitally important for protecting them.[360] Another recent study found that pediatric emergency department visits and hospitalizations for COVID-19 were lowest in states with high vaccination coverage.[361] Arizona was among the states within the second lowest quartile of vaccination coverage rates for the population 12 and older.[362]

Although COVID-19 has dominated headlines in recent years, there are other widely circulating viruses that commonly infect young children including influenza ("the flu") and Respiratory Syncytial Virus (RSV). Across Arizona, the 2017–18 flu season broke records for reported flu and RSV cases.[363] Identified cases of RSV and flu in 2019-20 appeared to reach nearly those levels again (Table 27).

Young children are at an elevated risk for complications from the flu,[364] and while many cases of RSV are mild, for some children the infection becomes a more serious lower respiratory infection, requiring emergency care and/or hospitalization. Note that these case numbers likely represent more severe cases, and that the Centers for Disease Control and Prevention (CDC) notes that by the time they turn 2, most children will have had an RSV infection.[365]

Table 27. Confirmed and probable cases of infectious diseases in children ages birth to 4, 2017-18 to 2019-20

Geography	Season	Influenza	Respiratory Syncytial Virus (RSV) Infection
Coconino County	2017-18	204	184
	2018-19	295	260
	2019-20 (preliminary)	300	167
Arizona	2017-18	5,319	4,530
	2018-19	4,603	3,897
	2019-20 (preliminary)	6,612	5,351

Source: Arizona Department of Health Services (2021). [FTF VPD Flu RSV dataset]. Unpublished data.

Illness, Injury and Mortality

Asthma is the most common chronic illness affecting children,[366] and it is more prevalent among boys, Black children, American Indian or Alaska Native children, and children in low-income households.[367, 368] The total healthcare costs of childhood asthma in the United States are estimated to be between $1.4 billion and $6.4 billion, but these costs could be reduced through better management of asthma to prevent hospitalizations.[369]

In the Coconino Region, between 2016 and 2020, there were 253 emergency room visits due to asthma for children up to age 14 (Table 28). A smaller set of children presented with cases severe enough to need hospitalization. In the region, 42 children aged birth to 14, of which 19 were children aged birth to 4 (both excluding newborns), were hospitalized due to asthma during the same 5-year period. The average length of a child's hospital stay was 2.6 days, slightly longer than the average statewide (2.0).

Table 28. Hospitalizations and emergency room visits due to asthma, 2016-2020 combined

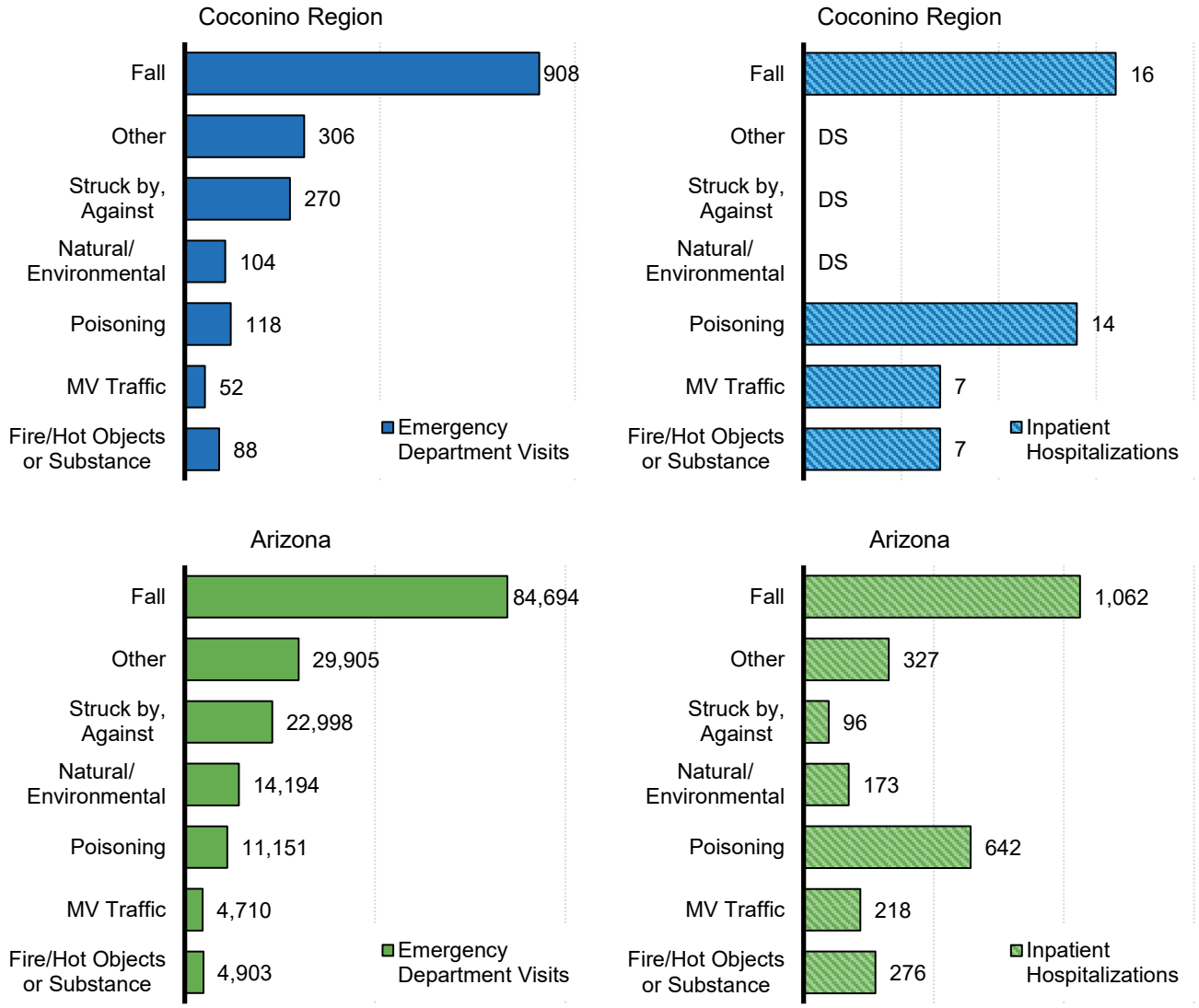
Geography	Number of inpatient asthma hospitalizations for children ages birth to 4 (except newborns)	Number of inpatient asthma hospitalizations for children ages birth to 14 (except newborns)	Average length of stay for asthma hospitalization for children ages birth to 14	Number of emergency department visits for asthma, children ages birth to 14
Coconino Region	**19**	**42**	**2.6**	**253**
Coconino County	19	40	2.7	235
Arizona	2,214	5,672	2.0	41,103

Source: Arizona Department of Health Services (2021). [Hospital Discharge dataset]. Unpublished data.

Unintentional injuries are the leading cause of death for children in Arizona and nationwide.[370, 371] It is estimated that as many as 90% of unintentional injury-related deaths could be preventable through better safety practices, such as use of proper child restraints (i.e., car seats) in vehicles and supervision of children around water, including pools.[372] Research has shown that children in rural areas are at higher risk of unintentional injuries than those who live in more urban areas, as are children in Native communities, suggesting that injury prevention is an especially salient need in these areas.[373, 374]

Between 2016 and 2020, there were 2,012 non-fatal emergency department visits, and 52 non-fatal inpatient hospitalizations for unintentional injuries in the Coconino Region among children aged birth to 4. The most common reasons for emergency departments visits were falls, accounting for nearly half of emergency department visits (Figure 93). Falls were also the more frequent cause of hospitalizations among unintentional injuries, but the rate of hospitalization was greatest for motor vehicle injuries (13%), poisoning events (12%), and burns (8%). The pattern of unintentional injuries in the region mostly resembles the same pattern seen statewide. However, as a percent of overall hospitalizations due to unintentional injuries, poisoning (27%), motor vehicle injuries (13%), and burns (13%) were all more frequent causes of hospitalization for young children in the Coconino Region than these mechanisms were statewide (22%, 8%, and 10%, respectively).

Figure 93. Non-fatal hospitalizations and emergency department visits due to unintentional injuries for children ages birth to 4 by selected mechanism of injury, 2016-2020 combined



Source: Arizona Department of Health Services (2021). [Hospital Discharge dataset]. Unpublished data.

Infant mortality describes the number of deaths of children under 1 year of age relative to live births. Arizona ranks in the middle of U.S. states in terms of infant mortality, with the 20th lowest infant mortality rate nationwide in 2019.[375] The most common causes of infant mortality in Arizona and the U.S. are congenital abnormalities, low birthweight and preterm birth, with a smaller proportion related to maternal pregnancy complications, sudden unexplained infant death (SUID) and unintentional injuries.[376,377]

In the Coconino Region, 10 infants died in 2018 and 8 in 2019 (data on the cause of these deaths was not available due to the very small number of deaths) (Table 29). Given the number of births each year, this

put the infant mortality rate at 7.5 and 6.2, respectively. These rates are both higher than those seen statewide and above the Healthy People 2020 target infant mortality rate of no more than 6.0 (Figure 94). Ensuring access to adequate and timely prenatal care and newborn screening are measures that could help the region reduce rates of infant mortality.[378] However, despite the higher infant mortality rate, the mortality rate for young children in Coconino County (110.8 per 100,000) was lower than the statewide rate (117.4 per 100,000) in 2019 (Table 29).

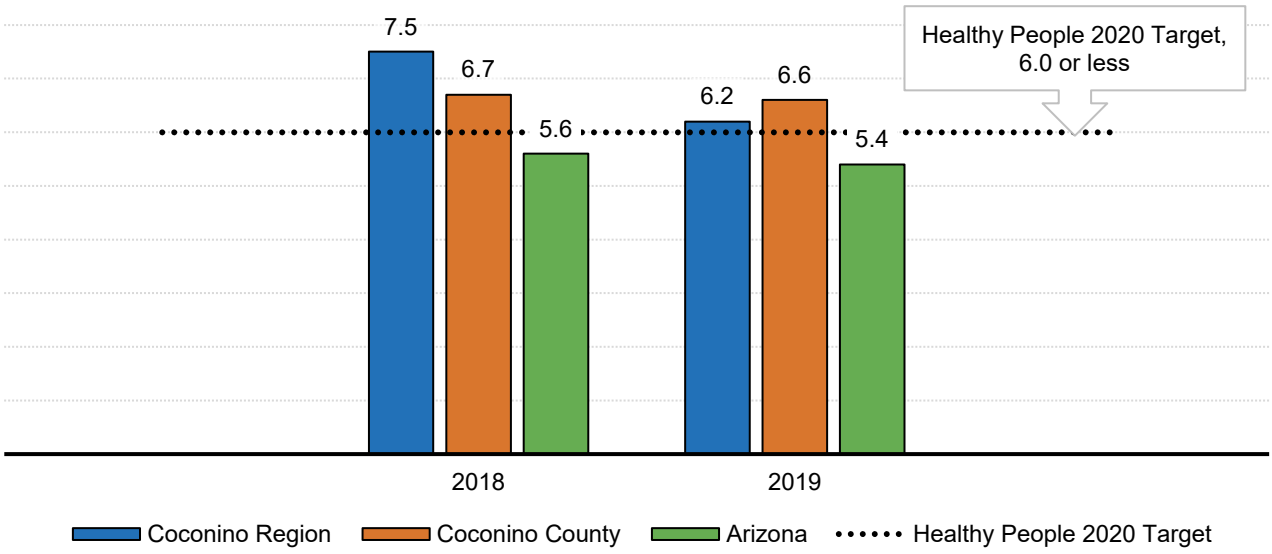
Table 29. Numbers of deaths and mortality rates for infants, young children ages birth to 4, and all children ages birth to 17, 2018 to 2019

Geography	Calendar year	Number of infant deaths	Infant mortality rate (per 1,000 live births)	Number of young child deaths (ages 0-4)	Young child mortality rate (per 100,000 population)	All child deaths (0-17 years old)	All child mortality rate (per 100,000 population)
Coconino Region	**2018**	10	7.5	13	**N/A**	**19**	**N/A**
	2019	8	6.2	9	**N/A**	**12**	**N/A**
Coconino County	2018	6	6.7	13	157.7	21	89.7
	2019	9	6.6	9	110.8	15	64.5
Arizona	2018	447	5.6	562	127.4	824	65.2
	2019	430	5.4	513	117.4	777	61.6
Healthy People 2020 Targets			6.0				

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

Note: The Healthy People 2030 target for infant mortality rate was decreased to no more than 5 infant deaths per 1,000 live births.

Figure 94. Infant mortality rates, 2018 to 2019



Source: Arizona Department of Health Services (2021). Kindergarten Immunization Coverage, 2019-2020 School Year. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2020). Kindergarten Immunization Coverage by County, 2019-2020 School Year. Retrieved from https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage

Note: The Healthy People 2030 target for infant mortality rate was decreased to no more than 5 infant deaths per 1,000 live births.

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

FAMILY SUPPORT AND LITERACY

FAMILY SUPPORT AND LITERACY

Why it Matters

Responsive relationships and language-rich experiences for young children help build a strong foundation for later success in school and in life. Families and caregivers play a critical role as their child's first and most important teacher. Positive and responsive early relationships and interactions support optimal brain development, academic skills and literacy during a child's earliest years and lead to better social, physical, academic and economic outcomes later in life. [379, 380, 381, 382, 383] Early literacy promotion, through singing, telling stories and reading together, is so central to a child's development that the American Academy of Pediatrics has emphasized it as a key issue in primary pediatric care, aiming to make parents more aware of their important role in literacy.[384] Children benefit when their families have the knowledge, resources and support to use positive parenting practices that support their child's healthy development, nutrition, early learning and language acquisition. Specifically, parental knowledge of positive parenting practices and child development is one of five key protective factors that improve child outcomes and reduce the incidence of child abuse and neglect.[xxxiii,385]

Unfortunately, not all children are able to begin their lives in positive, stable and nurturing environments. Adverse childhood experiences (ACEs)[xxxiv] have been associated with developmental disruption, mental illness, drug and alcohol use and overall increased healthcare utilization.[386,387] Arizona is among the top ten states with the highest proportion of children birth to 5 who have experienced at least one ACE, with nearly one in three (31.8%) young children in Arizona having one or more ACEs.[388] Future poor health outcomes are more likely as an individual's ACE score increases.[389] Children in Arizona are nearly twice as likely to have experienced two or more ACEs (15.5%) compared to children across the country (8.6%).[390] Very young children are most at risk for extremely adverse experiences, such as child abuse, neglect and fatalities from abuse and neglect. In 2019, children ages birth to five made up more than half (55%) of child maltreatment victims in Arizona.[391] These children and their families may require specific, targeted resources and interventions to reduce harm and prevent future risk.[392]

Alternatively, Positive Childhood Experiences (PCEs), including positive parent-child relationships and feelings of safety and support, have been shown to have similarly cumulative, though positive, long-term impacts on mental and relational health.[393] Strategies for preventing ACEs include: strengthening

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

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

economic supports for families; promoting social norms that protect against violence and adversity; ensuring a strong start for children; enhancing skills to help parents and children handle stress, manage emotions and tackle everyday challenges; connecting youth to caring adults and activities; and intervening to lessen immediate and long-term harms.[394]

What the Data Tell Us

Home Visitation, Parent Education and Early Literacy

Home visiting programs bring trained parent educators into homes, providing one-on-one coaching, guidance and resources to parents of young children. Such programs, which include evidence-based approaches such as Nurse-Family Partnership, Healthy Families and Parents as Teachers, aim to bolster the skills and confidence of parents. Through parent education, and working with parents and their children in tandem, home visitation programs help support healthy child development and increase school readiness, including strengthening early literacy skills. Home-based literacy practices between parents and caregivers and young children, specifically, have been shown to improve children's reading and comprehension, as well as children's motivation to learn.[395,396] These regular visits are also a chance for trained providers to potentially identify health and developmental concerns. Home visitation and parent education have been major funding priorities for the Coconino Region in recent years; the goal for SFY2022 is to serve 116 families through home visitation and 100 parents and caregivers through parent education.[397] Additionally, the Association for Supportive Child Care (ASCC) provides a Play & Learn program in Flagstaff for families with young children aimed at supporting children's brain development through activities with everyday materials; eight families were enrolled in this program in 2020.[398]

The pandemic greatly affected young children and their families nationwide, in both positive and negative ways. Data from the 2020 Survey of Income and Program Participation shows that during the pandemic, families spent more time together, and overall, parents reported eating more family meals together and reading to their children more frequently.[399] However, there were differences in effects of the pandemic on families depending on their income and education levels. Parents with incomes above the poverty level or with a bachelor's degree or higher educational attainment were much more likely to report reading to their children than lower-income or less-educated parents pre-pandemic, and these higher-income and highly-educated parents also increased their reported frequency of reading to their children during the pandemic.[400] This indicates a need for targeted literacy and family support programs for lower income families who may not have had the flexibility or resources to work from home or provide enriched environments for their children during the pandemic.

Mental and Behavioral Health

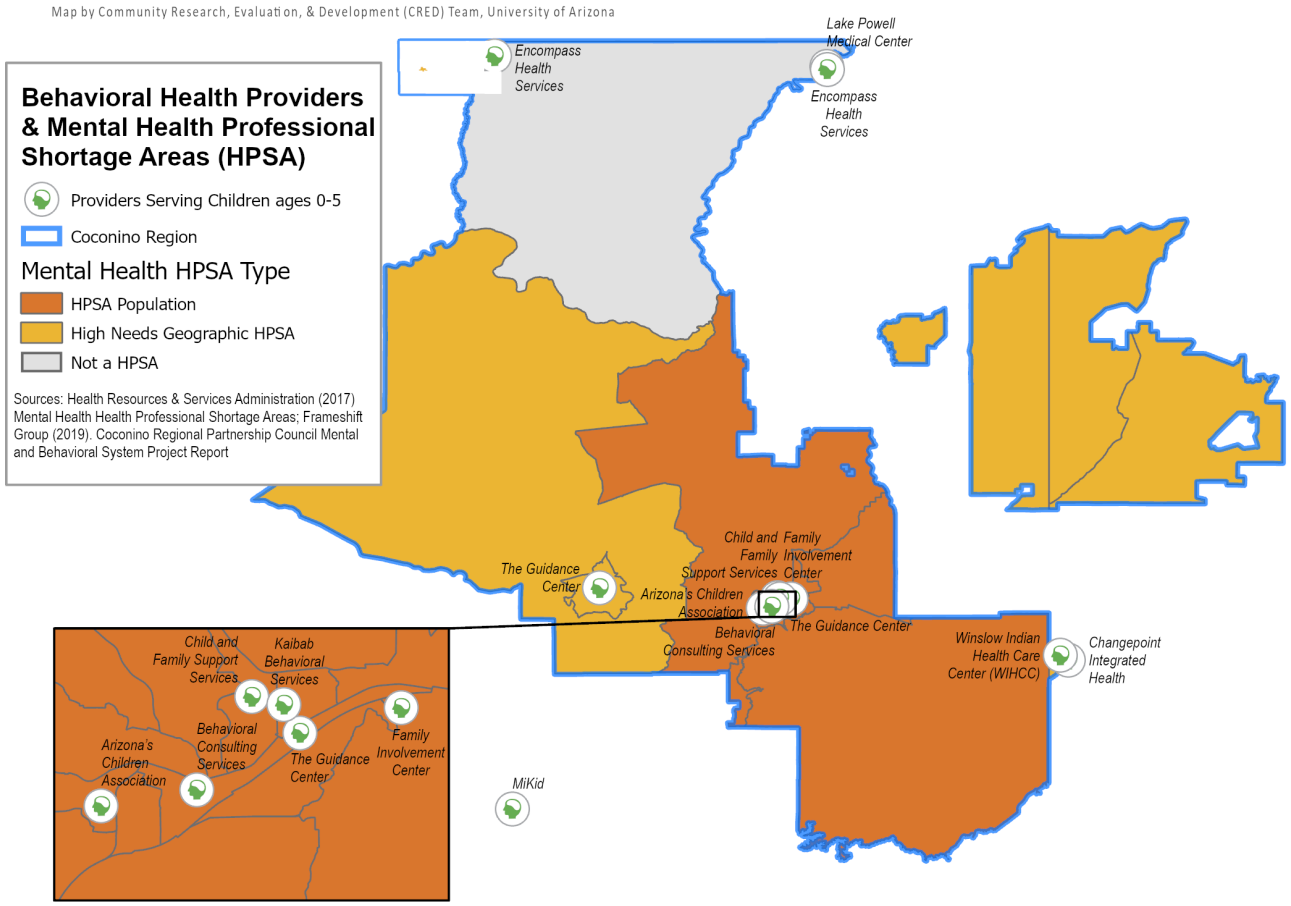
Behavioral health supports, both for children and caregivers, are often needed to address exposure to adverse childhood events. The foundation for sound mental health is built early in life, as early experiences shape the architecture of the developing brain. Sound mental health provides an essential foundation of stability that supports all other aspects of human development—from the formation of

friendships and the ability to cope with adversity to the achievement of success in school, work, and community life.[401] When young children experience stress and trauma they often suffer physical, psychological, and behavioral consequences and have limited responses available to react to those experiences.

Understanding the behavioral health of mothers is also important for the well-being of young children. Mothers dealing with behavioral health issues, such as depression, may not be able to perform daily caregiving activities, form positive bonds with their children or maintain relationships that serve as family supports.[402] Improving supports available through coordinated, collaborative efforts are key to early identification and intervention for young children and their caregivers.[403,404]

Unfortunately, even before the pandemic, access to mental and behavioral health care for young children and their families was limited in the Coconino Region. The entire region except for the Page and Fredonia communities are classified as Mental Health Professional Shortage Areas by the U.S. Health Resources and Services Administration (HRSA) (Figure 95).[405] The Greater Flagstaff Area is designated as a shortage area for low-income populations due to a lack of affordable mental health care services, while the Williams-Parks, Grand Canyon Village-Tusayan-Valle, Havasupai Tribe, Hopi Tribe and Winslow communities are designated as shortage areas due to overall high ratios of population to the available providers in these communities.[406]

Figure 95. Map of Behavioral Health Providers and Mental Health Professional Shortage Areas (HPSAs), 2019



Source: Health Resources & Services Administration (2017) Mental Health Professional Shortage Areas (HPSAs); Frameshift Group (2019). Coconino Regional Partnership Council Mental and Behavioral Health System Project Report. Map by UArizona CRED Team,

In 2019, the Coconino Regional Partnership Council commissioned a report on the mental and behavioral health system for young children and their families in the region. This report outlined the three major pathways to access mental and behavioral health care in the region. The first is for children and families enrolled in the Arizona Health Care Cost Containment System (AHCCS) Complete Care (ACC) plans, provided through AHCCCS, Arizona's Medicaid agency, which serves low-income adults and children. Children enrolled in ACC health plans access mental and behavioral health services through one of the intake agencies in the Northern Arizona region. These agencies provide services directly or refer patients out for specialty care. Intake agencies in the Coconino Region that serve children birth to 5 include:

- The Guidance Center, which has offices in Flagstaff and Williams;
- Child and Family Support Services, located in Flagstaff;
- Encompass Health Services, which has offices in Fredonia and Page; and

- Changepoint Integrated Health, located in Winslow.

Most of the children birth to 5 needing mental or behavioral health services in the region are seen by the Guidance Center or Child and Family Support Services.[407]

Young children involved with the Department of Child Safety (DCS) may access mental and behavioral health services through the Comprehensive Medical and Dental Program (CMDP) administered by DCS. This program contracts with AHCCCS, so the pathway for children to access services goes through the same intake agencies listed above.[408]

Once children with ACC health plans or children involved with DCS go through the intake process, they may receive services from either the intake agency or from specialty service providers, such as the Family Involvement Center, Arizona Children's Association, Kaibab Behavioral Health, Behavioral Consulting Services or MiKid. All of these providers are located in Flagstaff except for MiKid, which is located in Prescott.[409] Figure 95 shows both intake agencies and specialty service providers in the region. According to data from the two ACC health plan providers in the region, of the 3,519 children birth to 5 enrolled in these plans, 963 children (27%) received at least one behavioral health service in 2019.[410] However, key informants in the Coconino Region highlighted multiple challenges for families of young children in accessing mental and behavioral health services. First, many families find the process of accessing care overwhelming and need someone to walk them through all of the steps to go through the intake process and get referrals. Second, many families seek care once they have hit a crisis point, but due to the low number of providers in the region, families seeking care often get placed on waitlists. This delay can be very frustrating and disheartening for families in very challenging situations. Finally, most behavioral health providers, and nearly all specialty service providers, are concentrated in the Flagstaff area, which makes these services harder to access for families in more rural areas.

For children with private health insurance, mental and behavioral health services are typically accessed through referrals from medical providers or direct engagement with mental and behavioral health professionals by parents. However, many private insurance plans do not cover support services for parents of children with behavioral concerns, such as respite care or peer support. Additionally, there are very few mental and behavioral health providers who accept private insurance and focus on serving children birth to 5. For the few providers available, wait times exceeded 3 months before the pandemic.[411] Key informants in the region indicated that it is very difficult for families to get in with a good private provider for mental and behavioral health services due to the high demand for services but low number of professionals.

Children who are affiliated with federally-recognized tribes, including the Hopi Tribe and Havasupai Tribe, may access mental and behavioral health services through tribally-operated systems, including Winslow Indian Health Care Center (WIHCC) and Tuba City Regional Health Care Corporation (TCRHCC). WIHCC has multiple mental and behavioral health professionals who can serve children birth to 5, while TCRHCC is pursuing a telehealth partnership with the Guidance Center to serve this population.[412] Additionally, the Hopi Tribe Department of Behavioral Health Services, located at the Hopi Health Care Facility, operates a Family/Child Mental Health Program and can provide child psychiatric and psychologist consultations.[413]

The pandemic has exacerbated many of the pre-existing challenges around mental and behavioral health care access in the region and across the entire county. Disruptions to daily life heightened stress, anxiety and depression in both children and caregivers nationwide. [414] While the average stress level for U.S. adults as a whole was significantly higher than pre-pandemic, according to the *Stress in America*™ survey, conducted annually by the American Psychological Association, a notably larger proportion of adults with children reported high levels of stress during the pandemic compared to adults without children (46% and 28%, respectively).[415] Data from the U.S. Census Bureau's Household Pulse Survey shows that early in the pandemic (April 23-May 5, 2020) the proportion of U.S. adults with symptoms of anxiety disorder nearly tripled compared to pre-pandemic (30.8% and 8.1%, respectively), and a similar trend was seen for adults with symptoms of depressive disorder (25.3% and 6.5%, respectively).[416] While a larger proportion of Arizona adults reported symptoms of anxiety disorder (32.3%) compared to the U.S. overall (30.8%) early in the pandemic, a smaller proportion reported symptoms of depressive disorder (22.4% compared to 25.3%). Though data from spring 2021 show declines in Arizona adults with anxiety disorder symptoms (25.8%) and depression disorder symptoms (20.4%) over the course of the pandemic, these proportions are still notably higher than those seen pre-pandemic.

Like the trends seen in the overall population, rates of postpartum depression and other perinatal mental health conditions have increased during the COVID-19 pandemic, as the pandemic has limited access to many of the social supports and networks that new mothers typically rely on.[417, 418] One study found that rates of postpartum depression have more than doubled among mothers giving birth during the pandemic compared to those giving birth prior.[419]

The stress and uncertainty of the pandemic led to an increase in overall conflict, spousal conflict and parent-child conflict during the pandemic. Low-income households and households with children with special needs, in particular, reported higher levels of children's emotional difficulties alongside greater anxiety, depression, loneliness and stress among caregivers.[420, 421, 422] Parents' and caregivers' inability to access early intervention services and well-child visits has not only impacted young children's healthy development, but also limited access to the critical emotional and mental health supports caregivers and children receive from medical and social services professionals.[423] Additionally, the deaths caused by the COVID-19 pandemic also affect children nationwide. A recent study estimated that approximately 140,000 children in the U.S. and 4,800 in Arizona, lost a parent or caregiver (such as a grandparent) to COVID-19 between April 2020 and June 2021.[424] The same study found that American Indian or Alaska Native children were 4.5 times as likely to have lost a parent or caregiver than white children due to the high rates of death from COVID-19 in Native communities.

Access to family support services and mental and behavioral health care will be all the more critical for young children and their families as the pandemic continues. Key informants in the region emphasize the need for mental health supports for both young children and their caregivers, noting that a healthy parent is crucial for raising a healthy child. Given the many stressors and mental health challenges brought on by the isolation, disruption, trauma and grief caused by the pandemic, increasing access to mental and behavioral health care is a critical need in the region going forward.

Substance Use Disorders

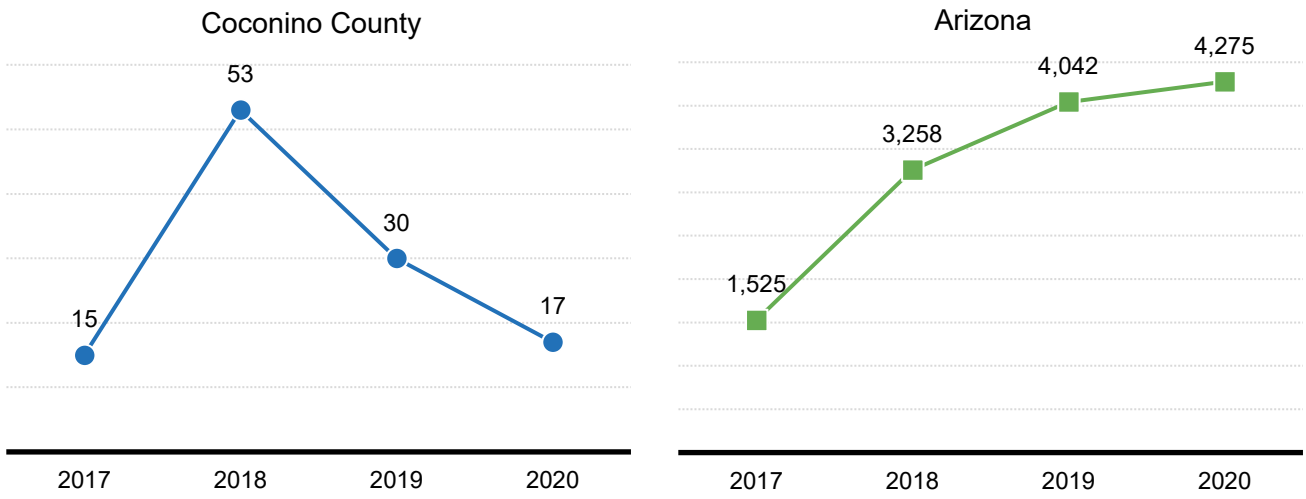
Much like mental health, parental substance use has major implications for children's health and well-being. A mother's use of substances such as drugs and alcohol during pregnancy can impact her newborn's health. Babies born to mothers who smoke are more likely to be born early (preterm), have low birth weight, die from sudden unexplained infant death (SUID) and have weaker lungs than babies born to mothers who do not smoke.[425,426] Opiate use during pregnancy, either illegal or prescribed, has been associated with neonatal abstinence syndrome (NAS), a group of conditions that causes infants exposed to these substances in the womb to be born exhibiting withdrawal symptoms.[427] As noted previously (Table 23), between 2016 and 2020, there were 106 newborns in the Coconino Region hospitalized because of maternal drug use during pregnancy.

Parental substance abuse also has other impacts on family wellbeing. According to the National Survey of Children's Health, young children in Arizona are more than twice as likely to live with someone with a problem with alcohol or drugs than children in the U.S. as a whole (9.8% compared to 4.5%).[428] Children of parents with substance use disorders are more likely to be neglected or abused and face a higher risk of later mental health and behavioral health issues, including developing substance use disorders themselves.[429,430] Substance abuse treatment and supports for parents and families grappling with these issues can help to ameliorate the short and long-term impacts on young children.[431]

Along with an increase in stress and mental health concerns among adults in the U.S., data from the Census Bureau's Household Pulse Survey show that more than 1 in 10 adults (12%) reported increases in alcohol consumption or substance use during the pandemic.[432] Drug overdose deaths in the early months of the pandemic, when many states instituted stay at home or lockdown orders, were notably higher than pre-pandemic levels, particularly for synthetic opioids.[433] While drug overdose deaths increased across all racial and ethnic groups during the pandemic, American Indian and Alaska Native, Black and Hispanic individuals showed greater increases compared to White individuals.[434] This rise in substance use issues coincides with a time when these groups have disproportionately dealt with negative effects of the pandemic, including stress, job loss, illness and death.

In Coconino County, counter to the trend seen statewide, the number of non-fatal overdoses involving opioids or opiates has fallen from a peak of 53 in 2018 to 17 in 2020 (Figure 96). This may indicate that efforts to prevent opioid overdoses in the county are having a positive effect. Rising numbers in non-fatal overdoses statewide may reflect a rise in opioid use in the rest of state, but also may show success in the prevention of opioid-related deaths, thanks to a 2017 public health initiative. In November 2017, The Director of Arizona Department of Health Services (ADHS) issued a standing order allowing any Arizona-licensed pharmacist in any pharmacy to dispense naloxone (which goes by the brand name Narcan) to anyone.[435] Naloxone is a life-saving medication that counters the effects of an opioid overdose, and providing access to and training on the use of naloxone has been a major part of opioid fatality prevention efforts.

Figure 96. Number of non-fatal overdoses with opioids or opiates contributing to the overdose, 2017 to 2020



Source: Arizona Department of Health Services (2021). [Hospital Discharge dataset]. Unpublished data.

During the same time period, 2017-2020, there were at least 44 deaths with opioids or opiates as a contributing factor in the Coconino Region, likely more (35% of overdose deaths were missing address information) (Table 30). Data from a 2019 report on opioid hospitalization and deaths shows that the rate of deaths due to opioids per 100,000 people was much lower in Coconino County (7.47) than in the state overall (18.78).[436] Coconino County has an Overdose Fatality Review team that reviews all fatal opioid overdoses in the county to develop recommendations to prevent future fatalities. According to their 2019 report, most fatal overdoses occur in the Greater Flagstaff Area.[437]

Table 30. Number of deaths with opiates or opioids contributing, 2017 through 2020

Geography	Number of deaths with opiates or opioids contributing, 2017 through 2020
Coconino Region	**44**
Coconino County	84
Arizona	5,455

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

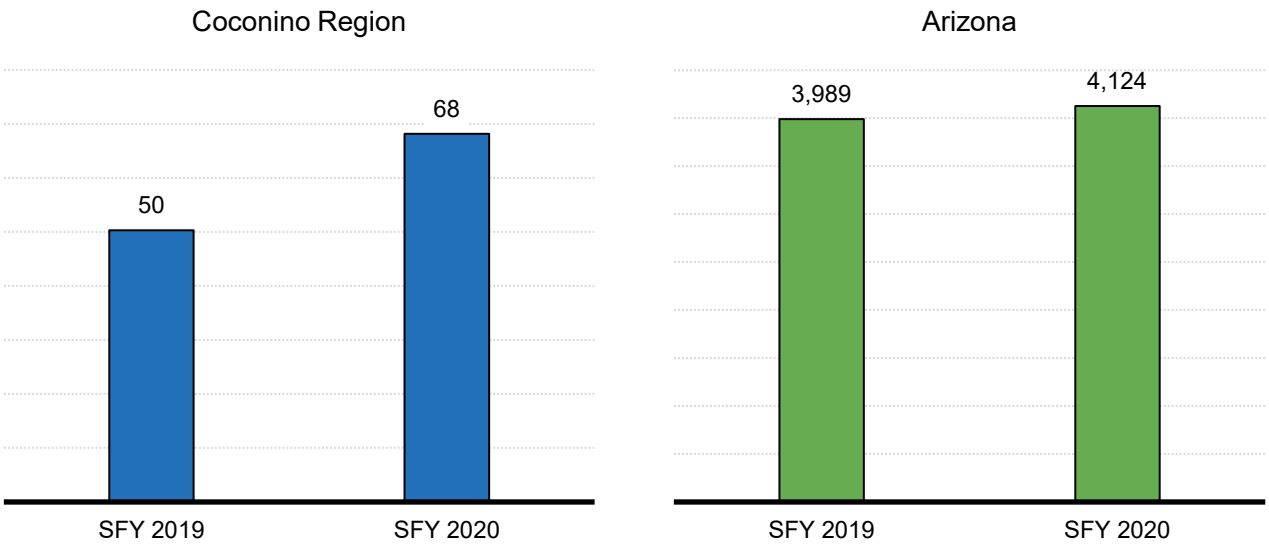
Note: Over a third (35%) of overdose deaths were missing address information, so they could not be accurately assigned to a First Things First region. These deaths are reflected in county numbers.

Child Removals and Foster Care

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. The Arizona Department of Child Safety (DCS) oversees this process. Children involved in foster care systems often have physical and behavioral health issues, in addition to the social-emotional needs brought on by being removed from a parent's care.[438]

In the Coconino Region, DCS removed about 68 young children in state fiscal year 2020, a 36% increase from the 50 children removed in SFY 2019 (Figure 97). The increase in removals across the region in those years parallels a slight increase seen statewide.

Figure 97. Number of children ages birth to 5 removed by DCS, state fiscal years 2019 to 2020

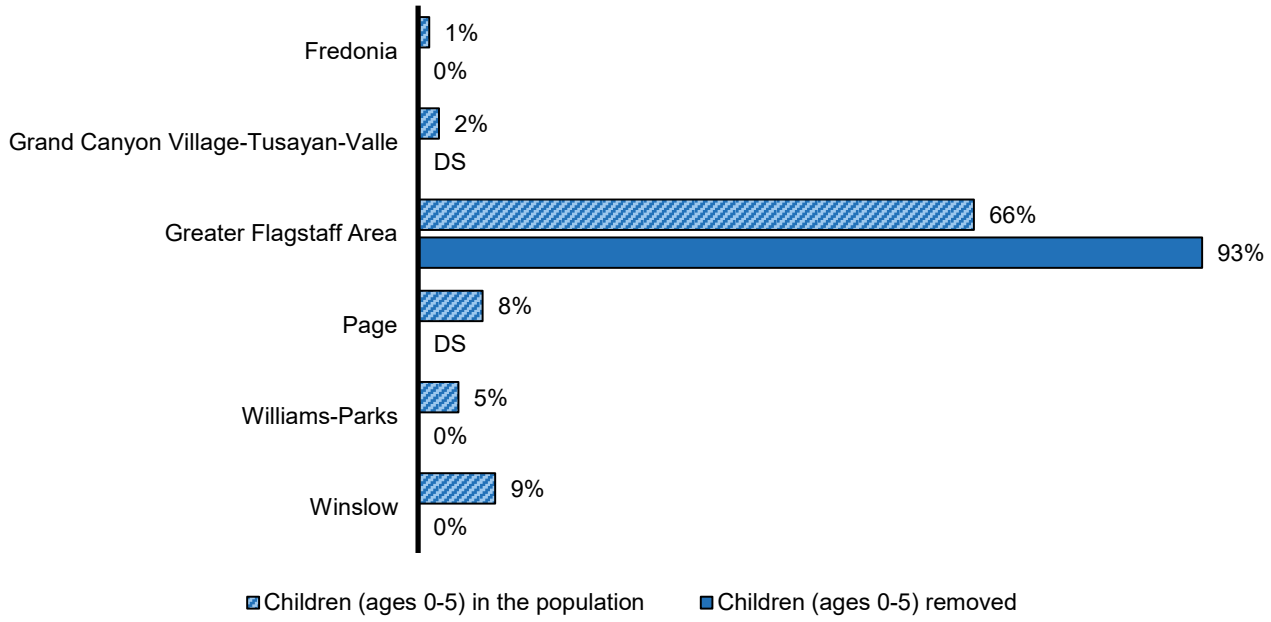


Source: Arizona Department of Child Safety (2021). [Child removal dataset]. Unpublished data.

Note: These data were received by zip code and geocoded to the region by the UArizona CRED team. The data reflect the last known address of the caregiver from whose custody the child was removed, not the location where the removal took place.

The proportion of removals by community differed from the share of young children in each. Most removals (93%) occurred in the Greater Flagstaff Area, even though only two-thirds of young children live in that community (Figure 98). No children were removed in Fredonia, Williams-Parks, or Winslow. Key informants in the region noted that, especially during the pandemic, children in the Flagstaff area were more likely to come into contact with educators and other community members who may have flagged potential worrying dynamics more frequently compared to children in more outlying areas. Additionally, many of the resources and organizations that work with families involved in the child welfare system are concentrated in the Flagstaff area, even though these services are meant for families across the entire county.

Figure 98. Share of children ages birth to 5 removed by DCS in the Coconino Region by community compared to the population ages birth to 5, state fiscal years 2019-2020 combined

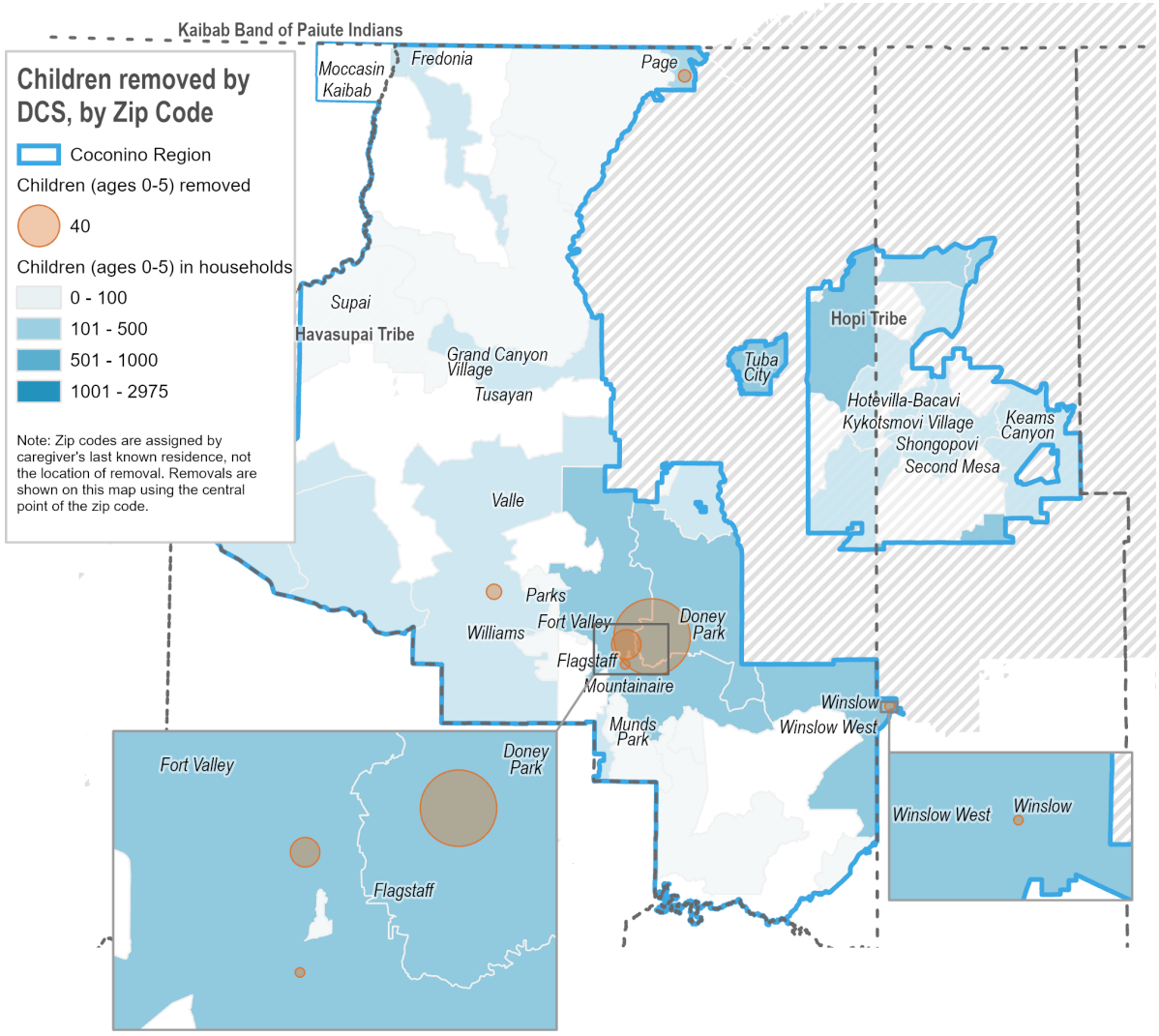


Source: Arizona Department of Child Safety (2021). [Child removal dataset]. Unpublished data.

Note: These data were received by zip code and geocoded to the region by the UArizona CRED team. The data reflect the last known address of the caregiver from whose custody the child was removed, not the location where the removal took place. Havasupai Tribe and Hopi Tribe have their own child welfare agencies and thus are not represented in this figure.

Figure 99 illustrates the number of children removed in 2019 and 2020 by zip code. There was a particular concentration of children removed in the 86004 zip code, an area with very high poverty rates. Key informants working in that part of the Greater Flagstaff Area noted that they observed a high level of trauma among children and families during the pandemic, such as family conflict and domestic violence as families were under strain. This likely contribute to the high numbers of children removed in that zip code compared to elsewhere in the region.

Figure 99. Map of children removed by DCS by zip code, 2019-2020 combined



Source: Arizona Department of Child Safety (2021). [Child removal dataset]. Unpublished data. Map by UArizona CRED Team,

Note: These data were received by zip code and reflect the last known address of the caregiver from whose custody the child was removed, not the location where the removal took place. Please note that Havasupai Tribe and Hopi Tribe operate their own child welfare agencies and data from these agencies are not reflected in this map.

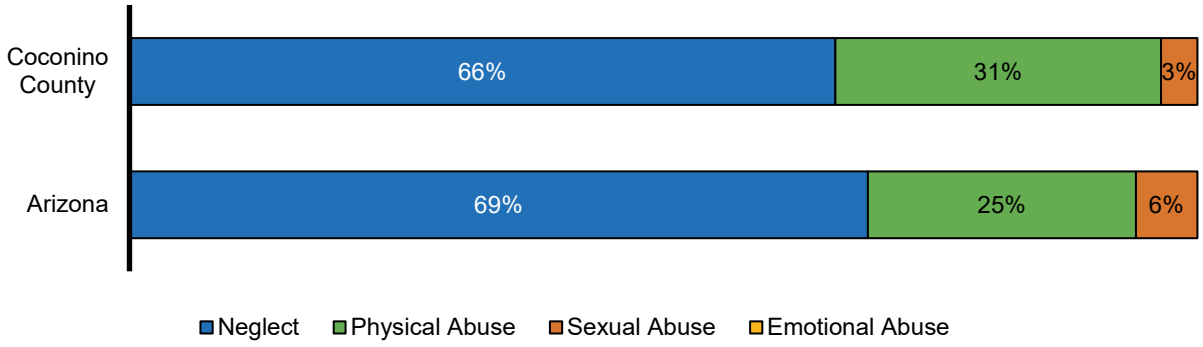
The Coconino County Best for Babies Court Team is an asset in the region for young children involved in the child welfare system. Best for Babies was established in 2008, creating a team of professionals, including a judge, a Health Families Arizona representative, DCS child safety specialists, mental health providers, and other key stakeholders to work together to support young children involved with the child welfare system and the courts. About 65 children ages birth to 5 were in care with the team as of January 2021.[439] In 2020, Best for Babies created a Dependency Unit at the Juvenile Court to provide more dependency services and supports for parents who have had their children removed. They also launched several new programs in 2020, including:

- Parent Support Now, a support group for parents and caregivers with children with behavioral health challenges provided in partnership with the Family Involvement Center;
- Visit Coaching services, which aim to help parents foster healthy relationship with their children during supervised visits; and
- The 2-4-2 book program, an early literacy program designed to increase bonding between parents and children during virtual visits due to COVID-19 visitation restrictions.[440]

Best for Babies also provided Baby CASA and Baby Attorney trainings through Prevent Child Abuse. In 2021, the team is hoping to launch a Dependency Alternative Program, which would aim to help families find alternative legal options to dependency court, in addition to creating a Community Resource Coordinator position in the Juvenile Court to better support families and facilitate timely referrals to services.[441]

While data specific to young children in the Coconino Region are limited, DCS produces a semi-annual report on child welfare services which includes data on children of all ages in the child welfare system by county. This report includes data on types of maltreatment experienced by children involved with DCS. Of the 59 substantiated maltreatment reports for children ages birth to 17 received between June and December 2020, two out of every three reports in Coconino County(66%) were due to neglect (Figure 100). This proportion was slightly lower than across the state (69%). The county had a higher proportion of substantiated reports due to physical abuse (31%) compared to the state (25%), and a lower proportion of sexual abuse cases (3%) during that time period.

Figure 100. Substantiated maltreatment reports by type for children ages birth to 17, June-Dec 2020

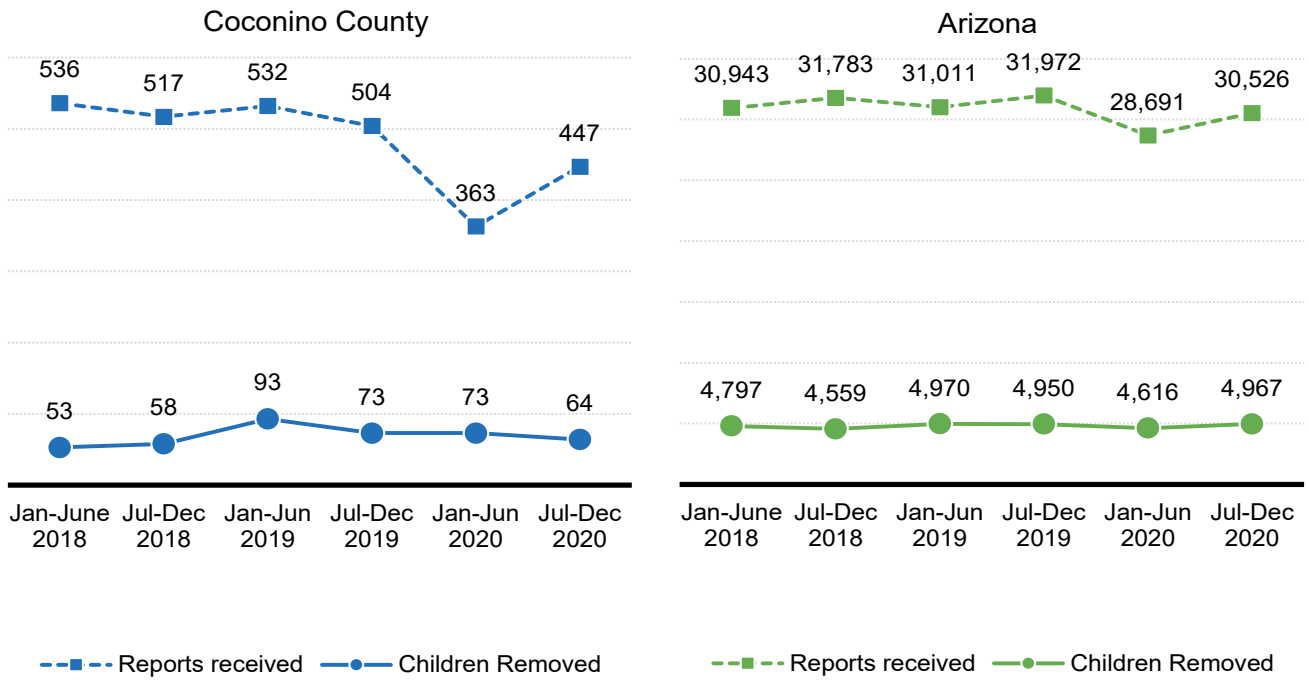


Source: Department of Child Safety (2021). Semiannual child welfare report, March 2021. Retrieved from https://dcs.az.gov/reports

Prior to 2020, reports of child abuse and neglect were consistently around 500 to 530 reports per 6-month period (Figure 101). However, the number of reports fell dramatically in the first half of 2020 in Coconino County, by approximately a third (-33%), likely due to the pandemic. There was a similar dip at the state level (-10%), but not to the same extent seen in the county. While the number of reports returned to levels similar those seen before the pandemic in the state by the second half of 2020, the

number of reports in Coconino County remains down by about 10%. National studies suggest that the transition to distance learning and remote work resulted in fewer opportunities for educators, health care professionals, and other key social service providers to identify and report child maltreatment during the pandemic.[442] Key informants indicated that this was true in the Coconino Region—with children out of school and less likely to have visitors, there were less eyes on children in the community. However, they also noted that there was not a substantial decline in the number of children removed, which suggests that more severe cases of abuse and neglect were still being reported. During the pandemic, families also experienced limited access to key social programs, including family support services and school nutrition programs, which can promote physical and mental health and help decrease and prevent instances of child maltreatment.[443] Key informants in the region noted that the stress of the pandemic amplified pre-existing family dynamics for many; families with healthy relationship patterns grew stronger while those with conflict or other challenging dynamics faced further challenges.

Figure 101. Children reported to and removed by DCS, Jan 2018 to Dec 2020

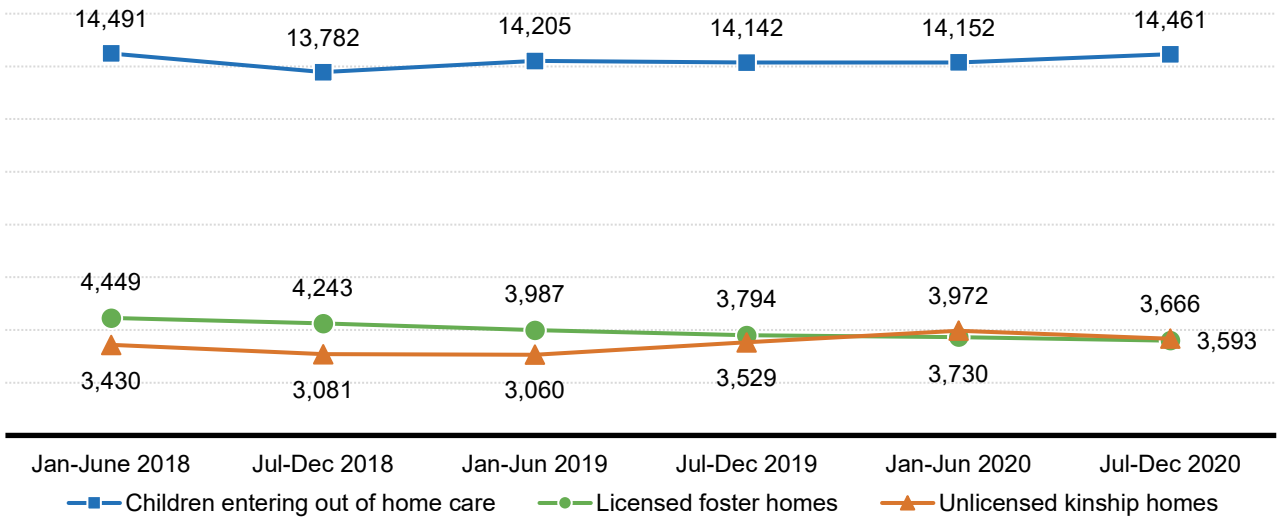


Source: Department of Child Safety (2021). Semiannual child welfare reports, Sept 2018 to March 2021. Retrieved from https://dcs.az.gov/reports

Statewide, there is a large gap between the number of children needing placements and the number of licensed foster homes and unlicensed kinship homes available (Figure 102). Key informants emphasized that this is a problem in the Coconino Region as well. Due to the extreme shortage of foster homes in Coconino County, some children are being placed in foster homes in neighboring counties, such as Yavapai County. Coconino County also faces challenges in maintaining a strong child welfare workforce. Key informants noted that there is very high turnover among child welfare workers and maintaining sufficient staffing levels is difficult.

Statewide, the number of licensed foster homes has been steadily declining since 2018, whereas the number of unlicensed kinship homes was on an increasing trend since 2019, until the pandemic (Figure 102). The Family First Prevention Services Act, signed into law on February 9, 2018, includes reform to child welfare policies, as well as federal investments, to keep children safely with their families and avoid the traumatic experience of entering foster care when possible.[444] Research shows that children in kinship care placements have better wellbeing, fewer mental health disorders, fewer behavioral problems and less placement disruption than children in non-relative foster care.[445] Kinship families may however need additional supports navigating the child welfare system and accessing resources as they support children who may have experienced trauma.[446] Such families may benefit from nearly $15 million in CARES Act funding for the state of Arizona for child welfare agencies,[447] issued as part of the federal response to the pandemic. In the Coconino Region, there is a need to support both the child welfare workforce as well as increasing the number of foster homes and kinship homes in the area so that children can be placed closer to home.

Figure 102. Children entering out-of-home care compared to the number of licensed foster homes and unlicensed kinship homes in Arizona, Jan 2018-Dec 2020



Source: Department of Child Safety (2021). Semiannual child welfare reports, Sept 2018 to March 2021. Retrieved from https://dcs.az.gov/reports

Additional data tables related to *Family Support* can be found in Appendix 1 at the end of this report.

SUMMARY AND CONCLUSIONS

This Needs and Assets Report is the eighth biennial assessment of the challenges and opportunities facing children birth to age 5 and their families in the First Things First Coconino Region. In addition to providing an overview of the region, this report looks more closely at some of the community-level variation within it, by including data by community and school district when available.

The quantitative data reported here, as well as qualitative information provided by key informants during a data interpretation session held in August 2021, highlight some of the Coconino Region's many strengths. A summary of identified regional assets is included below.

Population Characteristics

- More than 15% households in the Coconino Region include at least one child birth to 5.
- At least 16% of residents speak multiple languages proficiently. High rates of Native language use at home in the Hopi Tribe and Havasupai Tribe communities are an asset for cultural preservation and cultivations of a strong sense of cultural identity for young children.

Economic Circumstances

- The median income estimates for all types of families in Coconino County exceed those seen statewide, and relatively fewer young children (16%) in the Coconino Region live in poverty compared to Arizona overall (23%).
- The Summer Food Service Program in Coconino County was leveraged to support students during the pandemic, hopefully reducing food insecurity during a difficult time. In school year 2019-20, over 380,000 free lunches were served to children across the county.
- The number of students experiencing homelessness in the region has steadily declined over the past 3 years.
- The majority of children birth to 17 in the region lived in homes with both a computer and internet access pre-pandemic, which hopefully eased the transition to virtual learning during the pandemic.

Educational Indicators

- Passing rates for AzMERIT 3rd Grade English Language Arts have been consistently rising over the most recent 4 years of data. More than half of all Hopi Tribe Bureau of Indian Education (BIE) schools had higher rates of student meeting academic standards than in BIE school nationally.
- Graduation rates have climbed in the region over the past 3 years and are substantially higher than state rates. Dropout rates declined to only 1% in the 2019-20 school year. As of 2019-20, nearly 9 out of every 10 students starting high school in the region graduate within 5 years.

- Adults in the Coconino Region have higher levels of educational attainment than in Arizona as a whole. The majority of births in the region are to mothers with more than a high school education.

Early Learning

- Nearly half of all preschool-age children in the Coconino Region are estimated to be enrolled in preschool. This far exceeds the state rate and nearly matches national estimates.
- In three communities in the region (Grand Canyon Village-Tusayan-Valle, Page, and Havasupai Tribe), there is a good balance between early care and education availability and the number of young children who may need out-of-home care, and in at least two of these communities (Grand Canyon Village-Tusayan-Valle and Havasupai Tribe), most slots available are in Quality First participating providers.
- Child care centers tend to be more affordable in Coconino County than elsewhere (e.g., $760 per month for infant care vs. $861/month in Arizona).
- A strong network of Head Start providers supports both typically developing students and students with special needs.

Child Health

- The Coconino Region has seen significant progress on multiple maternal and infant health indicators over the past 5 years. The percent of births to mothers with inadequate prenatal care, births to teenaged mothers and low-birthweight births all decreased from 2015 to 2019.
- Among children enrolled in WIC programs, the Coconino Region has higher rates of breastfeeding initiation and lower rates of early childhood obesity. In the Hopi Tribe WIC program, 9 out of every 10 infants enrolled had breastfeeding initiated, and approximately half were still breastfed at 6 months in 2020.
- The vast majority of children in child care and kindergarten in the Coconino Region are up to date on the three major (DTAP, polio, and MMR) vaccine series for young children.

Family Support and Literacy

- Home visiting programs, including those funded by the Regional Partnership Council, support healthy child development and increase school readiness, including strengthening early literacy skills, for over a hundred young children and their families across the region.
- The Best for Babies Court Team helps to coordinate services for young children involved with the courts and has launched multiple programs during the pandemic to help foster healthy relationships between parents and children even during pandemic-related disruptions to in-person visitation and better support parents caring for children with behavioral challenges.

Even with substantial strengths in the region, there continue to be challenges to fully serving the needs of families with young children, and it is particularly important to recognize that there is considerable variability in the needs of families across the region. A more extensive list of regional challenges follows, but we first summarize key needs in the region based on available data. The Coconino Regional Partnership Council supports multiple efforts that aim to address these major challenges, and many of these challenges are challenges seen statewide as well. These include:

- **The need for affordable, high quality and accessible child care** – There are challenges with both the availability and affordability of child care in the region. Comparing the number of children birth to 5 to the number of available child care slots in the region overall, more than 1,500 additional slots would be needed to ensure that all children with working parents could access out-of-home care. This need is greatest in the Greater Flagstaff Area, Hopi Tribe, Williams-Parks, and Winslow communities. The shortage of accessible, affordable early care and education programs may mean that fewer children reap the benefits of attending a high quality preschool, and the shortage may also be a barrier to employment for families who need affordable child care in order to work. Additionally, the loss of Preschool Development Grant funding in 2019 and the substantial disruptions to the child care sector during the pandemic threaten to roll-back substantial improvement in child care access in the region if funds provided through federal pandemic relief bills to support child care programs are not allocated wisely.

  Additionally, based on a median family income of $75,800, families in Coconino County pay about 10-12% of their income for child care, depending on the child's age. Although this is more affordable relative to other families statewide (11-15% of income a median $70,200 income), it still puts child care as a substantial cost for families, especially for families with multiple young children needing care. The United States Department of Health and Human Services recommends that parents spend no more than 10% of their family income on child care to avoid being overburdened. Key informants highlighted that child care costs are especially high in the Greater Flagstaff Area.

- **The need for additional supports for the youngest children with special needs** – Only 2.3% of children aged birth to 2 years in the Coconino Region were receiving in services from the Arizona Early Intervention Program (AzEIP) or the Division of Developmental Disabilities (DDD) in state fiscal year 2020, whereas research suggests about 13% of young children would typically qualify for early intervention services. The number of young children referred to and served by AzEIP fell by almost half from 2019 to 2020, and the number served by DDD also halved between 2018 and 2020. This combined with the disruption of services during the pandemic raises serious concerns that young children in need may not be receiving early intervention services and highlights a need for additional screening and supports.

  Despite the declines in early intervention services, the number of preschool-aged children receiving services for disability or delays from Local Education Authorities in the Coconino Region has steadily increased over the past 3 years, while the number of early elementary

students enrolled in special education in public and charter schools has remained steady. As of October 1 in the 2019-20 school year, there were 662 kindergarten to 3rd grade students enrolled in special education in public and charter schools in the region. This is nearly 6 times the number of children birth to 2 in the region being served by early intervention services (108 served by AzEIP and DDD in 2020). Even accounting for the wider age range served in elementary school, there are relatively more students being served through schools than early intervention programs. It may be that children with delays are being identified and diagnosed when they are older, potentially missing the opportunity for earlier intervention which can be more effective and less costly.

The availability of early learning opportunities and services for young children with special needs has been an ongoing concern across the state, particularly in the more geographically remote communities and some tribal communities. The pandemic added to these challenges in serving these students, as pandemic-related school closures and transitions of services from in-person to remote further impacted availability and quality of services provided children with special needs. Going forward, young children with special needs may need additional supports to compensate for the challenges faced during the pandemic.

- **The need for greater access to mental and behavioral services for young children and their parents and caregivers** – Even before the pandemic, access to mental and behavioral health care in the Coconino Region was very limited. Most of the region is classified as a Mental Health Professionals Shortage Area, and there were few providers specifically trained in providing mental and behavioral health care to the birth to 5 population. As a result, families often faced long waitlists to receive needed care.

  The pandemic has led to increased stress, anxiety and depression among adults, increased postpartum depression for mothers, increased emotional difficulties and challenging behaviors in young children and increased trauma and grief as thousands of children have lost caregivers and loved ones nationwide. These challenges have been amplified for low-income families and families of children with special needs. Given the increase in need for mental and behavioral health supports, finding ways to create more access to mental and behavioral health care is a crucial need to foster resilience for young children and their families.

- **The need to strengthen the local child welfare system and provide additional support to families in crisis** – The number of young children removed in the Coconino increased from 2019 to 2020, possibly driven by increased family conflict and domestic violence under the stressors of the pandemic. At the same time, the number of reports of child maltreatment to the Department of Child Safety (DCS) dropped sharply in 2020, as many children did not interact with teachers, medical professionals and other mandated reporters outside the home.

  Key informants in the region noted that the pandemic amplified pre-existing family dynamics, both good and bad, with strong families coming through the initial lockdowns strengthened, while families already caught in unhealthy patterns struggling even more. At the same time, there

is a high rate of turnover among child welfare workers in the region, and far from enough local foster homes, leading to children being placed in foster homes in neighboring counties.

Programs like the Coconino County Best for Babies Court Team are important for coordinating services and providing supports tailored towards the needs of very young infants and toddlers in the child welfare system. As the pandemic continues, additional supports for families in crisis situations as well as supports for child welfare workers and foster and kinship families will be needed to protect vulnerable young children and nurture safe and supportive families.

Additional regional challenges highlighted in this report include:

Population Characteristics

- More than 1,600 grandparents in the Coconino Region are estimated to be caring for one or more grandchildren birth to 17, and more than 1 in 10 children birth to 5 live in a multigenerational household. Given the heightened risks that multigenerational households faced during the pandemic, along with the challenges faced by grandparents and other relative caregivers for young children, additional outreach and supports for these families may be warranted.

Economic Characteristics

- While relatively fewer young children live in poverty in the Coconino Region, many families may struggle to make ends meet. The self-sufficiency standard for a two-parent family with a preschooler and an infant is nearly the same as the median income in Coconino, meaning that many families, especially those with multiple young children, may be struggling to cover all their costs. Ensuring families have access to safety net programs and supporting strategies to make housing and child care more affordable can help reduce strain on these families.
- Food security issues were likely exacerbated by the pandemic, with Feeding America projecting that child food insecurity in Coconino County increased by more than 4 percentage points between 2019 and 2021. The Pandemic Electronic Benefit Transfer Program (P-EBT) was established to offset the loss of meals normally received for free at schools or child care settings. Eligible families included those participating in SNAP with a child birth to 5 and those with a child who received free or reduced-price school lunch. In 2020, over 3,400 children birth to 5 were participating in SNAP in the region. However, in March 2021, only 692 children birth to 5 received P-EBT, and this number shrank in the following months, suggesting that many eligible children did not access this benefit to help ensure access to adequate food during the pandemic. The high proportions of students eligible for free and reduced-price lunches in districts across the region also raises concerns about additional hardships for these children during school closures. While many districts aimed to provide meals even while running classes remotely, families faced more logistical hurdles to acquiring those meals.
- In 2020, the region lost eight years of progress as unemployment spiked to the highest rates seen since the Great Recession as a result of the COVID-19 pandemic. The number of unemployment

claims jumped more than 30-fold from February to April 2020. Even as claims surged during the pandemic, there was a consistent and wide gap between the number of claims filed and the number of claims found eligible and paid. This suggests there may be widespread economic challenges in families with lost incomes who requested but did not receive unemployment benefits.

- Single-female-headed households in Coconino County have a median income of $33,592, far below the median income for married families with children in the county ($90,955). About a third of young children in the region live in single-parent households, most of which are single moms.
- Prior to the pandemic, nearly half (48%) of renter-occupied households were housing-cost burdened (i.e., spending more than 30% of their income on housing) a percentage that likely increased during the pandemic with job losses and shifts in the housing market.
- While overall internet connectivity in the region exceeded that seen statewide, in the Hopi Tribe community, less than a third of children birth to 17 (29%) lived in household with a computer and internet access prior to the pandemic. This lack of internet connectivity created many challenges for children and their families during the transition to remote learning and during pandemic lockdowns.

Educational Indicators

- Prior to the pandemic, early elementary chronic absenteeism rates in the region exceeded those seen statewide, with more than one in every four students reported chronically absent in some charter schools and school districts.
- Despite improvements, the region still consistently lags behind the state in terms of AzMERIT passing rates in both 3rd Grade English Language Arts and Math. At Havasupai Elementary School, no students met academic standards in English Language Arts or Math in 2018-19.

Early Learning

- There are no early care and education providers in the Fredonia community following the closure of Fredonia Head Start.
- There are very few slots available in Quality First participating providers in the Winslow community, and no accredited providers, meaning that families in the region have very limited access to high quality care.

Child Health

- Less than two-thirds of birth in the Coconino Region were to mothers who began prenatal care in the first trimester in 2019, suggesting a need for education about the importance of early prenatal care.

- Rates of tobacco use among expectant mothers has been rising in the region since 2017. In the Coconino Region, 3.7% of babies born in 2019 had mothers who reported smoking while pregnant, compared to 4.3% statewide. Both the region and state are more than twice as high as the Healthy People 2020 goal of no more than 1.4%. Rates of tobacco use during pregnancy are especially high in Winslow (8.1%).
- More families are seeking exemptions from routine childhood vaccinations. While the proportion of families seeking exemptions from all vaccines in kindergarten dropped between 2018-19 and 2019-20, the proportion seeking religious exemptions in child care jumped dramatically, from 4.5% to 6.1%. Rates of exemptions are particularly high in Williams-Parks where 12.1% of children in child care and 23.5% of kindergarteners were exempt from all required vaccines in 2019-20. These trends are worrisome because in order to assure community immunity of preventable infectious diseases, which helps to protect unvaccinated children and adults, vaccination rates need to remain high.
- In the Coconino Region, 10 infants died in both 2018 and 8 in 2019. Given the number of births each year, this put the infant mortality rate at 7.5 and 6.2, respectively. These rates are both higher than those seen statewide and above the Healthy People 2020 target infant mortality rate of no more than 6.0.

Family Support and Literacy

- A high number of young children removed by DCS are concentrated in a particular neighborhood in the Greater Flagstaff Area, suggesting an opportunity for targeted interventions.
- Coconino County has a higher proportion of substantiated child maltreatment reports due to physical abuse than seen statewide.

These needs are complex issues that have root causes that no single organization can tackle alone. Successfully addressing the needs outlined in this report will require the continued concentrated effort of collaboration among First Things First and other state agencies, the Coconino Regional Partnership Council and staff, local providers, and other community stakeholders in the region. Families in the region have unique assets and strengths and a desire to provide the best life possible for their children. Continued collaborative efforts have the long-term potential to create opportunities for families to thrive in the Coconino Region.

APPENDIX 1: ADDITIONAL DATA TABLES

Population Characteristics

Table 31. Number of babies born, 2015 to 2019

Geography	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019
Coconino Region	**1,562**	**1,451**	**1,513**	**1,415**	**1,331**	**1,292**
Coconino County	1,701	1,575	1,615	1,506	1,500	1,367
Arizona	86,648	85,024	84,404	81,664	80,539	79,183

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

Table 32. Race and ethnicity for the mothers of babies born in 2018 and 2019

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
Coconino Region	**2018**	**1,331**	**48%**	**16%**	**1%**	**31%**	**4%**
	2019	**1,292**	**49%**	**16%**	**1%**	**31%**	**3%**
Coconino County	2018	1,500	44%	13%	1%	39%	3%
	2019	1,367	44%	13%	1%	40%	2%
Arizona	2018	80,539	43%	41%	6%	6%	4%
	2019	79,183	43%	41%	6%	6%	4%

Source: Arizona Department of Health Services (2021). [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 33. Children ages birth to 5 living with parents who are foreign-born, 2015-2019 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	
Coconino Region	**8,276**	**642**	**8%**
Fredonia	38	0	0%
Grand Canyon Village-Tusayan-Valle	230	0	0%
Greater Flagstaff Area	5,379	550	10%
Havasupai Tribe	0	0	N/A.
Hopi Tribe	933	17	2%
Page	489	0	0%
Williams-Parks	558	30	5%
Winslow	624	45	7%
Coconino County	8,802	583	7%
Arizona	494,590	126,082	25%
United States	22,727,705	5,631,005	25%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B05009

Note: The term "parent" here includes stepparents. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Table 34. Language spoken at home (by persons ages 5 and older), 2015-2019 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
Coconino Region	**124,909**	**79%**	**8%**	**13%**
Fredonia	1,314	87%	8%	5%
Grand Canyon Village-Tusayan-Valle	3,221	87%	6%	7%
Greater Flagstaff Area	88,687	84%	8%	8%
Havasupai Tribe	0	N/A	N/A	N/A
Hopi Tribe	8,329	32%	0%	68%
Page	7,778	76%	5%	19%
Williams-Parks	6,327	84%	11%	5%
Winslow	9,026	70%	11%	19%
Coconino County	133,512	76%	6%	18%
Arizona	6,616,331	73%	20%	7%
United States	304,930,125	78%	13%	8%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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%). Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Table 35. English-language proficiency (for persons ages 5 and older), 2015-2019 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
Coconino Region	**124,909**	**79%**	**16%**	**4%**
Fredonia	1,314	87%	9%	4%
Grand Canyon Village-Tusayan-Valle	3,221	87%	9%	4%
Greater Flagstaff Area	88,687	84%	12%	4%
Havasupai Tribe	0	N/A.	N/A	N/A
Hopi Tribe	8,329	32%	54%	15%
Page	7,778	76%	23%	1%
Williams-Parks	6,327	84%	11%	5%
Winslow	9,026	70%	24%	6%
Coconino County	133,512	76%	19%	5%
Arizona	6,616,331	73%	19%	9%
United States	304,930,125	78%	13%	8%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16001

Note: The three percentages in each row should sum to 100%, but may not because of rounding. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Table 36. Limited-English-speaking households, 2015-2019 ACS

Geography	Estimated number of households	Number and percent of limited-English-speaking households	
Coconino Region	**44,316**	**810**	**2%**
Fredonia	444	3	1%
Grand Canyon Village-Tusayan-Valle	1,409	23	2%
Greater Flagstaff Area	31,829	511	2%
Havasupai Tribe	0	0	N/A
Hopi Tribe	2,198	150	7%
Page	2,653	0	0%
Williams-Parks	2,952	59	2%
Winslow	2,736	64	2%
Coconino County	47,447	1,397	3%
Arizona	2,571,268	102,677	4%
United States	120,756,048	5,308,496	4%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16002

Note: A "limited-English-speaking" household is one in which no one over the age of 13 speaks English very well. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Table 37. Percent of kindergarten to 3rd grade students who were English Language Learners, 2017-18 to 2019-20

Geography	Percent of K-3 Students who were English Language Learners, 2017-18	Percent of K-3 Students who were English Language Learners, 2018-19	Percent of K-3 Students who were English Language Learners, 2018-19
Coconino Region Schools	**7%**	**5%**	**5%**
Coconino County Schools	7%	5%	6%
Arizona Schools	11%	11%	11%

Source: Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: English Language Learners are students who are not deemed 'proficient' in the English language and thus eligible for additional supportive services for English language acquisition.

Table 38. Selected characteristics of grandparents who are responsible for one or more grandchildren under 18 in their households, 2015-2019 ACS

Geography	Estimated number of grandparents who live with and are responsible for grandchildren under 18 years old	Percent of these grandparents who:				
		Are female	Are 60 years old or older	Have an income below the poverty level	Do not speak English very well	Do not have the child's parents in the household
Coconino Region	**1,263**	**66%**	**49%**	**18%**	**19%**	**28%**
Fredonia	N/A	N/A	N/A	N/A	N/A	N/A
Grand Canyon Village-Tusayan-Valle	N/A	N/A	N/A	N/A	N/A	N/A
Greater Flagstaff Area	532	65%	60%	9%	19%	15%
Havasupai Tribe	N/A	N/A	N/A	N/A	N/A	N/A
Hopi Tribe	251	73%	38%	30%	18%	45%
Page	201	57%	26%	0%	16%	55%
Williams-Parks	N/A	N/A	N/A	N/A	N/A	N/A
Winslow	235	67%	56%	42%	28%	14%
Coconino County	1,520	62%	48%	18%	21%	24%
Arizona	64,841	62%	42%	22%	21%	31%
United States	2,465,864	63%	44%	19%	14%	36%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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. In Fredonia, Grand Canyon Village-Tusayan-Vale, and Williams Parks, the sample size for the ACS was too small to calculate a reliable estimate for this indicator. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Table 39. Grandchildren ages birth to 5 living in a grandparent's household, 2015-2019 ACS

Geography	Estimated number of children (birth to 5 years old) living in households	Number and percent living in their grandparent's household	
Coconino Region	**8,612**	**1,201**	**14%**
Fredonia	38	0	0%
Grand Canyon Village-Tusayan-Valle	251	96	38%
Greater Flagstaff Area	5,502	323	6%
Havasupai Tribe	N/A	N/A	N/A
Hopi Tribe	1,029	547	53%
Page	521	32	6%
Williams-Parks	580	103	18%
Winslow	666	91	14%
Coconino County	9,276	1,981	21%
Arizona	517,483	67,495	13%
United States	23,640,563	2,521,583	11%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Tables B10001 & B27001

Note: This table includes all children (under six 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. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Economic Circumstances

Table 40. Median annual family income, 2015-2019 ACS

Geography	Median annual income for all families	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
Coconino Region	N/A	N/A	N/A	N/A
Hopi Tribe	$43,000	$56,800	N/A	$23,800
Havasupai Tribe	N/A	N/A	N/A	N/A
Coconino County	$75,800	$91,000	$53,700	$33,600
Arizona	$70,200	$88,400	$42,900	$30,400
United States	$77,300	$100,000	$45,100	$29,000

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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. Median income estimates are only available for official census geographies, such as counties, places, or reservations. Since the region and many sub-regional communities are custom aggregations of census geographies, no median income estimates are available for them. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Table 41. Rates of poverty for persons of all ages and for children ages birth to 5, 2015-2019 ACS

Geography	Estimated population for whom poverty status can be determined (all ages)	Percent of the population below the poverty level	Estimated number of children for whom poverty status can be determined (birth to 5 years old)	Percent of children below the poverty level
Coconino Region	**118,019**	**17%**	**8,480**	**16%**
Fredonia	1,333	15%	38	22%
Grand Canyon Village-Tusayan-Valle	3,393	9%	230	0%
Greater Flagstaff Area	80,325	15%	5,446	8%
Havasupai Tribe	0	N/A	0	N/A
Hopi Tribe	9,149	38%	1,005	51%
Page	8,171	17%	521	16%
Williams-Parks	6,758	17%	558	19%
Winslow	8,645	22%	658	33%
Coconino County	128,041	18%	9,111	16%
Arizona	6,891,224	15%	508,453	23%
United States	316,715,051	13%	23,253,254	20%

Source: U.S. Census Bureau. (2020). American Community Survey five-year estimates 2015-2019, Table B17001

Note: This table 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 2019, the poverty threshold for a family of two adults and two children was $25,926; for a single parent with one child, it was $17,622. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Table 42. Children ages birth to 5 living at selected poverty thresholds, 2015-2019 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
Coconino Region	**8,480**	**9%**	**7%**	**20%**	**64%**
Fredonia	38	1%	21%	76%	2%
Grand Canyon Village-Tusayan-Valle	230	0%	0%	15%	85%
Greater Flagstaff Area	5,446	4%	3%	16%	76%
Havasupai Tribe	0	N/A	N/A	N/A	N/A
Hopi Tribe	1,005	30%	21%	22%	27%
Page	521	16%	0%	27%	57%
Williams-Parks	558	6%	13%	38%	42%
Winslow	658	19%	14%	25%	42%
Coconino County	9,111	9%	7%	22%	62%
Arizona	508,453	11%	13%	22%	54%
United States	23,253,254	9%	11%	19%	60%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B17024

Note: The four percentages in each row should sum to 100%, but may not because of rounding. In 2019, the poverty threshold for a family of two adults and two children was $25,926; for a single parent with one child, it was $17,622. The 185% thresholds are $47,963 and $32,600, respectively. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Table 43. Families with children ages birth to 5 receiving TANF, state fiscal years 2016 to 2020

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 2020
		SFY 2016	SFY 2017	SFY 2018	SFY 2019	SFY 2020	
Coconino Region	**6,795**	**118**	**115**	**109**	**86**	**105**	**2%**
Coconino County	7,474	69	71	53	[21-29]	57	1%
Arizona	384,441	13,925	12,315	10,538	9,360	9,947	3%

Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P20.

Table 44. Children ages birth to 5 receiving TANF, state fiscal years 2016 to 2020

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 2020
		SFY 2016	SFY 2017	SFY 2018	SFY 2019	SFY 2020	
Coconino Region	**9,652**	**155**	**143**	**142**	**106**	**131**	**1%**
Coconino County	10,777	94	90	70	38	72	1%
Arizona	546,609	18,968	17,143	14,659	13,029	13,747	3%

Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P14.

Table 45. Families participating in SNAP, state fiscal years 2016 to 2020

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 2020
		SFY 2016	SFY 2017	SFY 2018	SFY 2019	SFY 2020	
Coconino Region	**6,795**	**3,027**	**2,946**	**2,745**	**2,465**	**2,333**	**34%**
Coconino County	7,474	3,320	3,273	2,943	2,669	2,427	32%
Arizona	384,441	171,977	164,092	151,816	140,056	132,466	34%

Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P20.

Table 46. Children participating in SNAP, state fiscal years 2016 to 2020

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 2020
		SFY 2016	SFY 2017	SFY 2018	SFY 2019	SFY 2020	
Coconino Region	**9,652**	**4,520**	**4,431**	**4,103**	**3,707**	**3,451**	**36%**
Coconino County	10,777	5,070	4,964	4,483	4,140	3,693	34%
Arizona	546,609	258,455	247,414	229,275	211,814	198,961	36%

Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P14.

Table 47. Children ages birth to 17 and birth to 5 receiving Pandemic EBT, March to May 2021

Geography	Children ages 0-17 receiving P-EBT			Children ages 0-5 receiving P-EBT		
	March 2021	April 2021	May 2021	March 2021	April 2021	May 2021
Coconino Region	**10,832**	**10,879**	**10,832**	**692**	**623**	**557**
Coconino County	11,265	11,252	11,265	729	640	584
Arizona	628,147	628,087	628,221	38,053	34,402	30,926

Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data.

Table 48. Women enrolled in WIC, 2016 to 2020

Geography	Enrolled women, 2016	Enrolled women, 2017	Enrolled women, 2018	Enrolled women, 2019	Enrolled women, 2020
Coconino Region	**1,059**	**987**	**874**	**779**	**676**
Coconino County	1,087	1,004	896	780	686
Arizona	80,063	75,882	72,098	68,312	63,111

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

Note: Enrolled women include both pregnant and breastfeeding women.

Table 49. Women participating in WIC, 2016 to 2020

Geography	Participating women, 2016	Participating women, 2017	Participating women, 2018	Participating women, 2019	Participating women, 2020
Coconino Region	999	913	810	708	624
Coconino County	1,028	921	831	716	629
Arizona	75,126	70,840	67,687	64,225	59,477

Source: Arizona Department of Health Services (2021). [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 50. Children ages birth to 4 enrolled in WIC, 2016 to 2020

Geography	Enrolled infants and children, 2016	Enrolled infants and children, 2017	Enrolled infants and children, 2018	Enrolled infants and children, 2019	Enrolled infants and children, 2020
Coconino Region	2,759	2,516	2,254	2,125	1,875
Coconino County	2,785	2,482	2,270	2,102	1,852
Arizona	206,626	196,482	187,737	178,300	167,186

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

Table 51. Children ages birth to 4 participating in WIC, 2016 to 2020

Geography	Participating infants and children, 2016	Participating infants and children, 2017	Participating infants and children, 2018	Participating infants and children, 2019	Participating infants and children, 2020
Coconino Region	2,416	2,232	2,029	1,891	1,712
Coconino County	2,440	2,205	2,050	1,867	1,678
Arizona	185,185	175,423	169,372	161,287	154,501

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 52. Free and reduced-price lunch eligibility, 2017-18 to 2019-20

Geography	Students eligible for free or reduced-price lunch, 2017-18	Students eligible for free or reduced-price lunch, 2018-19	Students eligible for free or reduced-price lunch 2019-20
Coconino Region Schools	**57%**	**56%**	**55%**
Flagstaff Unified District	41%	40%	38%
Williams Unified District	65%	68%	64%
Grand Canyon Unified District	59%	54%	66%
Fredonia-Moccasin Unified District	70%	71%	69%
Page Unified District	75%	74%	74%
Maine Consolidated School District	61%	55%	37%
Winslow Unified District	74%	74%	74%
Coconino County Accommodation School District	83%	>98%	>98%
Painted Desert Demonstration Projects, Inc.	69%	70%	84%
PEAK School Inc., The	74%	76%	66%
Heritage Elementary School	74%	77%	63%
Coconino Region BIE & Mission Schools	94%	94%	96%
Coconino County Schools	60%	59%	58%
Arizona	**57%**	**56%**	**55%**

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

Note: The Coconino Region BIE & Mission schools that participate in the National School Lunch Program include Hotevilla Bacavi Community School, Moencopi Day School, First Mesa Elementary, Second Mesa Day School, Winslow Residential Hall, Keams Canyon Elementary, Havasupai Elementary, Hopi Mission School, and Hopi Jr/Sr High School.

Table 53. Lunches served through the National School Lunch Program, 2017-18 to 2019-20

Geography	Number of schools			Number of lunches served		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
Coconino Region Schools	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Coconino County Schools	44	44	44	1,630,790	1,554,413	1,134,708
Arizona Schools	1,767	1,765	1,805	101,727,112	102,012,129	76,454,370

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

Table 54. Lunches served through the Child and Adult Care Feeding Program, 2017-18 to 2019-20

Geography	Number of schools			Number of lunches served		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
Coconino Region Schools	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Coconino County Schools	29	28	23	88,345	74,783	47,102
Arizona Schools	1,011	1,090	920	7,225,302	7,242,730	5,556,341

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

Note: Please note the meals served through CACFP reflect both meal service at child care providers and at adult care centers. 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

Table 55. Lunches served through the Summer Food Service Program, 2017-18 to 2019-20

Geography	Number of schools			Number of lunches served		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
Coconino Region Schools	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Coconino County Schools	33	35	91	54,796	53,849	385,200
Arizona Schools	1,207	1,076	2,520	1,870,111	1,868,539	21,786,393

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

Table 56. Monthly unemployment insurance claims, Nov 2019 to Nov 2020

Geography	Coconino Region			Arizona		
	Total Claims (All Outcomes)	Claims found eligible and paid	Percent of claims found eligible and paid	Total Claims (All Outcomes)	Claims found eligible and paid	Percent of claims found eligible and paid
Nov 2019	145	58	40%	7,787	2,275	29%
Dec 2019	202	67	33%	7,906	2,312	29%
Jan 2020	213	79	37%	9,892	2,712	27%
Feb 2020	117	27	23%	7,185	1,919	27%
Mar 2020	3,137	1,911	61%	110,129	66,655	61%
Apr 2020	4,218	2,075	49%	186,217	93,529	50%
May 2020	2,060	710	34%	98,786	33,481	34%
Jun 2020	1,565	455	29%	94,720	30,465	32%
July 2020	1,464	569	39%	78,744	26,081	33%
Aug 2020	791	294	37%	46,360	16,028	35%
Sept 2020	623	142	23%	39,660	9,464	24%
Oct 2020	628	212	34%	30,032	7,807	26%
Nov 2020	323	34	11%	15,835	1,812	11%

Sources: Arizona Department of Economic Security (2021). [Unemployment Insurance dataset]. Unpublished data.

Table 57. Households with and without computers and smartphones, 2015-2019 ACS

Geography	Estimated number of households	Have both computer and smartphone	Have computer but no smartphone	Have smartphone but no computer	Have neither smartphone nor computer
Coconino Region	**44,316**	**75%**	**7%**	**11%**	**7%**
Fredonia	444	74%	10%	7%	9%
Grand Canyon Village-Tusayan-Valle	1,409	66%	13%	12%	9%
Greater Flagstaff Area	31,829	81%	6%	8%	5%
Havasupai Tribe	N/A	N/A	N/A	N/A	N/A
Hopi Tribe	2,198	29%	2%	34%	35%
Page	2,653	77%	7%	11%	6%
Williams-Parks	2,952	62%	10%	18%	10%
Winslow	2,736	56%	5%	28%	11%
Coconino County	47,447	72%	6%	12%	9%
Arizona	2,571,268	73%	7%	12%	8%
United States	120,756,048	71%	7%	13%	10%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B28010

Note: In this table, "computer" includes both desktops and laptops; "smartphone" includes tablets and other portable wireless devices. The four percentages in each row should sum to 100%, but may not because of rounding.Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Table 58. Persons of all ages in households with and without computers and internet connectivity, 2015-2019 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
Coconino Region	**116,794**	**83%**	**11%**	**6%**
Fredonia	1,098	79%	15%	6%
Grand Canyon Village-Tusayan-Valle	3,114	84%	10%	6%
Greater Flagstaff Area	80,063	90%	7%	3%
Havasupai Tribe	0	N/A	N/A	N/A
Hopi Tribe	9,175	29%	38%	33%
Page	8,020	90%	7%	3%
Williams-Parks	6,437	83%	10%	6%
Winslow	8,641	74%	16%	10%
Coconino County	126,779	80%	13%	8%
Arizona	6,892,175	87%	7%	6%
United States	316,606,796	86%	7%	6%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B28005

Note: The three percentages in each row should sum to 100%, but may not because of rounding. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Table 59. Children ages birth to 17 in households with and without computers and internet connectivity, 2015-2019 ACS

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
Coconino Region	**26,641**	**85%**	**10%**	**5%**
Fredonia	184	69%	31%	0%
Grand Canyon Village-Tusayan-Valle	497	87%	11%	3%
Greater Flagstaff Area	17,063	93%	6%	1%
Havasupai Tribe	0	N/A	N/A	N/A
Hopi Tribe	2,531	29%	38%	33%
Page	2,375	95%	3%	1%
Williams-Parks	1,367	88%	11%	1%
Winslow	2,571	75%	14%	11%
Coconino County	29,015	80%	14%	6%
Arizona	1,632,019	88%	8%	4%
United States	73,225,376	89%	7%	3%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B28005

Note: The three percentages in each row should sum to 100%, but may not because of rounding. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Table 60. Persons in households by type of internet access (broadband, cellular, and dial-up), 2015-2019 ACS

Geography	Estimated number of persons (all ages) living in households with computer and internet	With fixed-broadband internet	With cellular-data internet	With only dial-up internet
Coconino Region	**97,176**	**86%**	**79%**	**0.4%**
Fredonia	867	82%	79%	0.2%
Grand Canyon Village-Tusayan-Valle	2,626	85%	69%	0.4%
Greater Flagstaff Area	71,814	90%	84%	0.2%
Havasupai Tribe	N/A	N/A	N/A	N/A
Hopi Tribe	2,683	73%	26%	9.4%
Page	7,186	69%	71%	0.0%
Williams-Parks	5,361	74%	70%	0.2%
Winslow	6,434	82%	67%	0.1%
Coconino County	100,958	84%	80%	0.4%
Arizona	5,968,639	87%	82%	0.3%
United States	273,795,622	88%	82%	0.3%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B28008

Note: The percentages in each row sum to more than 100% because many households use both fixed-broadband and cellular-data internet. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Educational Indicators

Table 61. Migrant students (grades K-12) enrolled in public and charter schools, 2017-18 to 2019-20

Geography	Number of migrant students			Percent of students who were migrant students		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
Coconino Region Schools	**DS**	**DS**	**DS**	**DS**	**DS**	**DS**
Coconino County Schools	DS	DS	DS	DS	DS	DS
Arizona Schools	4,023	3,426	4,498	0.4%	0.3%	0.4%

Source: Arizona Department of Education (2021). [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 62. Kindergarten to 3rd grade students with chronic absences, 2018-19 to 2019-20

Geography	K-3 students enrolled, 2018-19	K-3 students with chronic absences, 2018-19	Chronic absence rate, 2018-19	K-3 students enrolled, 2019-20	K-3 students with chronic absences, 2019-20	Chronic absence rate, 2019-20
Coconino Region Schools	**5,265**	**954**	**18%**	**5,195**	**535**	**10%**
Flagstaff Unified District	2,708	477	18%	2,644	271	10%
Williams Unified District	163	32	20%	181	26	14%
Grand Canyon Unified District	DS	DS	11%	91	13	14%
Fredonia-Moccasin Unified District	DS	DS	<2%	DS	DS	6%
Page Unified District	725	219	30%	728	105	14%
Maine Consolidated School District	DS	DS	22%	DS	DS	8%
Winslow Unified District	553	112	20%	546	51	9%
Pine Forest Education Association, Inc.	95	29	31%	126	22	17%
Mountain School, Inc.	131	12	9%	DS	DS	7%
Flagstaff Montessori, L.L.C.	102	12	12%	DS	DS	5%
Flagstaff Junior Academy	DS	DS	3%	DS	DS	3%
Painted Desert Demonstration Projects, Inc.	DS	DS	<2%	DS	DS	<2%
PEAK School Inc., The	77	19	25%	DS	DS	<2%
Heritage Elementary School	DS	DS	3%	DS	DS	13%
Haven Montessori Children's House, Inc.	DS	DS	6%	DS	DS	4%
BASIS Charter Schools, Inc.	262	15	6%	257	14	5%
Coconino County Schools	5,137	979	19%	5,003	559	11%
Arizona Schools	326,891	43,773	13%	329,300	25,382	8%

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

Note: Students are considered chronically absent if they miss more than 10 percent of the school days in a school year. This table includes children who are absent due to chronic illness. Please note that school closures and transitions to distance learning substantially affected how attendance was tracked by schools in the spring of 2020.

Table 63. AzMERIT assessment results: 3rd Grade English Language Arts, 2018-19

Geography	Students Tested	Falls Far Below	Approaches	Meets	Exceeds	Passing
Coconino Region Schools	**1,233**	**42%**	**15%**	**30%**	**12%**	**42%**
Flagstaff Unified District	DS	43%	15%	30%	12%	42%
Williams Unified District	DS	43%	16%	35%	5%	41%
Grand Canyon Unified District	DS	50%	10%	30%	10%	40%
Fredonia-Moccasin Unified District	DS	62%	23%	15%	<2%	15%
Page Unified District	DS	59%	17%	20%	4%	24%
Maine Consolidated School District	DS	36%	9%	55%	<2%	55%
Winslow Unified District	DS	43%	21%	29%	7%	36%
Pine Forest Education Association, Inc.	DS	32%	20%	28%	20%	48%
Mountain School, Inc.	DS	13%	13%	55%	19%	74%
Flagstaff Montessori, L.L.C.	DS	22%	13%	48%	17%	65%
Flagstaff Junior Academy	DS	31%	12%	27%	31%	58%
Painted Desert Demonstration Projects, Inc.	DS	78%	<2%	22%	<2%	22%
PEAK School Inc., The	DS	71%	6%	18%	6%	24%
Heritage Elementary School	DS	60%	20%	<2%	20%	20%
Haven Montessori Children's House, Inc.	DS	20%	<2%	60%	20%	80%
BASIS Charter Schools, Inc.	DS	14%	9%	45%	32%	77%
Coconino County Schools	1,233	46%	14%	28%	11%	40%
Arizona Schools	82,653	40%	14%	32%	14%	46%

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

Table 64. AzMERIT assessment results: 3rd Grade Math, 2018-19

Geography	Students Tested	Falls Far Below	Approaches	Meets	Exceeds	Passing
Coconino Region Schools	**1,240**	**24%**	**32%**	**31%**	**13%**	**43%**
Flagstaff Unified District	DS	27%	33%	31%	10%	41%
Williams Unified District	DS	24%	46%	24%	5%	30%
Grand Canyon Unified District	DS	15%	55%	15%	15%	30%
Fredonia-Moccasin Unified District	DS	31%	54%	15%	<2%	15%
Page Unified District	DS	34%	35%	23%	8%	30%
Maine Consolidated School District	DS	18%	45%	27%	9%	36%
Winslow Unified District	DS	16%	31%	32%	21%	53%
Pine Forest Education Association, Inc.	DS	16%	20%	52%	12%	64%
Mountain School, Inc.	DS	6%	10%	68%	16%	84%
Flagstaff Montessori, L.L.C.	DS	17%	39%	39%	4%	43%
Flagstaff Junior Academy	DS	16%	20%	40%	24%	64%
Painted Desert Demonstration Projects, Inc.	DS	22%	56%	22%	<2%	22%
PEAK School Inc., The	DS	65%	6%	24%	6%	29%
Heritage Elementary School	DS	20%	40%	40%	<2%	40%
Haven Montessori Children's House, Inc.	DS	10%	20%	60%	10%	70%
BASIS Charter Schools, Inc.	DS	8%	23%	28%	42%	69%
Coconino County Schools	1,238	26%	34%	29%	11%	40%
Arizona Schools	83,042	23%	26%	33%	18%	51%

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

Table 65. 4-year and 5-year graduation rates, 2019

Geography	4-Year Senior Cohort (2019)	4-Year Graduates (2019)	4-Year Graduation Rate (2019)	5-Year Graduates (2019)	5-Year Graduation Rate (2019)
Coconino Region Schools	**1,436**	**1,242**	**86%**	**1,291**	**89%**
Coconino County Accommodation School District	96	64	67%	84	82%
Flagstaff Unified District	748	650	87%	661	89%
Williams Unified District	42	40	95%	40	95%
Grand Canyon Unified District	23	22	96%	23	96%
Fredonia-Moccasin Unified District	22	18	82%	18	82%
Page Unified District	194	158	81%	170	86%
Winslow Unified District	153	135	88%	137	90%
Flagstaff Arts And Leadership Academy	41	39	95%	40	98%
Northland Preparatory Academy	76	75	99%	77	100%
BASIS Charter Schools, Inc.	41	41	100%	41	100%
Coconino County Schools	1,438	1,224	85%	1,286	88%
Arizona Schools	86,355	68,393	79%	71,610	83%

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

Note: The 2019 four-year senior cohort is the number of students who are expected to graduate in 2019. It represents all students who enrolled in high school in the region or Arizona for the first time in grade 9 in the 2015-16 school year, those who enrolled in high school in the region or Arizona for the first time in grade 10 in the 2016-2017 school year, those who enrolled in high school in Arizona for the first time in grade 11 in the 2017-2018 school year, and those who enrolled in high school in the region or Arizona for the first time in grade 12 in the 2018-2019 school year. This group of students provides the denominator that can be compared to the number of graduates to in order to calculate the four-year graduation rate. Five year graduation rates are similarly calculated, but with a 5-year cohort denominator (so students who started in grade 9 in 2014-15 as well as students entering that cohort in subsequent years).

Table 66. Trends in 4-year and 5-year graduation rates, 2017 to 2019

Geography	4-Year Graduation Rates			5-Year Graduation Rates		
	2017	2018	2019	2017	2018	2019
Coconino Region Schools	**83%**	**83%**	**86%**	**87%**	**86%**	**89%**
Coconino County Accommodation School District	53%	51%	67%	68%	71%	82%
Flagstaff Unified District	87%	86%	87%	89%	88%	89%
Williams Unified District	78%	93%	95%	83%	94%	95%
Grand Canyon Unified District	100%	100%	96%	100%	100%	96%
Fredonia-Moccasin Unified District	85%	69%	82%	85%	71%	82%
Page Unified District	77%	80%	81%	86%	85%	86%
Winslow Unified District	88%	81%	88%	89%	82%	90%
Flagstaff Arts And Leadership Academy	91%	90%	95%	96%	90%	98%
Northland Preparatory Academy	99%	96%	99%	99%	96%	100%
BASIS Charter Schools, Inc.	97%	100%	100%	97%	100%	100%
Coconino County Schools	83%	83%	85%	87%	87%	88%
Arizona Schools	78%	78%	79%	82%	82%	83%

Source: Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: The 2019 four-year senior cohort is the number of students who are expected to graduate in 2019. It represents all students who enrolled in high school in the region or Arizona for the first time in grade 9 in the 2015-16 school year, those who enrolled in high school in the region or Arizona for the first time in grade 10 in the 2016-2017 school year, those who enrolled in high school in Arizona for the first time in grade 11 in the 2017-2018 school year, and those who enrolled in high school in the region or Arizona for the first time in grade 12 in the 2018-2019 school year. This group of students provides the denominator that can be compared to the number of graduates to calculate the four-year graduation rate. Five year graduation rates are similarly calculated, but with a 5-year cohort denominator (so students who started in grade 9 in 2014-15 as well as students entering that cohort in subsequent years).

Table 67. 7th to 12th grade dropout rates, 2017-18 to 2019-20

Geography	Dropout Rate, 2017-18	Dropout Rate, 2018-19	Dropout Rate, 2019-20
Coconino Region Schools	**2%**	**2%**	**1%**
Coconino County Accommodation School District	20%	19%	16%
Flagstaff Unified District	3%	2%	1%
Williams Unified District	1%	1%	1%
Grand Canyon Unified District	0.3%	0.3%	0%
Fredonia-Moccasin Unified District	2%	2%	0.4%
Page Unified District	3%	2%	2%
Winslow Unified District	6%	6%	4%
Flagstaff Arts And Leadership Academy	1%	1%	0.3%
Northland Preparatory Academy	0%	0.2%	0.2%
Flagstaff Junior Academy	1%	0%	0%
Painted Desert Demonstration Projects, Inc.	0%	4%	0%
PEAK School Inc., The	10%	4%	0%
BASIS Charter Schools, Inc.	0%	0%	0%
Coconino County Schools	3%	3%	2%
Arizona Schools	5%	4%	3%

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

Note: 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.

Early Childhood System

Table 68. School enrollment for children ages 3 to 4, 2015-2019 ACS

Geography	Estimated number of children (3 or 4 years old)	Number and percent enrolled in school	
Coconino Region	**3,173**	**1,489**	**47%**
Fredonia	N/A	N/A	N/A
Grand Canyon Village-Tusayan-Valle	135	107	79%
Greater Flagstaff Area	2,009	889	44%
Havasupai Tribe	N/A	N/A	N/A
Hopi Tribe	409	206	50%
Page	146	0	0%
Williams-Parks	236	136	58%
Winslow	232	147	63%
Coconino County	3,378	1,452	43%
Arizona	183,386	71,233	39%
United States	8,151,928	3,938,693	48%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B14003

Note: In this table, "school" may include nursery school, preschool, or kindergarten. Reliable estimates were not available for Fredonia due to limitations in the size of the ACS sample. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Table 69. Number and capacity of Quality First Programs, January 2021

Geography	Total Programs		2-Star Programs		3-Star Programs		4-Star Programs		5-Star Programs		Programs not publicly rated	
	Num.	Cap.	Num.	Cap.	Num.	Cap.	Num.	Cap.	Num.	Cap.	Num.	Cap.
Coconino Region	24	1,583	2	128	5	447	13	779	2	113	2	116
Fredonia	0	0	0	0	0	0	0	0	0	0	0	0
Grand Canyon Village-Tusayan-Valle	1	159	0	0	1	159	0	0	0	0	0	0
Greater Flagstaff Area	14	1,048	2	128	3	278	6	467	1	59	2	116
Havasupai Tribe	2	36	0	0	0	0	2	36	0	0	0	0
Hopi Tribe	1	25	0	0	0	0	1	25	0	0	0	0
Page	2	179	0	0	0	0	1	125	1	54	0	0
Williams-Parks	2	81	0	0	0	0	2	81	0	0	0	0
Winslow	1	10	0	0	1	10			0	0	0	0
Coconino County	21	1,503	2	128	4	437	11	709	2	113	2	116
Arizona	925	84,921	141	15,042	334	31,428	250	22,443	70	4,200	130	11,808

Source: First Things First (2021). Quality First Data Center [Dataset]. Retrieved from https://datacenter.azftf.gov/ in January 2021.

Note: This table reflects a snapshot of the Quality First program in January 2021.

Table 70. Quality First Programs, state fiscal year 2020

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
Coconino Region	27	21	78%
Coconino County	N/A	N/A	N/A
Arizona	1,045	824	79%

Source: First Things First (2021). Quality First Summary Data. Unpublished data.

Table 71. Cumulative enrollment in Coconino Region N.A.C.O.G. Head Start programs by race, 2019-20

Center Name	Hispanic or Latino Origin	American Indian or Alaska Native	Asian	Black	Pacific Islander	White	Multi/Bi-Racial
Coconino Region	**153**	**190**	**0**	**<10**	**0**	**90**	**77**
Winslow Head Start	25	43	0	<10	0	11	14
Winslow Early Head Start	<10	<10	0	0	0	<10	10
Clear Creek Head Start	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sunnyside Early Head Start	<10	<10	0	0	0	<10	<10
Siler Homes Head Start	23	27	0	<10	0	<10	<10
Ponderosa Early Head Start	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ponderosa Head Start	40	32	0	0	0	<10	15
Flagstaff Early Head Start	10	12	0	<10	0	17	<10
Puente de Hozho Head Start	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Clark Homes Head Start	14	12	0	<10	0	<10	10
Cromer Elementary Head Start	<10	<10	0	0	0	<10	<10
Williams Early Head Start	16	<10	0	<10	0	<10	<10
Page Head Start	0	18	0	0	0	<10	0
Cogdill Head Start	<10	20	0	<10	0	<10	<10
Fredonia Head Start	0	<10	0	0	0	14	<10

Source: Northern Arizona Council of Governments (2021). Head Start Program Data [Dataset]. Data received by request.

Table 72. Number and licensed capacity of licensed or registered child care providers by type, December 2020

Geography	All providers		Nannies or individual providers		Child care centers		Family child care providers	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
Coconino Region	52	3,374	0	0	50	3,360	2	14
Fredonia	0	0	0	0	0	0	0	0
Grand Canyon Village-Tusayan-Valle	2	174	0	0	2	174	0	0
Greater Flagstaff Area	36	2,592	0	0	36	2,592	0	0
Havasupai Tribe	0	0	0	0	0	0	0	0
Hopi Tribe	0	0	0	0	0	0	0	0
Page	4	266	0	0	4	266	0	0
Williams-Parks	2	47	0	0	2	47	0	0
Winslow	7	250	0	0	5	236	2	14
Coconino County	46	3,144	0	0	46	3,144	0	0
Arizona	2,521	202,010	26	89	1,909	198,100	586	3,821

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

Note: This table only includes data for providers listed in the National Data System for Child Care NACCRRAware database. These providers are listed through the Child Care Resource & Referral Guide to allow parents and caregivers to find child care and early education providers. Providers that only provide before- and after-school care are not included in this table

Table 73. Number and capacity of regulated early care and educational providers by operational status in December 2020

Geography	All providers		Providers closed		Providers open		Percent of providers closed	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
Coconino Region	52	3,374	25	1,673	27	1,701	48%	50%
Fredonia	0	0	0	0	0	0	N/A	N/A
Grand Canyon Village-Tusayan-Valle	2	174	1	15	1	159	50%	9%
Greater Flagstaff Area	36	2,592	16	1,252	20	1,340	44%	48%
Havasupai	0	0	0	0	0	0	0%	0%
Hopi	0	0	0	0	0	0	0%	0%
Page	4	266	3	227	1	39	75%	85%
Williams-Parks	2	47	2	47	0	0	100%	100%
Winslow	7	250	3	132	4	118	43%	53%
Coconino County	46	3,144	24	1,606	22	1,538	52%	51%
Arizona	2,521	202,010	930	71,576	1,591	130,434	37%	35%

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

Note: This table only reflects providers registered with the Child Care Resource and Referral (CCR&R) Guide. Closure status for providers were gathered by CCR&R staff throughout the pandemic, who made a strong effort to keep this information up to date; however, these data may not reflect current closure status in the region.

Table 74. Median daily charge for full-time child care, 2018

Geography	Approved family homes			Certified 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
Coconino Region	**$20.00**	**$20.00**	**$20.00**	**$27.50**	**$22.50**	**$22.50**	**$38.00**	**$33.21**	**$31.18**
Fredonia	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grand Canyon Village-Tusayan-Valle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Greater Flagstaff Area	$20.00	$20.00	$20.00	N/A	N/A	N/A	$38.00	$35.50	$32.75
Havasupai Tribe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hopi Tribe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Page	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$15.66
Williams-Parks	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Winslow	N/A	N/A	N/A	$27.50	$22.50	$22.50	$40.00	$25.00	$25.00
Coconino County	$20.00	$20.00	$20.00	N/A	N/A	N/A	$38.00	$35.50	$32.51
Arizona	$20.00	$20.00	$20.00	$30.00	$28.00	$28.00	$43.03	$38.00	$33.00

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

Table 75. Median monthly charge for full-time child care, 2018

Geography	Approved family homes			Certified 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
Coconino Region	**$400**	**$400**	**$400**	**$550**	**$450**	**$450**	**$760**	**$664**	**$624**
Fredonia	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grand Canyon Village-Tusayan-Valle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Greater Flagstaff Area	$400	$400	$400	N/A	N/A	N/A	$760	$710	$655
Havasupai Tribe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hopi Tribe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Page	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$313
Williams-Parks	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Winslow	N/A	N/A	N/A	$550	$450	$450	$800	$500	$500
Coconino County	$400	$400	$400	N/A	N/A	N/A	$760	$710	$650
Arizona	$400	$400	$400	$600	$560	$560	$861	$760	$660

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

Table 76. Cost of center-based child care as a percentage of income, 2018

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
Coconino Region	**N/A**	**N/A**	**N/A**	**N/A**
Coconino County	$75,800	12.0%	11.2%	10.3%
Arizona	$70,200	14.7%	13.0%	11.3%

Sources: Arizona Department of Economic Security (2021). [Child Care Administration dataset]. Unpublished data. & U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B19126.

Note: Annual costs of care are calculated by multiplying the median daily cost of care by 240 to approximate a full year of care.

Table 77. Children receiving DES child care subsidies, 2015 to 20

	Number of children receiving subsidy						Percent of eligible children receiving subsidy					
Geography	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
Coconino Region	**225**	**189**	**168**	**207**	**223**	**150**	**93%**	**95%**	**90%**	**90%**	**84%**	**70%**
Fredonia	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
Grand Canyon Village-Tusayan-Valle	[1-9]	[1-9]	0	0	0	0	DS	DS	N/A	N/A	N/A	N/A
Greater Flagstaff Area	139	116	110	154	158	104	96%	97%	89%	92%	83%	68%
Havasupai Tribe	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
Hopi Tribe	18	17	12	[1-9]	[1-13]	[1-9]	72%	81%	DS	DS	DS	DS
Page	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
Williams-Parks	[1-9]	[1-9]	0	0	0	0	DS	DS	DS	N/A	N/A	N/A
Winslow	63	53	46	48	53	48	DS	DS	N/A	DS	DS	DS
Coconino County	163	131	122	164	172	111	94%	96%	100%	90%	98%	81%
Arizona	19,040	17,784	16,922	19,813	23,155	19,909	94%	93%	93%	92%	92%	80%

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

Table 78. DCS-involved children receiving DES child care subsidies

	Number of DCS children receiving subsidy						Percent of DCS eligible children receiving subsidy					
Geography	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
Coconino Region	**84**	**102**	**115**	**118**	**128**	**81**	**90%**	**88%**	**93%**	**76%**	**87%**	**59%**
Fredonia	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
Grand Canyon Village-Tusayan-Valle	[1-9]	[1-9]	0	0	0	0	DS	DS	N/A	N/A	N/A	N/A
Greater Flagstaff Area	57	62	80	83	92	56	93%	87%	89%	80%	87%	56%
Havasupai Tribe	0	0	0	0	0	0	DS	DS	N/A	N/A	N/A	N/A
Hopi Tribe	0	[1-9]	[1-9]	0	[1-12]	0	DS	DS	DS	N/A	DS	N/A
Page	0	0	0	[1-9]	0	0	N/A	N/A	N/A	DS	N/A	N/A
Williams-Parks	[1-9]	[1-9]	[1-9]	[1-9]	[1-12]	[1-9]	DS	DS	DS	DS	DS	DS
Winslow	22	33	27	26	23	[16-24]	88%	87%	104%	67%	88%	DS
Coconino County	62	66	85	92	102	64	91%	88%	90%	81%	86%	59%
Arizona	13,098	13,352	12,201	12,219	11,808	7,137	91%	89%	88%	82%	82%	59%

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

Table 79. Eligible families not using DES child care subsidies, 2015 to 2020

Geography	2015	2016	2017	2018	2019	2020
Coconino Region	**7%**	**7%**	**10%**	**9%**	**15%**	**27%**
Coconino County	7%	5%	11%	8%	15%	27%
Arizona	6%	6%	7%	8%	8%	18%

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

Table 80. Children ages birth to 2 referred to and found eligible for AzEIP, federal fiscal years 2018 to 2020

Geography	Number of children (ages 0-2) referred to AzEIP			Number of children (ages 0-2) eligible for AzEIP			Percent of referrals found eligible		
	FFY 2018	FFY 2019	FFY 2020	FFY 2018	FFY 2019	FFY 2020	FFY 2018	FFY 2019	FFY 2020
Coconino Region	**307**	**340**	**255**	**86**	**114**	**63**	**28%**	**34%**	**25%**
Fredonia	[1-9]	0	0	[1-9]	0	0	DS	N/A	N/A
Grand Canyon Village-Tusayan-Valle	[1-9]	10	[1-9]	[1-9]	[1-9]	0	DS	DS	0%
Greater Flagstaff Area	184	227	189	48	76	45	26%	33%	24%
Havasupai Tribe	[1-9]	0	[1-9]	0	0	[1-9]	0%	N/A	DS
Hopi Tribe	28	24	[1-9]	11	12	0	39%	50%	0%
Page	34	30	19	11	10	[1-9]	32%	33%	DS
Williams-Parks	20	12	17	[1-9]	[1-9]	[1-9]	DS	DS	DS
Winslow	36	37	19	[1-9]	10	[1-9]	DS	27%	DS
Coconino County	288	312	268	87	102	66	30%	33%	25%
Arizona	13,803	14,692	13,615	5,372	5,225	4,675	39%	36%	34%

Source: Arizona Department of Economic Security (2021). [Arizona Early Intervention Program dataset]. Unpublished data.

Table 81. Number of children (ages 0-5) receiving DDD services, state fiscal years 2017 to 2020

Geography	SFY 2017	SFY 2018	SFY 2019	SFY 2020	Percent change from 2017 to 2020
Coconino Region	**61**	**63**	**31**	**33**	**-46%**
Fredonia	0	0	[1-9]	[1-9]	DS
Grand Canyon Village-Tusayan-Valle	0	0	0	0	N/A
Greater Flagstaff Area	50	44	20	21	-58%
Havasupai Tribe	0	0	0	0	N/A
Hopi Tribe	[1-9]	[1-9]	[1-9]	[1-9]	DS
Page	[1-9]	[1-9]	0	0	DS
Williams-Parks	[1-9]	[1-9]	[1-9]	[1-9]	DS
Winslow	[1-9]	10	[1-9]	[1-9]	DS
Coconino County	57	54	29	26	-54%
Arizona	5,520	6,123	4,005	4,078	-26%

Source: Arizona Department of Economic Security (2021). [Division of Developmental Disabilities dataset]. Unpublished data.

Table 82. Preschoolers with disabilities receiving services through Local Education Authorities, 2017-18 to 2019-20

Geography	Preschoolers enrolled in special education, 2017-18	Preschoolers enrolled in special education, 2018-19	Preschoolers enrolled in special education, 2019-20
Coconino Region Schools	152	159	179
Flagstaff Unified District	72	65	88
Williams Unified District	DS	DS	DS
Grand Canyon Unified District	DS	DS	DS
Fredonia-Moccasin Unified District	DS	DS	DS
Page Unified District	36	44	31
Maine Consolidated School District	DS	DS	DS
Winslow Unified District	DS	DS	DS
Coconino County Schools	169	175	184
Arizona Schools	10,123	10,314	10,521

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

Table 83. Kindergarten to 3rd grade students enrolled in special education in public and charter schools, 2017-18 to 2019-20

Geography	K-3 students enrolled in special education, 2017-18	K-3 students enrolled in special education, 2018-19	K-3 students enrolled in special education on Oct 1, 2019-20
Coconino Region Schools	674	663	662
Flagstaff Unified District	290	270	270
Williams Unified District	21	20	22
Grand Canyon Unified District	DS	DS	16
Fredonia-Moccasin Unified District	DS	DS	DS
Page Unified District	66	64	73
Maine Consolidated School District	DS	DS	DS
Winslow Unified District	[74-84]	[71-81]	[79-89]
Pine Forest Education Association, Inc.	DS	DS	DS
Mountain School, Inc.	DS	DS	DS
Flagstaff Montessori, L.L.C.	DS	[12-22]	DS
Flagstaff Junior Academy	DS	DS	DS
Painted Desert Demonstration Projects, Inc.	DS	DS	DS
PEAK School Inc., The	DS	DS	DS
Heritage Elementary School	DS	DS	DS
Haven Montessori Children's House, Inc.	DS	DS	DS
BASIS Charter Schools, Inc.	DS	14	14
Arizona State School for the Deaf & Blind, North Central Regional Cooperative	[18-22]	26	24
Coconino County Schools	668	647	643
Arizona Schools	36,807	38,115	39,071

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

Child Health

Table 84. Health insurance coverage, 2015-2019 ACS

Geography	Estimated civilian non-institutionalized population (all ages)	Without health insurance (all ages)	Estimated number of children (ages 0-5)	Without health insurance (ages 0-5)
Coconino Region	**130,376**	**10%**	**8,612**	**6%**
Fredonia	1,335	23%	38	1%
Grand Canyon Village-Tusayan-Valle	3,460	12%	251	3%
Greater Flagstaff Area	92,465	9%	5,502	5%
Havasupai Tribe	0	N/A	0	N/A
Hopi Tribe	9,222	14%	1,029	8%
Page	8,139	15%	521	21%
Williams-Parks	6,857	11%	580	1%
Winslow	8,652	12%	666	5%
Coconino County	140,443	11%	9,276	8%
Arizona	6,941,028	10%	517,639	7%
United States	319,706,872	9%	23,653,661	4%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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 access to health care through the Indian Health Service (IHS) are considered "uninsured" by the U.S. Census Bureau. Reliable data for the Havasupai Tribe are not available from the 2015-2019 ACS.

Table 85. Prenatal care for the mothers of babies born in 2018 and 2019

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
Coconino Region	**2018**	**1,331**	**2%**	**7%**	**69.4%**
	2019	**1,292**	**1%**	**6%**	**64.6%**
Coconino County	2018	1,500	2%	7%	68.9%
	2019	1,367	1%	6%	65.0%
Arizona	2018	80,539	3%	8%	68.8%
	2019	79,183	3%	8%	68.9%
Healthy People 2020 Target					84.8%

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

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

Table 86. Pre-pregnancy obesity rate for WIC-enrolled women, 2016 to 2020

Geography	Pre-pregnancy obesity rate, 2016	Pre-pregnancy obesity rate, 2017	Pre-pregnancy obesity rate, 2018	Pre-pregnancy obesity rate, 2019	Pre-pregnancy obesity rate, 2020
Coconino Region	**30%**	**31%**	**35%**	**34%**	**34%**
Coconino County	30%	29%	32%	32%	33%
Arizona	33%	34%	35%	36%	37%

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

Table 87. Selected birth outcomes, 2018 to 2019

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
Coconino Region	**2018**	**1,331**	**7.5%**	**7.9%**	**6%**
	2019	**1,292**	**8.0%**	**9.8%**	**9%**
Coconino County	2018	1,500	7.5%	8.1%	6%
	2019	1,367	7.4%	9.7%	8%
Arizona	2018	80,539	7.6%	9.5%	8%
	2019	79,183	7.4%	9.3%	8%
Healthy People 2020 Targets			7.8%	9.4%	

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

Table 88. WIC-enrolled infants ever breastfed, 2020

Geography	Infants for whom breastfeeding status is determined	Infants ever breastfed	Percent of infants ever breastfed
Coconino Region	**319**	**275**	**86%**
Coconino County	313	272	87%
Arizona	32,545	25,322	78%

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

Table 89. Percent of WIC-enrolled infants ever breastfed, 2016 to 2020

Geography	Breastfeeding rate, 2016	Breastfeeding rate, 2017	Breastfeeding rate, 2018	Breastfeeding rate, 2019	Breastfeeding rate, 2020
Coconino Region	**85%**	**88%**	**86%**	**84%**	**86%**
Coconino County	90%	88%	88%	86%	87%
Arizona	73%	77%	77%	79%	78%

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

Table 90. Children ages 2-4 with obesity 2016 to 2020

Geography	Number of children ages 2-4 with obesity					Percent of children ages 2-4 with obesity				
	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
Coconino Region	**121**	**139**	**116**	**113**	**38**	**12%**	**15%**	**13%**	**13%**	**13%**
Coconino County	131	100	111	106	34	13%	11%	13%	13%	12%
Arizona	10,870	10,564	10,463	10,085	4,318	14%	14%	15%	15%	16%

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

Table 91. Child care immunization exemption rates, 2015-16 to 2019-20

Geography	Children in child care with religious exemptions					Children in child care exempt from all vaccines				
	2015-16	2016-17	2017-18	2018-19	2019-20	2015-16	2016-17	2017-18	2018-19	2019-20
Coconino Region	**3.9%**	**4.8%**	**5.2%**	**4.5%**	**6.1%**	**3.0%**	**3.4%**	**4.0%**	**3.4%**	**4.3%**
Fredonia	40.0%	26.3%	36.8%	N/A	36.8%	40.0%	26.3%	36.8%	N/A	36.8%
Grand Canyon Village-Tusayan-Valle	0.0%	0.0%	0.0%	0.0%	N/A	0.0%	0.0%	0%	0.0%	N/A
Greater Flagstaff Area	4.8%	5.2%	5.5%	4.8%	5.8%	3.7%	3.6%	4.0%	3.5%	3.9%
Havasupai Tribe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hopi Tribe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Page	0.5%	0.0%	0.6%	0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Williams-Parks	8.2%	14.5%	13.6%	8.5%	15.2%	4.1%	8.7%	12.3%	7.0%	12.1%
Winslow	0.0%	1.1%	1.1%	2.0%	3.4%	0%	1.1%	0.6%	2.0%	3.4%
Coconino County	4.6%	5.2%	5.6%	4.5%	6.0%	3.5%	3.6%	4.3%	3.3%	4.1%
Arizona	3.5%	3.9%	4.3%	4.5%	5.0%	2.1%	2.4%	2.9%	3.0%	3.1%

Source: Arizona Department of Health Services (2021). Childcare Immunization Coverage, 2015-2016 to 2019-2020 School Years. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2021). Childcare Immunization Coverage by County, 2015-2016 through 2019-2020 School Years. Retrieved from: https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage

Table 92. Kindergarten immunization exemption rates, 2015-16 to 2019-20

Geography	Kindergarteners with personal belief exemptions					Kindergarteners exempt from all vaccines				
	2015-16	2016-17	2017-18	2018-19	2019-20	2015-16	2016-17	2017-18	2018-19	2019-20
Coconino Region	**6.8%**	**7.3%**	**9.1%**	**6.0%**	**6.2%**	**3.1%**	**3.8%**	**5.6%**	**5.0%**	**4.6%**
Fredonia	N/A	N/A	14.3%	N/A	N/A	N/A	N/A	14.3%	N/A	N/A
Grand Canyon Village-Tusayan-Valle	N/A	5.3%	4.0%	4.0%	4.0%	N/A	N/A	4.0%	4.0%	4.0%
Greater Flagstaff Area	8.4%	7.8%	10.7%	6.6%	6.9%	3.1%	4.1%	6.5%	5.2%	5.1%
Havasupai Tribe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hopi Tribe	0.0%	N/A	0.0%	0.0%	N/A	0.0%	N/A	0.0%	0.0%	N/A
Page	4.7%	10.5%	N/A	N/A	N/A	0.0%	0.0%	N/A	N/A	N/A
Williams-Parks	8.8%	12.5%	1.7%	10.5%	23.5%	8.8%	7.8%	1.7%	10.5%	23.5%
Winslow	3.5%	1.3%	2.5%	1.5%	0.6%	4.2%	0.7%	0.8%	1.5%	0.0%
Coconino County	7.1%	7.4%	10.3%	5.9%	6.4%	2.5%	3.9%	6.5%	4.8%	4.9%
Arizona	4.5%	4.9%	5.4%	5.9%	5.4%	1.8%	2.4%	3.5%	3.8%	3.4%

Source: Arizona Department of Health Services (2021). Kindergarten Immunization Coverage, 2015-2016 to 2019-2020 School Years. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2021). Kindergarten Immunization Coverage by County, 2015-2016 through 2019-2020 School Years. Retrieved from: https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage

Table 93. Confirmed and probable cases of infectious diseases in children ages birth to 4, 2018 to 2020

Geography	Calendar year	Pertussis (Whooping Cough)	Varicella (Chicken Pox)	Haemophilus influenzae	Meningococcal disease	Mumps	Measles
Coconino County	2018	<6	<6	0	0	0	0
	2019	0	0	<6	0	0	0
	2020	<6	0	<6	0	0	0
Arizona	2018	48	57	30	0	0	0
	2019	92	62	22	0	0	0
	2020	96	22	12	<6	<6	0

Source: Arizona Department of Health Services (2021). [VPD Flu RSV dataset]. Unpublished data.

Table 94. Non-fatal hospitalizations and emergency department visits due to unintentional injuries for children ages birth to 4, 2016-2020 combined

Geography	Non-fatal inpatient hospitalizations for unintentional injuries	Non-fatal emergency department visits for unintentional injuries
Coconino Region	**52**	**2,012**
Coconino County	66	2,421
Arizona	2,890	181,035

Source: Arizona Department of Health Services (2021). [Hospital Discharge dataset]. Unpublished data.

Family Support

Table 95. Number of children ages birth to 5 removed by DCS, state fiscal years 2019 to 2020

Geography	Children (ages 0-5) removed (SFY 2019)	Children (ages 0-5) removed (SFY 2020)	Children (ages 0-5) removed (SFY2019-2020)	Children (ages 0-5) in the population
Coconino Region	**50**	**68**	**118**	**9,652**
Fredonia	0%	0%	0%	1%
Grand Canyon Village-Tusayan-Valle	DS	DS	DS	2%
Greater Flagstaff Area	89%	95%	93%	66%
Havasupai Tribe	N/A	N/A	N/A	1%
Hopi Tribe	N/A	N/A	N/A	8%
Page	DS	DS	DS	8%
Williams-Parks	0%	0%	0%	5%
Winslow	0%	0%	0%	9%
Coconino County	N/A	N/A	N/A	N/A
Arizona	3,989	4,124	8,113	546,609

Source: Arizona Department of Child Safety (2021). [Child removal dataset]. Unpublished data.

Note: These data were received by zip code and geocoded to the region by the UArizona CRED team. The data reflect the last known address of the caregiver from whose custody the child was removed, not the location where the removal took place.

Table 96. Substantiated maltreatment reports by type for children ages birth to 17, June-Dec 2020

Geography	Total Substantiated Maltreatment Reports	Neglect	Physical Abuse	Sexual Abuse	Emotional Abuse
Coconino Region	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Coconino County	59	66%	31%	3%	0%
Arizona	1,669	69%	25%	6%	0%

Source: Department of Child Safety (2021). Semiannual child welfare report, March 2021. Retrieved from https://dcs.az.gov/reports

Table 97. Children ages birth to 17 removed by the Department of Child Services (DCS), June-Dec 2020

Geography	Total Reports	Number of children removed	Percent of children removed	Number of children with prior removal in last 24 months	Percent of children with prior removal in last 24 months
Coconino Region	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Coconino County	447	64	14%	1	2%
Arizona	30,526	4,967	16%	198	4%

Source: Department of Child Safety (2021). Semiannual child welfare report, March 2021. Retrieved from https://dcs.az.gov/reports

APPENDIX 2: METHODS AND DATA SOURCES

The data contained in this report come from a variety of sources, including publicly available datasets and data requested from Arizona state agencies. Specific sources and methods used in this report are enumerated below.

U.S. Census and American Community Survey Data. The U.S. Census[448] is an enumeration of the population of the United States. It is conducted every ten years, and includes information about housing, race, and ethnicity. The 2010 U.S. Census data are available by census block. There are about 115,000 inhabited blocks in Arizona, with an average population of 56 people each. The Census data for the Coconino Region presented in this report were calculated by identifying each block in the region and aggregating the data over all of those blocks. The Census Bureau is expected to publish new block-level population estimates and detailed tables later in 2023.

The American Community Survey (ACS)[449] is a survey conducted by the U.S. Census Bureau each month by mail, telephone, and face-to-face interviews. It covers many different topics, including income, language, education, employment, and housing. The ACS data are available by census tract. Arizona is divided into about 1,500 census tracts, with an average of about 4,200 people in each. The ACS data for the Coconino Region were calculated by aggregating over the census tracts which are wholly or partially contained in the region. The data from partial census tracts were apportioned according to the percentage of the 2010 Census population in that tract living inside the 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 2015 to 2019. 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 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 spring of 2021. 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 and business rules over the past three years, some indicators could not be presented as a time series.

Child Care Capacity Calculations. Overall child care capacity estimates were compiled by merging multiple licensing and enrollment datasets from ADHS, DES, Quality First and local Head Start programs. Duplicate programs were identified and removed based on name, phone number and address. Programs that only serve children ages 5-12 were also removed, as these are typically before- & after-school programs that only serve school-age children. Providers were geocoded using addresses or

coordinates provided in the various datasets to assign them to both regions and sub-regions. The child care capacity estimates are meant to provide a best guess at the supply of child care slots in regulated care providers. These estimates 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 pandemic-related closures, 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 preschool in the morning and a child care center in the afternoon).

Data Suppression. To protect the confidentiality of program participants, the First Things First (FTF) Data Dissemination and Suppression Guidelines preclude our reporting 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. The Arizona Department of Health Services (ADHS) does not report counts less than 6; the Arizona Department of Economic Security (DES) does not report counts between 1 and 9; and the Arizona Department of Education (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 will be indicated by entries of "<6" or "<10" or "<11" for counts, or "DS" (data suppressed) for percentages. Data are sometimes not available for particular regions, either because a particular program did not operate in the region or because data are only available at the county level. Cases where data are not available will be indicated by an entry of "N/A."

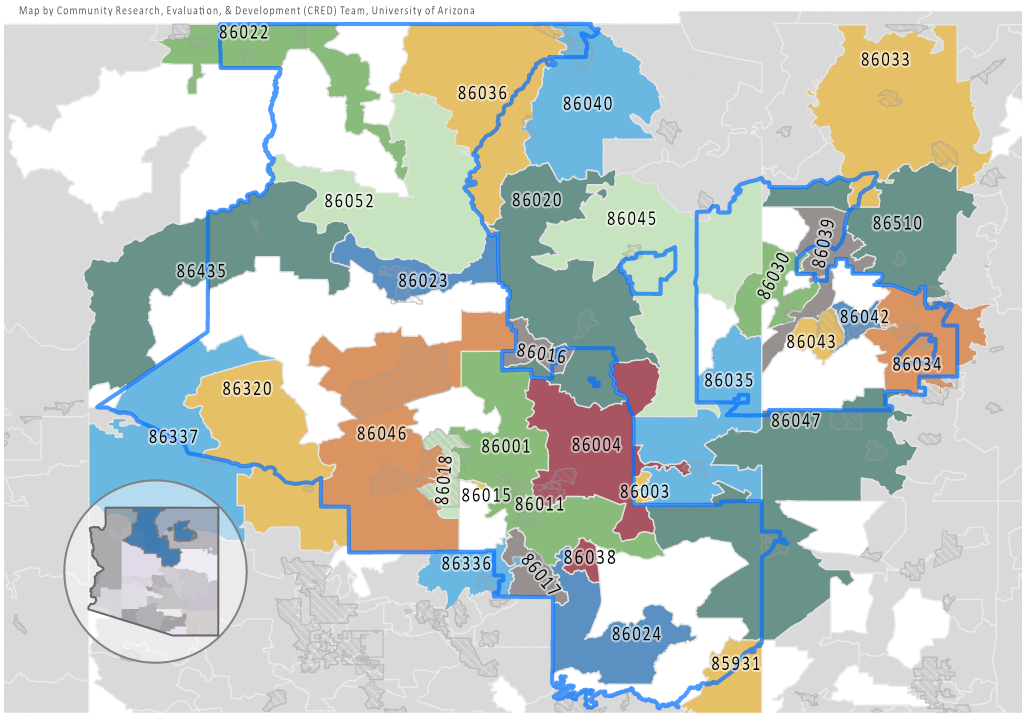
For some data, an exact number was not available because it was the sum of several numbers provided by a state agency, and some numbers were suppressed in accordance with agency guidelines or because the number was suppressed as a second-smallest value that could be used to calculate a suppressed value. 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 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 2 known numbers plus 1 on the lower bound to the sum of the 2 known numbers 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.

The Report Process. This report was the product of collaboration between the vendor, the regional director, the regional partnership council and the FTF Evaluation team. The vendor worked with the FTF Evaluation team to identify and review indicators for the report and prepare data requests to submit to state agencies. The regional partnership council, regional director, and the vendor worked together to define priority areas, identify local sources of data, and submit local data requests. The vendor worked to process, compile, analyze, and visualize data gathered as well as to review data for quality and accuracy. Following data analysis, visualization, and review, the vendor facilitated a data interpretation

session with the regional director, the regional partnership council, and key stakeholders in the region. This session aimed to allow participants to share their local knowledge and perspectives in interpreting the data collected. The vendor finally synthesized the data, analysis and findings from the data interpretation session in this report, which has been reviewed by the regional director and regional partnership council prior to publication.

APPENDIX 3: ZIP CODES OF THE COCONINO REGION

Figure 103. Zip Code Tabulation Areas (ZCTAs) in the Coconino Region



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

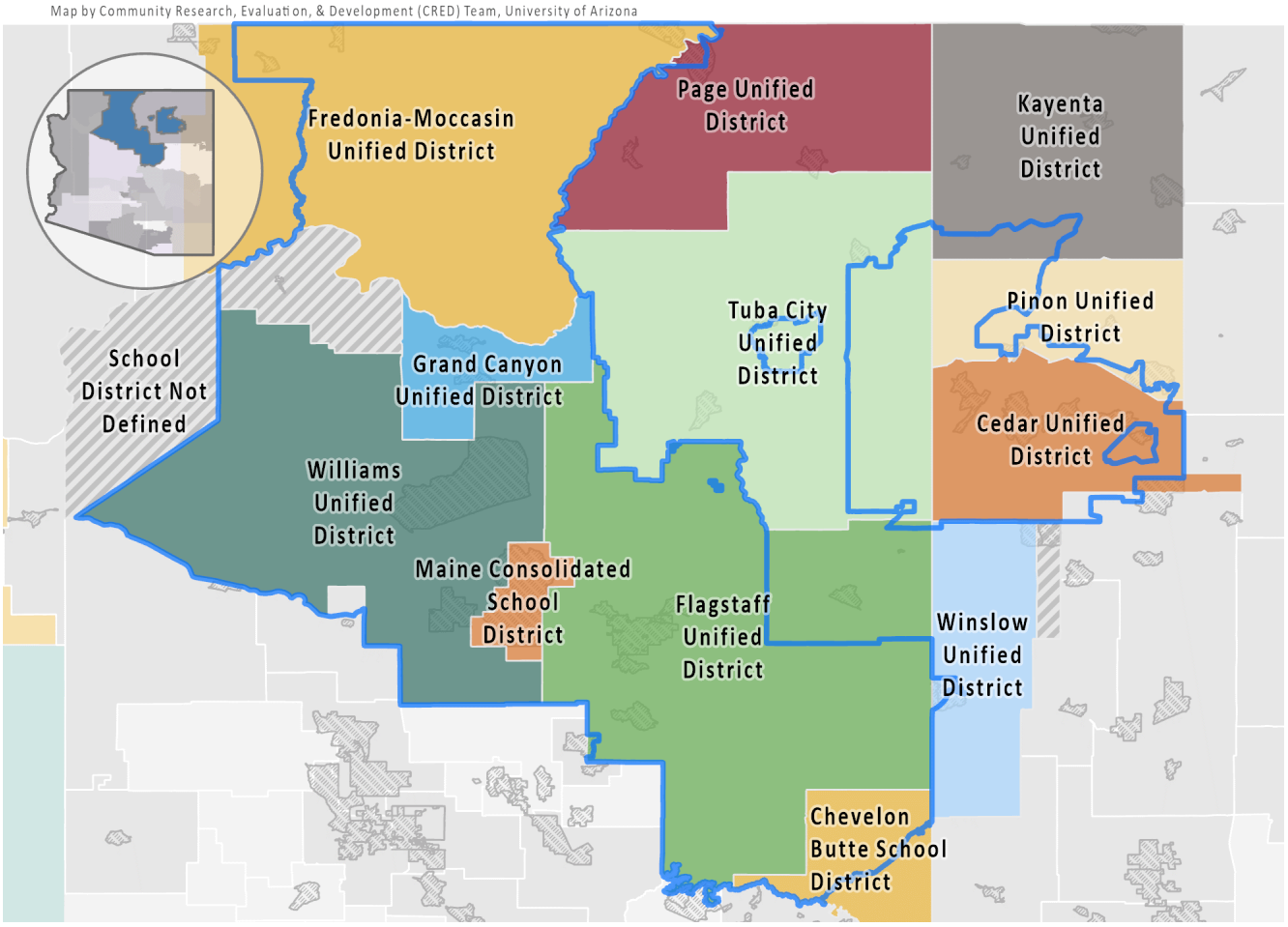
Table 98. Zip Code Tabulation Areas (ZCTAs) in the Coconino Region

Zip Code Tabulation Area (ZCTA)	Population (all ages)	Population (ages 0-5)	Total number of households	Households with young children (ages 0-5)	Percent of this ZCTA's total population living in the Coconino Region	This ZCTA is shared with
Coconino Region	**124,238**	**9,652**	**43,764**	**6,795**		
86001	40,776	2,840	16,311	2,063	100%	
86011	6,362	0	9	0	100%	
86015	385	75	135	47	100%	
86017	667	28	325	21	100%	
86018	759	48	332	35	100%	
86023	2,627	151	1,034	109	100%	
86024	703	14	374	10	100%	
86038	77	1	43	1	100%	
86042	1,778	183	517	120	100%	
86043	1,798	227	454	149	100%	
86046	6,090	440	2,478	322	100%	
86052	28	0	8	0	100%	
86004	37,131	3,355	13,404	2,354	99.4%	Navajo Nation
86435	481	64	105	38	98.8%	Hualapai Tribe
86030	1,148	112	362	77	83.6%	Navajo Nation
86022	1,724	163	630	105	78.0%	La Paz/Mohave
86040	7,638	733	2,699	500	74.3%	Navajo Nation
86047	10,150	906	3,083	626	67.8%	Navajo Nation & Navajo/Apache
86036	241	2	145	2	62.1%	Navajo Nation
86320	885	54	381	42	46.9%	Yavapai
86039	671	62	232	43	45.7%	Navajo Nation
86034	604	55	185	36	26.6%	Navajo Nation
86016	6	2	2	1	9.7%	Navajo Nation
86045	1,010	117	269	78	8.9%	Navajo Nation
86337	56	3	29	2	4.4%	Yavapai
86035	53	4	18	3	2.9%	Navajo Nation
86336	308	4	170	4	2.7%	Yavapai
86020	52	8	16	6	2.7%	Navajo Nation
85931	4	1	1	1	1.9%	Navajo/Apache
86510	8	0	5	0	0.1%	Navajo Nation
86033	10	0	5	0	0.13%	Navajo Nation
No assigned ZCTA	8	0	3	0		

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

APPENDIX 4: SCHOOL DISTRICTS OF THE COCONINO REGION

Figure 104. School Districts in the Coconino Region



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

Table 99. School Districts and Local Education Authorities (LEAs) in the Coconino Region

Name of district or Local Education Agency (LEA)	Number of schools	Number of students in kindergarten through third grade
Coconino Region Schools	**52**	**5,195**
Flagstaff Unified District	15	2,644
Williams Unified District	2	181
Grand Canyon Unified District	2	91
Fredonia-Moccasin Unified District	2	70
Page Unified District	6	728
Maine Consolidated School District	1	60
Winslow Unified District	6	546
Coconino County Accommodation School District	5	N/A
Pine Forest Education Association, Inc.	1	126
Mountain School, Inc.	1	132
Flagstaff Montessori, L.L.C.	1	94
Flagstaff Junior Academy	1	102
Painted Desert Demonstration Projects, Inc.	1	41
PEAK School Inc., The	1	DS
Heritage Elementary School	1	38
Haven Montessori Children's House, Inc.	1	55
BASIS Charter Schools, Inc.	1	257
Flagstaff Arts And Leadership Academy	1	N/A
Northland Preparatory Academy	1	N/A
DINE Southwest High School	1	N/A
Arizona State Schools for the Deaf and Blind, North Central Regional Cooperative	1	24

Source: Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: N/A in the enrollment column indicates that a district and LEA did not have any students enrolled in grades K-3 in the 2019-20 school year. Please note that this table does not include Bureau of Indian Education schools or private schools as these schools are not required to report enrollment data into the Arizona Department of Education enrollment data system.

APPENDIX 5: DATA SOURCES

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