2023

Building Bright Futures

Arizona's Early Childhood Opportunities Report

FIRST THINGS FIRST

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INTRODUCTION

First Things First was created by Arizonans to help ensure that our state's youngest children have the opportunity to arrive at kindergarten prepared to be successful. Each year, the First Things First state Board and its affiliated regional partnership councils make decisions about which early childhood strategies to fund that will impact the healthy development and school readiness of Arizona's children.

First Things First is not alone in its mission. Early childhood stakeholders – including parents and caregivers, child care and health providers, state and non-profit agencies, educators, businesses, philanthropists, faith organizations, policymakers and elected leaders – are partners in addressing children's school readiness.

Decisions made by all early childhood stakeholders must be based on science and evidence – about how our children are doing, the resources communities have, and the needs of children in different areas of the state. Building Bright Futures is a valuable tool to inform those decisions. Data presented in this report cover a myriad of topics – some directly related to children, their health and their learning; others that describe the circumstances and environments in which children live.

To that end, this biennial assessment describes the status of Arizona's children across a variety of sectors in several ways:

- Our Issue Essay, "The future stability of child care in Arizona will rely on long-term public investments" explains why the child care industry was struggling prior to the COVID-19 pandemic, how the pandemic exacerbated the child care crisis, how the public has benefited temporarily through the largest public investment in child care in US history and where the funding went in Arizona. In addition, a sidebar takes a look at research that explains why quality early care and education matters, along with an initial glimpse of the first year of plans of a 3-year federal Preschool Development Grant that Arizona received.

- Our Data Summaries paint a picture of the overall status of children statewide in four specific areas: Family Characteristics, Economic Circumstances, Education and Child Health and Well-Being. With the release of 2020 Census data, these summaries provide a new detailed snapshot of information on Arizona's children. However, the 2020 Census faced unprecedented challenges including being conducted during the height of the pandemic, but data quality reviews of the 2020 Census have concluded that the data are generally reliable and accurate for the overall population. However, the specific groups that have been undercounted in the past were again undercounted, often more severely, which includes data for young children.

Because the data needs of early childhood stakeholders vary, First Things First also has included additional statewide and county data in its Data Center. The Data Center makes existing First Things First data and reports more accessible, visual and customizable. In doing so, it supports the strategic planning of the First Things First Board, regional partnership councils, and staff, as well as the work of the many other stakeholders who are essential to the success of the early childhood system in Arizona.

Taken together, all of this information provides significant insight into the challenges facing young children in Arizona – challenges that threaten their well-being today and their school success tomorrow. Building Bright Futures is a tool to begin a public dialogue on what our children need to succeed in kindergarten and beyond, and the crucial role that all Arizonans play in ensuring that our kids are ready for school and set for life.

ISSUE ESSAY:

THE FUTURE STABILITY OF CHILD CARE IN ARIZONA WILL RELY ON LONG-TERM PUBLIC INVESTMENTS

"The solutions are clear: The public benefits from public investments in child care and early learning."

For years, child care accessibility, affordability and availability in Arizona was a simmering crisis. Parents struggled to find and afford child care for their young children and many child care and preschool providers struggled to find adequate, consistent staffing to help care for and guide the healthy growth and development of babies, toddlers and preschoolers.

Unfortunately, the COVID-19 pandemic dealt a devastating blow to the child care system both nationally and here in Arizona, exacerbating the child care crisis. A recent report from the National Association for the Education of Young Children provided results from an October 2022 survey of more than 12,000 early childhood educators from all states and settings—including faith-based programs, family child care homes, Head Starts and child care centers.[1] The report concluded: "The problems are clear: Families still can't find or afford child care because compensation is too low to attract and retain early childhood educators. As federal relief dollars that have saved the sector from complete collapse begin to dry up, the stability those dollars brought to programs will disappear with the funding. The solutions are clear: The public benefits from public investments in child care and early learning. Congress needs to build on the successes of child care funding to prioritize additional, sustainable investments that ensure programs and educators can meet the needs of families, children, and businesses, and states can continue to build toward an early childhood education system that works."

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The survey data from Arizona showed almost 80% of child care directors/administrators and 77% of family child care owners/operators reported receiving federal stabilization grant funding and close to 40% said their programs would have closed without the grants.[2] Providers report spending 90% of grant funds on personnel costs, rent/mortgage and utilities. And when the stabilization grants end, more than half said that their programs would have to raise tuition and 35% said they would have to cut wages or be unable to sustain wage/salary increases.

Among all the challenges of the child care crisis, one positive impact is a heightened awareness of the critical role that child care plays in ensuring parents can work, that young children grow and learn and that the economy can thrive. This has meant an increased focus on child care, from the federal level down to local communities. This is an opportunity to finally resolve fundamental challenges that the industry has faced for decades. But the child care crisis is multi-faceted, and it will take a long-term, multi-pronged approach to solve the issues faced in Arizona.

To begin with, even before the pandemic, 48% of Arizona was considered a child care desert, which includes rural and urban areas.[3] There are not enough available spaces for infants and young children to be in a safe, quality early care and learning environment.

Prior to the COVID-19 pandemic, in 2019, the Bipartisan Policy Center mapped the potential child care need for all children under 6 with available parents in the labor force, rather than the rate at which parents and families actually use or look for formal child care.[4] The report, released in 2021, showed that Arizona has more than 300,000 babies and toddlers who may need child care, but only about 230,000 slots to accommodate them.

The analysis also showed that child care needs in rural areas of the state were underserved more often than the urban areas. The child care gap in Arizona's urban areas was 23.1% vs. 37.3% in rural areas. The rural gap is higher than the national average of 35.1%.

After the pandemic, child care options have decreased - both in total programs open and in capacity at individual programs. According to a February 2022 NAEYC survey, 52% of providers were forced to serve fewer kids and 37% of providers reported longer waitlists.

A December 2022 national survey by the Council for a Strong America states that 75% of working parents surveyed reported that access to child care is a challenge. Along with access issues, affordability is a barrier.

Pre-pandemic, child care was already expensive, with one year of infant care costing more than one year of Arizona state college tuition. That's $10,948 for infant care vs. $10,054 average college tuition.[5] Child care costs have increased twice as fast as overall inflation since the 1990s. Now, three years after the pandemic began, finding and affording child care is harder than ever.

A recent Lending Tree report highlights the struggle for families who can't find or are sometimes unable to afford the child care they need.[6] The report says that families in Arizona on average are spending 20% of their income on child care - the 8th highest percentage nationwide (an average of $318 a week). And we know that is just an average, many families are spending a higher percentage of their income on child care. Yet child care is considered affordable if it costs just 7% or less of family income, according to the U.S. Department of Health and Human Services.

Economic Impact of the Child Care Crisis

The child care worker shortage ripples into the economic lives of families with young children who sometimes are unable to work if they can't find child care.

In Arizona, there are an estimated 420,548 parents in the labor force with children under age 6. The U.S. Chamber of Commerce Foundation and the Arizona Chamber of Commerce partnered to survey 402 households with children age 5 and under who are not in kindergarten. That statewide survey found:[7]

- approximately 6% of parents said they voluntarily left a job due to child care issues.
- 34% of respondents reported that they or someone in their household has left a job, not taken a job, or greatly changed jobs because of problems with child care in the last 12 months.
- 71% of parents reported missing work due to child care issues in the past three months.

It's not surprising that child care is harder to afford for workers making minimum wage, who in Arizona spend 44% of their earnings on child care.[8] Yet, only 10% of low-income families in Arizona receive federal child care subsidies.

According to a report from the Center for Law and Social Policy (CLASP), access to these subsidies, which are funded through the Child Care and Development Block Grant (CCDBG), was low across the board.[9] A 2019 CLASP analysis found just 8% of potentially eligible children received subsidies based on federal income eligibility limits and 12% of potentially eligible children received subsidies based on state income eligibility limits. Access to subsidies varied by race and ethnicity and access to subsidies varied by state.

According to the report, "several factors—including demographic shifts among families with young children, state and federal budget and policy climates, and state policy decisions within CCDBG and the broader early childhood system—likely contribute to wide variation in subsidy access across states and racial and ethnic groups."

The lack of access to child care clearly impacts families and their employers. In October 2022, an all-time high of 104,000 Americans missed work because of problems finding child care, according to the Bureau of Labor Statistics.[10] The October data point is higher than before the pandemic. The number has gone down since then, but it points to the increase in challenges that families are encountering when seeking child care for their children.

Absences and employee turnover cost Arizona employers an estimated $1.42 billion per year, according to the U.S. Chamber of Commerce Foundation survey.[11]

But solving the access and affordability conundrum is not easy. Parents cannot afford to pay more, providers cannot charge less and retain staff. Worker wages make up the majority of costs in a child care business. And providers have had to increase wages to keep up with other businesses, but even then, they have found it difficult to compete for workers.

Early childhood educators have one of the worst-paid jobs in the United States with 98% of all other jobs paying a higher wage, according to a report from the Center for the Study of Child Care Employment from the University of California, Berkeley.[12]

Early educators are more likely to lack health insurance and shoulder student debt than the national average, and they experience high levels of food insecurity. Poverty rates for early educators are double those of other workers and, on average, eight times higher than those of K-8 teachers. Nineteen percent of child care workers in Arizona lived in poverty.[13] In addition, most child care positions do not offer benefits - 4 out of 5 child care workers don't have employer-sponsored health insurance and 9 out of 10 child care workers do not have retirement savings.

A large part of the workforce challenge is that many child care providers find it difficult to recruit and retain staff because of this lack of benefits and low wages. The median wage for a child care worker is $13.22 an hour. The Economic Policy Institute estimates child care workers should be paid between $21 -$25 an hour.[14]

The struggle to fill open child care positions is reflected across the United States, according to a 2021 survey from the National Association for the Education of Young Children.[15] The early childhood advocacy group surveyed 7,500 early childhood educators. Four out of every five respondents from child care centers said that they had a staffing shortage and 15% reported a "major shortage" of 6-15 fewer workers than needed.

Temporary Assistance Through Pandemic Relief Funding

Families scramble to find child care, employers deal with employee absences and resignations because of employee child care challenges and child care providers struggle to keep classrooms open to meet demand. To address significant gaps, there has been an unprecedented investment in the nation's early care and education industry from the federal government's pandemic relief efforts including an influx of emergency federal child care program funding.[16] Three federal relief packages - CARES, CRRSA and ARPA provided $50 billion in Child Care and Development Fund (CCDF) relief funding nationally, the largest public investment in child care in US history:

- $3.5 billion in the Coronavirus Aid, Relief, and Economic Security (CARES) Act in March 2020
- $10 billion in the Coronavirus Response and Relief Supplemental Appropriations (CRRSA) Act, 2021 in December 2020
- $39 billion in American Rescue Plan (ARPA) Act, 2021 in March 2021

For Arizona, this has meant an investment - albeit short-term - of $1.3 billion to help stabilize the child care industry. This includes the following:

- $88 million in the Coronavirus Aid, Relief, and Economic Security (CARES) Act (all funds ended by September 30, 2023)
- $248 million in the Coronavirus Response and Relief Supplemental Appropriations (CRRSA) Act (all funds ended September 30, 2023)
- $968.6 million in American Rescue Plan (ARPA) Act
    - $596.4 million ARPA Stabilization Grant (all funds ended September 30, 2023)
    - $372.2 million ARPA Supplemental Discretionary (all funds must be used by September 30, 2024)

In contrast, Arizona's regular allocation from the Child Care and Development Fund (CCDF) is about $240 million. The Arizona Department of Economic Security (DES) Division of Child Care (DCC) is the administrator of Arizona's CCDF program. Arizona's child care infrastructure plan overseen by DCC includes more than 30 strategies aimed at increasing investment in Arizona's early childhood education and child care network and focused on four strategic areas from Fiscal Year 2022-2024:[17]

1. Expand access to quality child care for low-income working families by providing financial stabilization to support and maintain Arizona's child care network while supporting growth and sustainability.
2. Invest in quality early childhood education. To adequately address the current instability of the child care industry and ensure Arizona's families have access to quality child care settings that will best support them and their children, providers must have supports that ensure continued operation and simultaneously address other inequities in the system.
3. Accelerate educational support and early childhood literacy by supporting parents in need of child care who are seeking to increase skills to move toward greater self-sufficiency and higher income jobs. And increase the knowledge of early childhood educators and families to strengthen and sustain effective teaching and early childhood literacy practices in communities.
4. Stabilize the child care network through a focus on ensuring widespread access to quality child care through support for providers across the state, including help with operating costs of providers to prevent closures, retaining the early childhood education and child care workforce and ensuring that Arizona families continue to have access to quality options when choosing child care.

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These strategies were implemented in several ways including:

- Essential Workers Child Care Relief Scholarship Program (EWCCR), December 2020-September 2021: A scholarship program available to Arizona's critical health care workers, first responders, essential government operations, grocery store and food bank workers, and licensed/certified child care workers.
- Child Care Workforce Retention and Recruitment Grant (CCWRR), June 2021: assistance for child care providers with salaries and benefits for employees, and bonus incentives for hiring and retention.
- Child Care Stabilization Grant (July 19, 2021 - June 30, 2023): This monthly assistance was made available for all of Arizona's child care providers. Monthly grants of $900 to $30,100 were awarded to child care providers (the amount depended on provider size and type). Providers reported spending 90% of grant funds on personnel costs, rent/mortgage and utilities.

  DES made it easy for child care providers to qualify and apply. To qualify, providers needed to: be in good standing with DES and their regulatory agency; be open and serving children at the time of application; and comply with monthly reporting. As long as providers continued to meet the qualifying criteria, they received the monthly funds through June 2023.
- Arizona Child Care Infrastructure Grant (through September 30, 2023) Beginning December 2022, a partnership between DES and FTF provided funding through Local Initiatives Support Corporation (LISC) Phoenix to support grantmaking and technical assistance activities to address the urgent need across Arizona for families and communities to access child care. Project funding was used for eligible expenses made between September 30, 2022 and September 20, 2023. A total of $60 million was allocated for grants to providers to support grantmaking and technical assistance activities addressing the high demand for infrastructure and facility improvements. As of August 2023, 478 projects had been approved, impacting providers statewide. These projects highlight the need for funding dedicated to building the supply and capacity of quality child care programs through infrastructure and facility investments.

In addition, these other grants and scholarships are administered by DES.

- Arizona Child Care Assistance Provider Grant (October 2023-June 2024): One-time payment supporting DES contracted child care programs and DES certified family child care providers who serve children eligible for DES Child Care Assistance.
- Arizona Education Workforce Scholarship (April 1, 2023 - June 30, 2024): Provides child care assistance to eligible employees in the child care workforce, and employees in PreK-12 public schools and publicly funded charter schools.
- Arizona Early Childhood Educator Apprenticeship Pathway (May 2023 - September 2024): The apprenticeship pathway provides a structured opportunity for early childhood educators to obtain the Child Care Development Specialist certificate of apprenticeship from the US Department of Labor. The pathway utilizes a combination of on-the-job learning, community-based and online professional development, formal academic coursework, and mentoring. Apprentices are supported through the DES-funded Professional Career Pathway Project at Central Arizona College, and participating employers (child care providers) receive a wage enhancement grant from DCC to support required wage enhancements, paid orientation for apprentices, and paid professional development time for all program participants.

FTF administers the following scholarships:

- Expanded Access to College Scholarships for Early Childhood Educators (July 2023 - June 2024): In collaboration with the FTF College Scholarships program, additional funding from DES expanded access for practitioners to pursue bachelor's level coursework towards a degree in early childhood education. Previously, bachelor's scholarships through FTF had only supported a limited number of scholars in specific areas of the state. The additional funding opens up statewide access and covers tuition, books and fees for one year and is available at all community colleges and universities in Arizona.

  The additional funding also allowed for an online Child Development Associate (CDA) credential opportunity that provides early childhood practitioners with online courses, and prep they need to complete a portfolio to apply for the credential. The scholars also receive a laptop, headset and a year of access to internet connectivity and may be eligible for a completion incentive.

Other federal pandemic relief strategies that were implemented include increasing reimbursement rates to child care providers serving low-income families and increasing participation in the state's quality child care improvement program.

A total of $74 million in relief funding was used to expand Quality First to up to an additional 450 providers. First Things First funding allows for 1,050 providers to participate in the voluntary quality-improvement program. An additional 413 providers were able to join the program through these extra CCDF relief funds. All Quality First expansion participants also have access to technical support in early childhood mental health – to help their teachers improve their classroom climate, enhance child-teacher relationships, support children exhibiting challenging behaviors and encourage the social-emotional development of every child.

Federal relief funding also supported DCC's ability to increase reimbursement rates, and implement one statewide, daily rate for DES providers. Providers caring for children in the state's child care subsidy program receive a 50% enhanced rate for the care they provide if they participated in Quality First as a 3-, 4-, or 5-star program, or achieved national accreditation through a recognized accrediting body. These increased enhanced quality reimbursement rates are in addition to overall increases to reimbursements for providers serving families through the child care subsidy program.

In April 2023, DES again increased their subsidy reimbursement rates to child care programs serving low-income working families. The rates increased from $30.20 to $64.15 per day for infant care, which set the reimbursement rates in the 75th percentile of the 2022 Market Rate Survey for infant care.

Additionally, federal relief funding was used to increase the scholarship reimbursement rates paid to providers serving families receiving FTF Quality First scholarships. This meant that child care providers received about 50% more in their reimbursement, bringing that rate to the 2021 cost of quality level, which means the cost to provide high-quality, developmentally appropriate, safe and reliable child care staffed by a professionally compensated workforce.[18] Previously FTF Quality First scholarships were only reimbursing at the 2010 cost of quality level.

While all of these supports have been essential to helping child care providers manage through challenging times, the last of this federal funding ends in September 2024. This has left state early childhood stakeholders seeking long-term solutions. For FTF and partners, this has meant focusing attention on how to strengthen the early care and education workforce.

Next Steps

Attention continues to be focused on early care and education. In July 2023, the Biden administration announced plans to put a cap on how much families pay for child care as part of the Child Care & Development Block Grant program. Millions of American families spend more than 25% of their income on child care. Families would pay no more than 7% of their income for child care through the program and child care providers would find it easier to be paid on time.

In 2022, lawmakers passed the CHIPS and Science Act, which invests more than $200 billion over five years to help the US bring back semiconductor chip manufacturing from places like China. The law is not specifically about child care, but now the Commerce Department is requiring that applicants requesting direct funding over $150 million must submit a plan to provide their facility and construction workers with access to child care. This first-of-its-kind commitment will be essential to getting people—especially women—into the workforce.

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A recent review of research on child care costs and women's labor supply found that a 10% decrease in the cost of child care leads to a 0.5 to 2.5% increase in maternal employment.[19] That effect is even stronger for mothers with lower incomes. If women participated in the labor force at the same rate as men, there would be more than 10 million additional workers. Making it easier for women to join the workforce will therefore be critical to the success of individual projects and of the program as a whole.

In addition, a new federal National Early Care and Education (ECE) Workforce Center, which launched earlier this year, is expected to provide states, including Arizona, with research and technical assistance activities to build a career pipeline for the early care and education workforce and identify approaches to increase compensation and benefits.

The ECE Workforce Center is under the U.S. Department of Health and Human Services (HHS), through the Administration for Children and Families (ACF) and is the result of a $30 million investment to support research and technical assistance for states, communities, territories and Tribal Nations to improve the recruitment and retention of a diverse and qualified workforce across early care and education programs.

Since 2020, the child care sector has lost almost 80,000 jobs, or about 7.5% of its workforce, due to the COVID-19 pandemic, according to an HHS news release.[20]

It is expected that states will be grouped together, as with other federal comprehensive centers such as the one that focuses on the kindergarten through 12th-grade workforce. One of the early planning meetings was held at FTF's Phoenix office.

The center is expected to assist states through research and implementation of new programs. One focus of the center will be the workforce pipeline. Many organizations that provide early care and education services today find it difficult to locate skilled candidates to fill vacancies.

At the same time, a significant percentage of early care and education workers, who are overwhelmingly women and often have children of their own, live in poverty. Early care and education professionals are among the lowest-paid workforces in the country, despite the skills and expertise they possess to successfully support the development of young children.

"The new National Early Care and Education Workforce Center will help improve early care and education workforce recruitment and retention with a focus on career growth and better compensation for teachers, aides, and other caregivers," said Secretary Xavier Becerra in an HHS release.

"HHS is honored to launch this first-of-its-kind research and technical assistance center to support the essential early childhood workforce who partner with families every day to ensure young children have what they need to thrive."

The Administration for Children and Families will work with organizations such as Child Trends—along with partner organizations like the Center for the Study of Child Care Employment, BUILD Initiative, ZERO TO THREE, University of Massachusetts-Boston, and the University of Delaware — to carry out the ECE Workforce Center's work.

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The ECE Workforce Center's research and technical assistance activities will work together to 1) build a career pipeline for the early care and education workforce, including support for pursuing credentials and degrees while maintaining the strong diversity of the early childhood sector; and 2) identify and implement sustainable approaches to increase compensation and benefits.

The ECE Workforce Center is part of HHS' broader efforts to support the early childhood workforce, which includes an early care and education workforce resources webpage and the recent award of nearly $300 million in Preschool Development Grants Birth through Five to 42 states, including $42 million to Arizona over the next three years.

Initiatives include increasing access to high-quality early learning programs for children birth to age 5, building early childhood educator capacity, supporting family engagement and increasing inclusive settings for children with disabilities.

Here in Arizona, FTF has convened a series of community forums in cities and towns across Arizona to build awareness of the state's child care crisis. The forums offer an opportunity to hear from local community leaders in different parts of the state about how the child care crisis is impacting their communities.

FTF plans to continue convening forums focused on engaging Arizona's business community and leadership. The goal is to inform stakeholders of the impact that child care has on recruitment and retention of their workforce and inform them about the importance of investing in early childhood for the well-being of the community and the well-being of Arizona's economic development.

By working together, important steps can be taken toward ensuring the state can recruit, retain, compensate, develop and support a diverse and high-quality early childhood workforce and continue the important work of finding long-term solutions to Arizona's child care workforce crisis. Public investments in early care and education are good for Arizona's kids and families, good for Arizona employers and good for Arizona's economy.

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Why Quality Early Care And Education Matters

Over 60% of children under age 6 in Arizona live in homes where all parents are in the workforce. This means that the majority of households with young children likely need some form of child care, whether that is in a child care center, in a home-based child care setting or in the care of a family member or friend. Stable, affordable child care is essential for families to balance parenting and working. In order for children to thrive during the critical first five years of development, it's important that those child care settings are high-quality.

Decades of research studies demonstrate that children with access to high-quality early childhood development and health opportunities are more prepared for kindergarten, do better in school and are more likely to graduate from high school and enroll in college. They also tend to be healthier and more productive members of society. An investment in quality early care and education can be one of the most effective investments a community can make.

A 2017 comprehensive analysis from the Harvard Graduate School of Education of 22 research studies found medium- and long-term educational outcomes for children who experience early childhood education programs.[1] The analysis emphasizes the payoff to public funding of early childhood education, suggesting its potential to mitigate the high costs of special education and of dropouts and other poor educational outcomes.

"Researchers from five universities, led by the Harvard Graduate School of Education, analyzed 22 high-quality studies, which were conducted between 1960 and 2016. This meta-analysis found that children who attended high-quality ECE programs were less likely to be placed in special education, less likely to be retained in a grade, and more likely to graduate from high school than peers who didn't attend such programs."

These results suggest that classroom-based early childhood education programs for children under age 5 can lead to significant and substantial decreases in special education placement and grade retention and increases in high school graduation rates.

The positive impacts of caring, responsive relationships go beyond classroom-settings. Young children develop important brain connections through their everyday experiences. Those connections are built through positive interactions with their parents and caregivers in all types of settings, including home-based child care and family, friend and neighbor care. Nurturing relationships with responsive, dependable adults are essential to a child's healthy development.

Advances in science and technology have helped show how the experiences children have in their early years actually shape the development of their brain's most important window of development. According to the Center for the Developing Child at Harvard University, early experiences affect the development of brain architecture, which provides the foundation for all future learning, behavior, and health.[2]

The Centers for Disease Control and Prevention emphasize that children are born ready to learn and have many skills to learn over their early years. They depend on parents, family members, and other caregivers as their first teachers to develop the right skills to become independent and lead healthy and successful lives.[3] How the brain grows is strongly affected by the child's experiences with other people and the world. Nurturing care for the mind is critical for brain growth. Parents and caregivers who give attention, respond and interact with their child are literally building the child's brain. The right start matters.

ENDNOTES

1. Walsh, B. (2017). *The Lasting Payoff of Early Ed.* Harvard Graduate School of Education. Retrieved from https://www.gse.harvard.edu/ideas/usable-knowledge/17/11/lastingpayoff-early-ed

2. Harvard University Center for the Developing Child. (2017). *Brain Architecture*. Retrieved from https://developingchild.harvard.edu/science/key-concepts/brain-architecture/

3. Centers for Disease Control and Prevention. (2023). *Early Brain Development and Health.* Retrieved from https://www.cdc.gov/ncbddd/childdevelopment/early-braindevelopment.html

Arizona receives 3-year, $42 million Preschool Development Grant

In December 2022, Arizona was awarded the Preschool Development Grant Birth-5 (PDG B-5) Renewal Grant. This is a 3-year federal grant worth $42 million or $14 million per year. Grant initiatives include increasing access to high-quality early learning programs for children birth to age 5, building early childhood educator capacity, supporting family engagement and increasing inclusive settings for children with disabilities. This update can be considered a preview of what's to come in the three-year timeline, which started in August 2023.

Arizona's plan outlines how the Arizona Department of Education (ADE), in partnership with other early childhood care and education system partners, which include FTF, Read On Arizona and the Arizona Department of Economic Security Division of Child Care will be leveraged to significantly improve the early childhood care and education infrastructure and continue its commitment to the mixed-delivery service model.

Early childhood providers from across the state who were interested in expanding their programs to add infant and toddler classrooms were encouraged to apply for start-up and expansion funds in 2023. This is the first time that PDG funds have been allocated to include the expansion of infant and toddler classrooms, which means that the full continuum from birth to age 5 is served. Arizona was awarded previous Preschool Development Grants in 2015 and 2019, which were focused on increasing early learning opportunities only for 4-year-old children.

The current grant capped the addition of programs at 50, with a maximum of 10 slots per program, meaning that a potential 500 slots for children birth to age 5 in Arizona could be available. As of September 2023, 32 providers had been awarded funds and 28 had accepted.

Another portion of the first-year grant funds was used to create two new positions: a workforce specialist and an inclusion specialist. Both positions have been filled. The workforce specialist role is designed to support the early childhood workforce and help create pathways for more people to join the early childhood workforce. For example, the specialist will work with institutes of higher education and career and technical education high schools throughout the state to support those studying early childhood education.

The inclusion specialist will work with an early childhood special education team to provide training to early childhood teachers who are providing special education services to children. The goal is for more early childhood teachers to learn how to create more inclusive classrooms and decrease the number of special needs children who have to be pulled out of their general education classroom for services. Research shows that children with special needs who are in a general education classroom have more positive outcomes when their learning is supported prior to entering kindergarten.

Family engagement will be the focus of years two and three of the grant, which will include partners such as Read On Arizona to expand family engagement literacy hubs in identified areas of need throughout the state.

FAMILY CHARACTERISTICS

Why It Matters

Community resources, such as early education systems, family resource centers, health care facilities and social services, help families with young children thrive.[1,2] Accurate information about the number and characteristics of families allows policy makers and program providers to understand what resources are needed in their communities, including where services should be located and how to tailor offerings to the specific needs of those who are likely to use them.[3,4,5,6] For example, identifying which communities have high numbers of families with young children can facilitate strategic investments in libraries, playgrounds and educational systems. Knowing the languages spoken and linguistic heritage of a community also helps decision-makers and program providers understand what families with young children need.[7,8] Given persistent disparities linked to race and ethnicity in the U.S., knowing the racial-ethnic composition of communities can inform efforts to ensure equitable access to services and resources, and identify communities facing higher risks from environmental and public health hazards due to historic underinvestment and other factors—as the COVID-19 pandemic made woefully clear.[9]

FAMILY CHARACTERISTICS

In addition to growing racial, ethnic and social diversity, U.S. and Arizona families are becoming more diverse in terms of family structure.[10,11] Many children live in single-parent households, which has implications for poverty, access to health and education resources, parental health and wellbeing and the quality of a child's interactions with adult caregivers.[12,13,14,15,16,17,18] Multi-generational households, particularly where grandparents live in the home with children and parents, are increasingly common among families nationwide.[19,20] These arrangements can offer financial and social benefits, but also unique stressors.[21,22,23,24,25] It is also increasingly common for children to live in kinship care (care of children by someone other than their parents, such as relatives or close friends).[26,27] Each family structure carries with it a unique set of strengths and challenges.[28,29,30]

Program and policy decisions that are informed by data on the composition of children's home and community environments help ensure more effective supports for families and have a greater chance to improve well-being, economic security and educational outcomes for children.

How Arizona's Young Children Are Faring

Population Change

The release of 2020 Census data in 2023 provided a new detailed snapshot of the population of Arizona and the nation. However, the 2020 Census faced unprecedented challenges in conducting an accurate count of the population, the foremost of which included the COVID-19 pandemic and its related disruptions to institutions such as local and tribal governments, schools and health care facilities. Overall, data quality reviews of the 2020 Census have concluded that the data are generally reliable and accurate for the overall population; however, specific groups that have been undercounted in the past were again undercounted, often more severely.[31] These undercounts are important to keep in mind when using Census data, particularly data for young children.

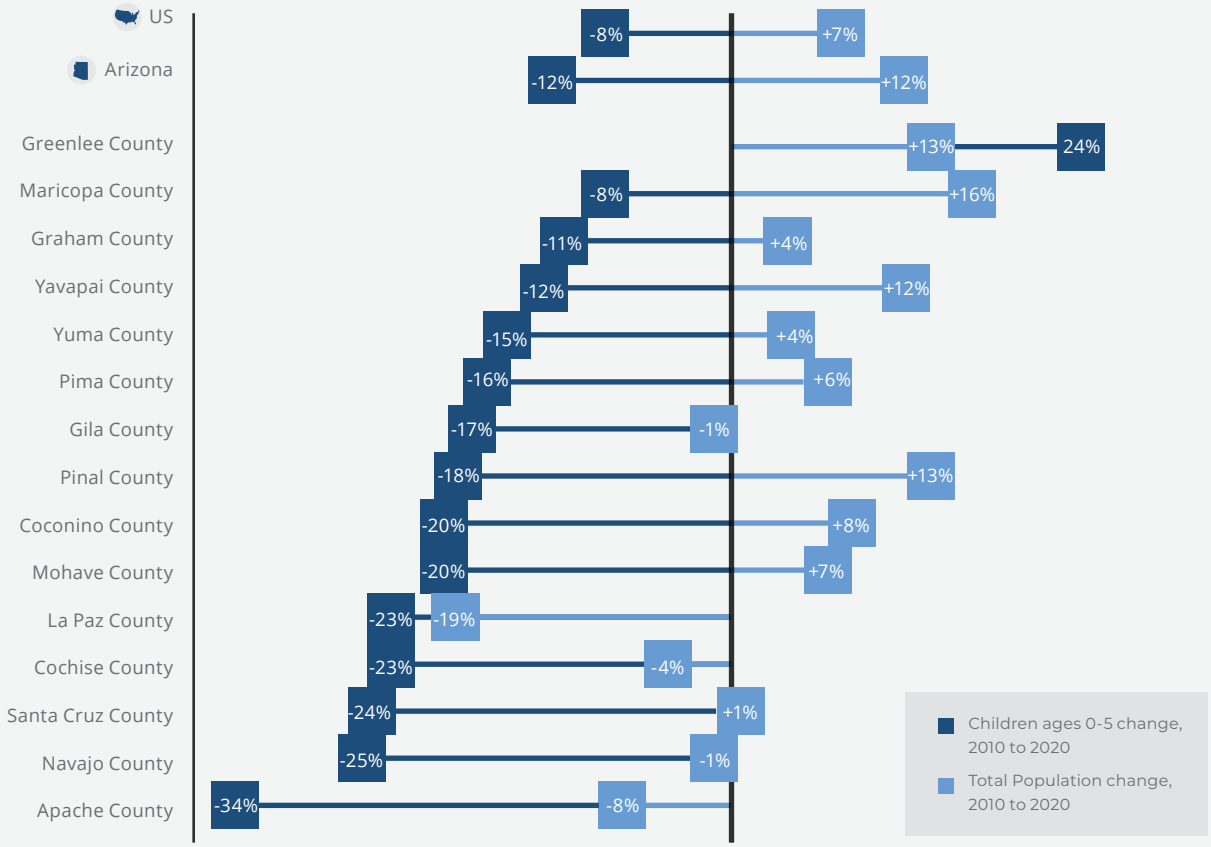
According to the Census, between 2010 and 2020 the population of the state as a whole grew by 12%, a larger increase than that of the U.S. (7%) (Figure 1). During that same time, the population of young children shrank by 12% in Arizona and 8% nationwide. This pattern of overall population growth, despite a decline in the population of young children, was seen in most counties as well. Maricopa County tops the list nationally of counties with growing populations.[32] Greenlee, Arizona's least populous county, was the sole place where more young children were reported in 2020 than in 2010 (Figure 1).

There were a few counties where the overall population also declined between 2010 and 2020: Gila, Navajo, Cochise, Apache and La Paz. Notably, these are all counties with relatively high populations of residents from undercounted groups, namely American Indians living on reservations and Hispanic or Latino individuals. The estimated undercounting rate of American Indians living on reservations was 5.6% (compared to 4.9% in 2010). Hispanic or Latino individuals were undercounted by 5.0% (compared to 1.5% in 2010).[33] In both cases, this means that about 1 in 20 members of these racial and ethnic groups were not counted by the 2020 Census. Undercounts among these groups have been a persistent issue for the Census, but 2020 presented heightened challenges as a result of the COVID-19 pandemic, shortened timelines and fear and confusion around immigration issues.[34,35,36,37,38] Undercounted communities risk receiving fewer resources for at least the next decade since the decennial census counts are the basis of many federal funding allocations.[39,40] This underinvestment in Indigenous and Latino families may further exacerbate existing disparities.

FAMILY CHARACTERISTICS

This is the first decennial census to fully capture a shift in birth rates. Starting in 1970, annual births in Arizona steadily climbed. This trend reversed in 2008, likely driven by the Great Recession which began in December 2007, with the economic hardship having a strong impact on the birth rate nationwide.[41,42] Western states have seen more dramatic decreases in birth rates than other areas of the country. After decades with one of the highest birth rates, Arizona now ranks first in the nation for declines in birth rate between 2001 and 2020.[43] Both nationwide and in Arizona, a dramatic drop in the Hispanic birth rate as well as declining rates of births to teenage mothers have contributed substantially to the overall decline.[44,45,46,47]

Figure 1. Percent change in the total population and children ages 0-5, 2010 to 2020 Census



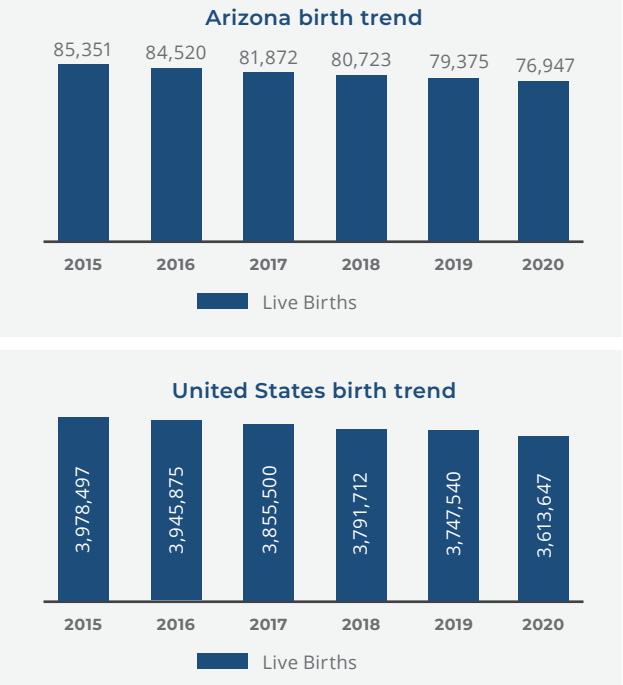
Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14, HCT3. U.S. Census Bureau (2010). 2010 Decennial Census, Summary File 1, Tables P1, P14, P20.

Note: Negative change means that the population decreased between 2010 and 2020; positive change means that population increased between 2010 and 2020.

FAMILY CHARACTERISTICS

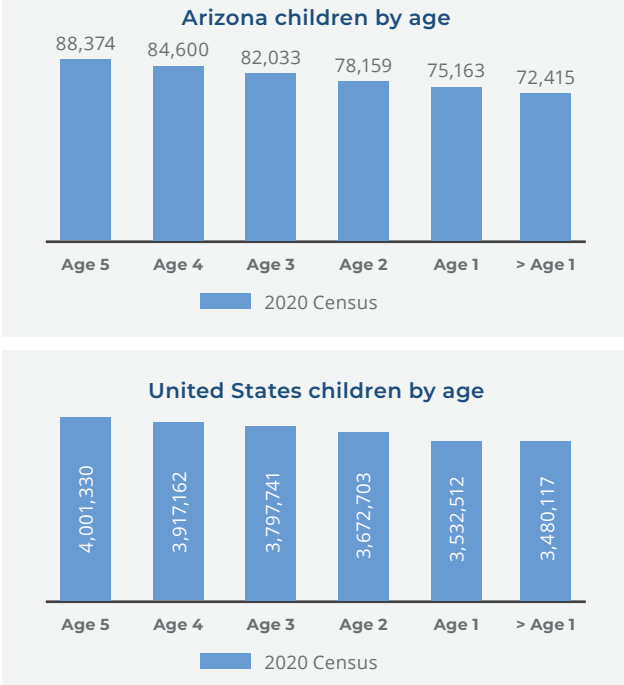
Even after economic recovery from the Great Recession, births have continued to decline across Arizona and the U.S. (Figure 2), meaning a shrinking population of young children (Figure 3). Over the past 6 years, 1-3% fewer babies were born in the state each year compared to the previous year. This decrease in natality in Arizona mirrors a trend in the U.S., where between 1 and 4% fewer babies were born each year in the same time period (Figure 2).[48] It is worth noting that Census estimates of the population size of very young children are consistently lower than births from that year would suggest (e.g., comparing Figure 2 and Figure 3). The recently released 2020 Census acknowledges an undercount of children, especially young children ages 0 to 4, who were undercounted by 3-5% nationwide (meaning that as many as 1 in 20 children ages 0 to 4 were missed by the Census).[49] An awareness of this undercount is important to keep in mind when using population data for decision-making, as 2020 Census estimates likely underestimate the number of young children in all communities, and particularly in predominantly Hispanic and American Indian communities.[i]

Figure 2. Number of births per calendar year to Arizona-resident and U.S. mothers, 2015 to 2020



Source: Centers for Disease Control and Prevention, National Center for Health Statistics (2022). [Natality 2016 - 2021 on CDC WONDER Online Database, released in 2022]. Accessed at https://wonder.cdc.gov/natality.html on Dec 2, 2022.

Figure 3. Children ages 0-5 by age in Arizona and the United States, 2020 Census



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

Note: Ages are reversed and birth trend data presented for 2014 to 2019 to allow for most direct comparability between these two datasets. Census Day 2020 occurred on April 1, 2020, with follow-up continuing until Sept 30, 2020.

[i] Young children ages 0-4 have been persistently undercounted in the decennial census for decades, including the 2010 Census and 2000 Census. The 2020 Census, compared to the 2010 Census, had higher undercounts across all populations according to the Census Post-Enumeration Survey and Demographic Analysis Estimates. There are not currently any plans to revise 2020 Census estimates, but Census data may be augmented with other survey and administrative datasets such as the American Community Survey and Current Population Survey as well as Vital Statistics and school enrollments.

FAMILY CHARACTERISTICS

Overall, young children birth to age 5 comprise about 7% of the population at both state and national levels (Table 1). About 1 in every 8 Arizona households (13%) has a young child in the home; this is also true for the U.S. as a whole. In Graham and Greenlee counties, this rises to about 1 in every 5 households (19 and 20%, respectively), meaning that there are relatively more families with young children in these counties. In Yavapai and Mohave counties, there are relatively fewer families with young children, only about 1 in every 12 households (8% each). While young children make up a small portion of the overall population, their well-being has wide-reaching impacts on families, social service systems and the state's future population. Continued investment in their well-being and the well-being of their families was deemed by the National Academy of Sciences as "the most efficient strategy" for strengthening the future workforce and supporting a thriving community.[50]

Table 1. Population and households with children ages 0-5, 2020 Census

	Total Population	Children ages 0-5 - Number	Children ages 0-5 - Percent	Households	Households with one or more children ages 0-5- Number	Households with one or more children ages 0-5- Percent
United States	331,449,281	22,401,565	7%	126,817,580	16,429,111	13%
Arizona	7,151,502	480,744	7%	2,705,878	345,601	13%
Apache County	66,021	4,765	7%	22,103	3,398	15%
Cochise County	125,447	7,769	6%	50,936	5,737	11%
Coconino County	145,101	8,662	6%	51,320	6,430	13%
Gila County	53,272	3,022	6%	22,312	2,214	10%
Graham County	38,533	3,404	9%	12,150	2,339	19%
Greenlee County	9,563	981	10%	3,634	710	20%
La Paz County	16,557	949	6%	7,370	708	10%
Maricopa County	4,420,568	310,813	7%	1,643,579	222,016	14%
Mohave County	213,267	10,596	5%	91,270	7,673	8%
Navajo County	106,717	7,932	7%	36,836	5,602	15%
Pima County	1,043,433	62,466	6%	427,021	45,676	11%
Pinal County	425,264	29,672	7%	146,663	20,864	14%
Santa Cruz County	47,669	3,361	7%	16,670	2,596	16%
Yavapai County	236,209	11,040	5%	104,425	8,134	8%
Yuma County	203,881	15,312	8%	69,589	11,504	17%

Source: United States Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14, HCT3.

FAMILY CHARACTERISTICS

Race and Ethnic Composition

Arizona's young children are demographically different from Arizona's adults.[ii] Most children are identified as either Hispanic or Latino (44%) or non-Hispanic White (42%) (Figure 4). Arizona, California, Nevada, New Mexico and Texas are the only U.S. states where Hispanic or Latino children are the largest racial or ethnic group.[51] Among adults, over half (57%) identify as non-Hispanic White, and about a third (31%) identify as Hispanic or Latino (Figure 5). In both cases, Arizona has a larger Hispanic or Latino population and smaller non-Hispanic White population than the U.S. as a whole. Arizona also has a higher percentage of American Indian or Alaska Native residents (6% of both children and adults) than the U.S. as a whole (1%). The proportion of respondents indicating "some other race" (16% children, 23% adults)[iii] or identifying as multiracial (21% children, 14% adults) is also higher in Arizona than across the nation.

Figure 4. Adults and children ages 0-4 by reported race or ethnicity in Arizona, Census 2020

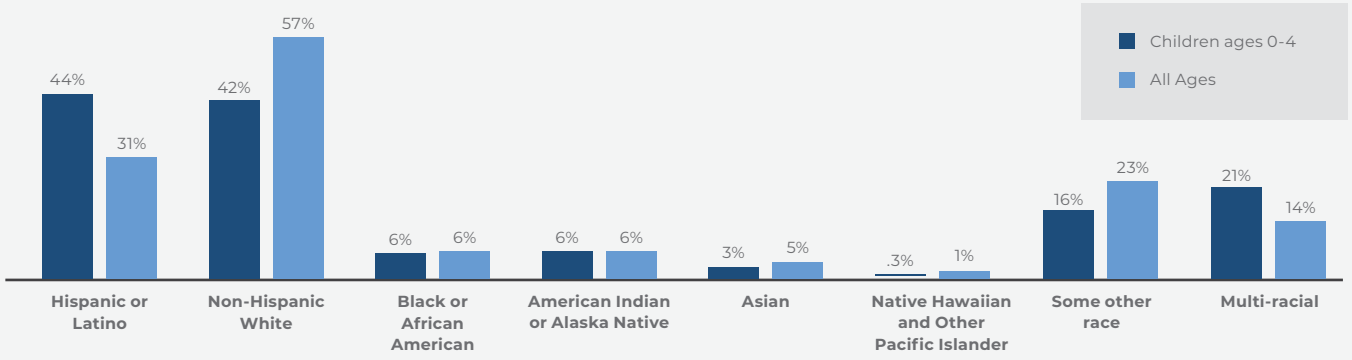
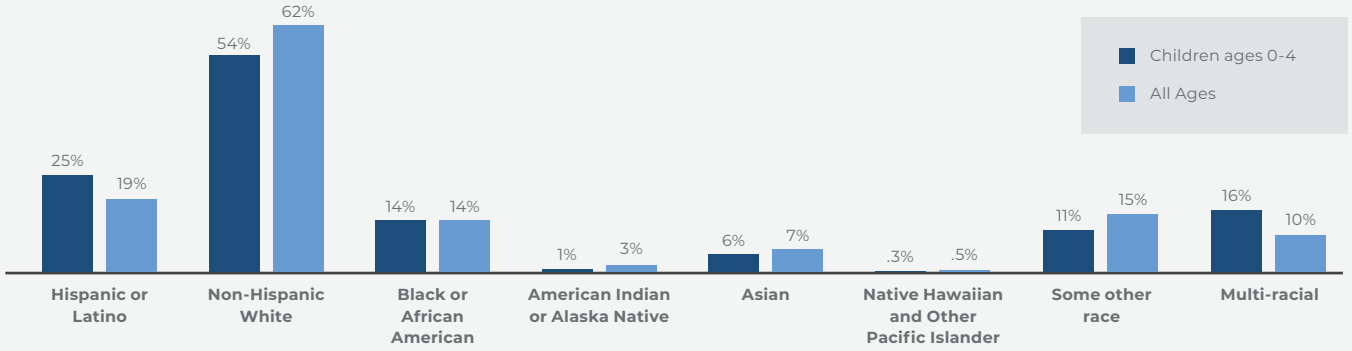


Figure 5. Adults and children ages 0-4 by reported race or ethnicity in the U.S., Census 2020



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

Note: The 8 percentages for each geography in these figures sum to more or less than 100% because persons are counted in each racial or ethnic category with which they identify, meaning that multi-racial persons are counted multiple times. For example, a person identifying as Hispanic and American Indian would be counted in both the Hispanic or Latino and the American Indian or Alaska Native categories. Multi-racial includes individuals who report 2 or more races (not ethnicities).

[ii] Note that with the exception of non-Hispanic White, these categories are not mutually exclusive. For example, someone reporting that they are Hispanic, Black and American Indian would appear in those each of those counts as well as in the multi-racial category. Please also note that racial and ethnic identities for children are reported by the reference adult who complete the Census form on behalf of their entire household.

[iii] The U.S. Census presents Hispanic origin and race as two separate questions, so it is common for people who identify as Hispanic or Latino to indicate "some other race" on the Census form. See U.S. Census Bureau. (2021a, October 8). 2015 National Content Test: Race and Ethnicity Analysis Report for more information. Retrieved August 19, 2023, from https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/plan/finalanalysis/2015nct-race-ethnicity-analysis.html

FAMILY CHARACTERISTICS

Conversely, there are relatively fewer Black (6% vs. 14% for both children and adults) and Asian residents (3% vs. 6% for children; 5% vs. 7% for adults) compared to the U.S. as a whole. Among Arizonans, 0.3% of children and 1% of adults identify as Native Hawaiian or Pacific Islander.

Reflecting the diversity of cultural heritage across Arizona, there are some notable differences in the ethnic composition of young children across Arizona counties (Table 2). In Santa Cruz and Yuma counties, a large majority of children are Hispanic or Latino (94% and 78%, respectively), whereas in Apache and Navajo counties most young children are American Indian (76% and 53%, respectively). In Yavapai and Mohave counties about two-thirds (66%) of young children are White, non-Hispanic. Maricopa, Pinal and Pima have the largest relative populations of Black or African American young children at 7%, 6% and 5%, respectively.

Table 2. Children ages 0-4 by race/ethnicity, 2020 Census

	Population ages 0-4	Hispanic or Latino	White, non-Hispanic	Black or African American	American Indian or Alaska Native	Asian	Native Hawaiian or Pacific Islander	Some other race	Multiracial
United States	18,400,235	25%	54%	14%	1%	6%	0.3%	11%	16%
Arizona	392,370	44%	42%	6%	6%	3%	0.3%	16%	21%
Apache County	3,861	7%	17%	0.2%	76%	0.2%	0.1%	1%	6%
Cochise County	6,287	47%	46%	4%	1%	1%	0.4%	13%	25%
Coconino County	7,084	19%	44%	1%	35%	1%	0.1%	6%	14%
Gila County	2,434	26%	43%	1%	29%	1%	0.2%	8%	10%
Graham County	2,781	32%	48%	2%	19%	0.1%	0.0%	5%	13%
Greenlee County	815	57%	40%	1%	3%	0.0%	0.1%	10%	20%
La Paz County	772	48%	23%	0.3%	34%	0.3%	1%	16%	22%
Maricopa County	253,703	43%	43%	7%	3%	4%	0.3%	17%	21%
Mohave County	8,667	29%	66%	1%	3%	1%	0.3%	8%	16%
Navajo County	6,446	13%	34%	0.3%	53%	0.5%	0.0%	3%	8%
Pima County	51,065	51%	38%	5%	4%	2%	0.4%	15%	26%
Pinal County	24,272	42%	47%	6%	6%	1%	0.4%	13%	21%
Santa Cruz County	2,745	94%	4%	1%	1%	0.3%	0.0%	34%	37%
Yavapai County	8,937	30%	66%	1%	3%	1%	0.2%	8%	19%
Yuma County	12,501	78%	19%	2%	2%	1%	0.1%	28%	31%

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

Note: The 8 percentages for each row sum to more or less than 100% because persons are counted in each racial or ethnic category with which they identify, meaning that multi-racial persons are counted multiple times. For example, a person identifying as Hispanic and American Indian would be counted in both the Hispanic or Latino and the American Indian or Alaska Native categories. Multi-racial includes individuals who report 2 or more races (not ethnicities).

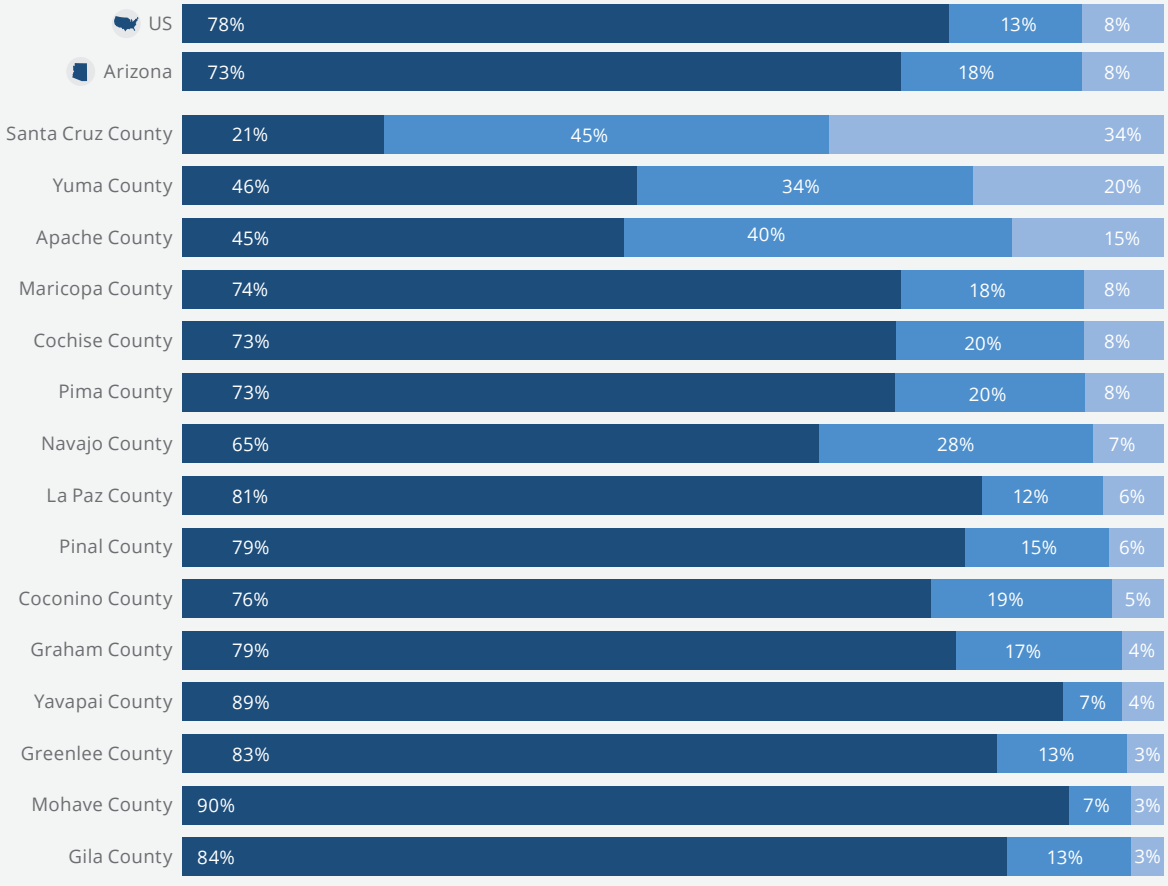
FAMILY CHARACTERISTICS

Language of Children and Families

The American Community Survey estimates that 18% of Arizonans speak a language other than English at home and speak English "very well,"[iv] meaning they are proficiently bilingual or multilingual (Figure 6). In several counties, including Santa Cruz (45%), Apache (40%), Yuma (34%) and Navajo (28%), over a quarter of residents over age 5 are proficiently bilingual. Young children can benefit from this exposure to multiple languages. Language is an important connection to family, community and culture.[52] Additionally, mastery of more than 1 language is an asset in school readiness and academic achievement and may offer cognitive and social-emotional benefits in early school experiences and across one's lifetime.[53,54,55,56,57]

In addition to those who are multilingual, about 8% of Arizona residents speak a language other than English at home and do not consider themselves as speaking English "very well." The proportion of residents who do not speak English "very well" varies widely across the state, from more than 1 in 3 people in Santa Cruz County, to only 3% in Greenlee, Mohave and Gila counties (Figure 6). Parents and caregivers with limited English proficiency may experience challenges accessing health care and social services, as well as barriers to engaging in important interactions at their children's schools.[58,59] Such barriers can affect a family's ability to promote positive child development. The availability of bilingual or multilingual staff and resources can help support families whose first language is not English.[60,61]

Figure 6. English language proficiency for the population (ages 5 and older), 2017-2021 ACS



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

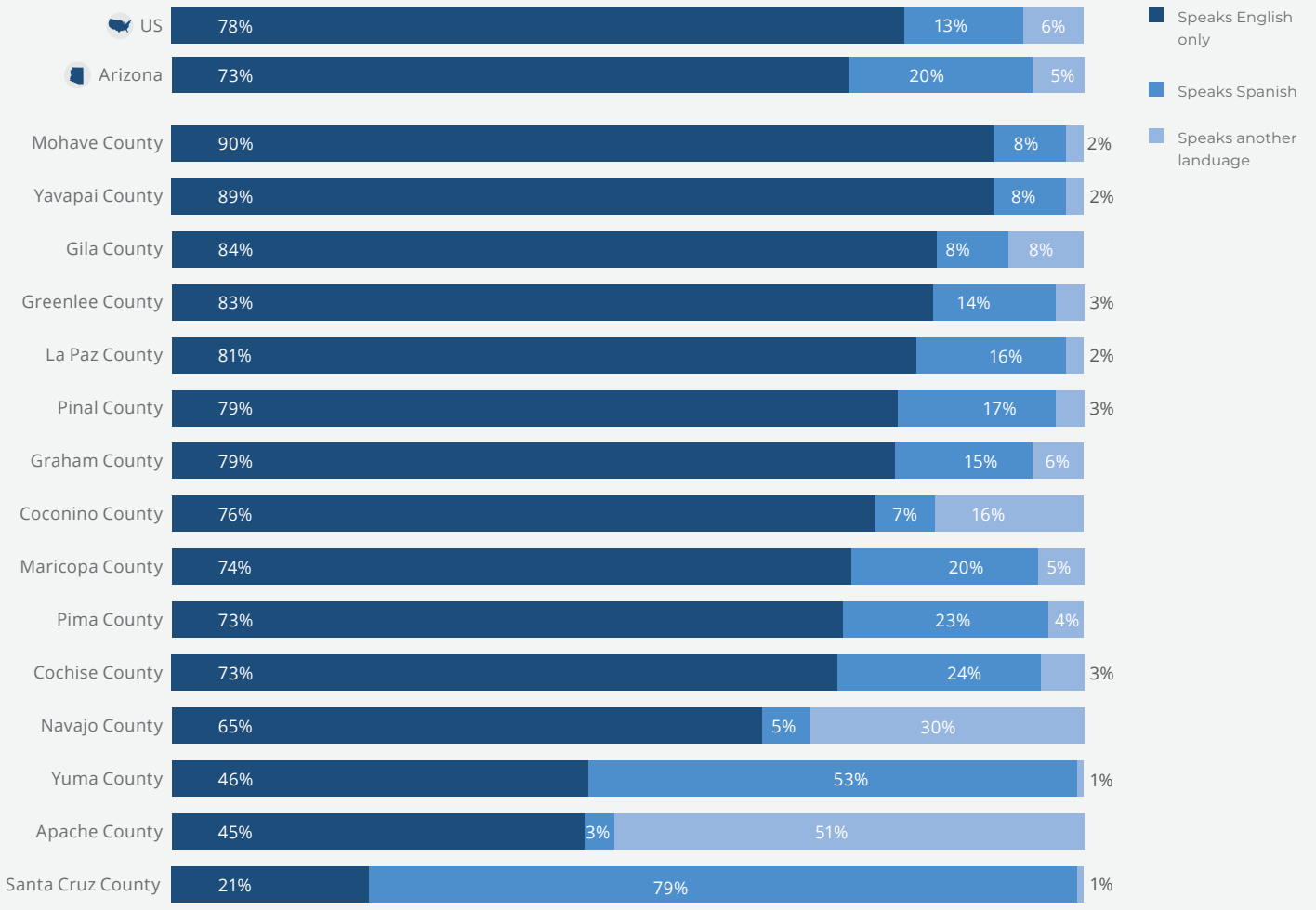
Note: The 3 percentages in each column should sum to 100%, but may not because of rounding.

[vi] "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

FAMILY CHARACTERISTICS

In Arizona, the most common languages spoken at home are English (73%), Spanish (20%) and Native American languages (including Apache, Hopi, Navajo and O'odham) (5%) (Figure 7). Consistent with the diversity of cultural heritage in the state, the linguistic profiles of the counties are also diverse. In 5 counties – Santa Cruz (79%), Yuma (53%), Cochise (24%), Pima (23%) and Maricopa (20%) – at least 1 in 5 residents speaks Spanish at home (Figure 7). Other counties have substantial numbers of residents who speak a Native American language (e.g., Apache, 51%; Navajo, 30%; Coconino, 16%; and Gila, 8%). Language preservation and revitalization are an important focus in many Native American communities in Arizona.[62,63] These efforts promote social unity, community well-being and Indigenous self-determination. Such efforts intentionally include the youngest members of the community, offering early childhood programs in the Indigenous language of a community.[64]

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



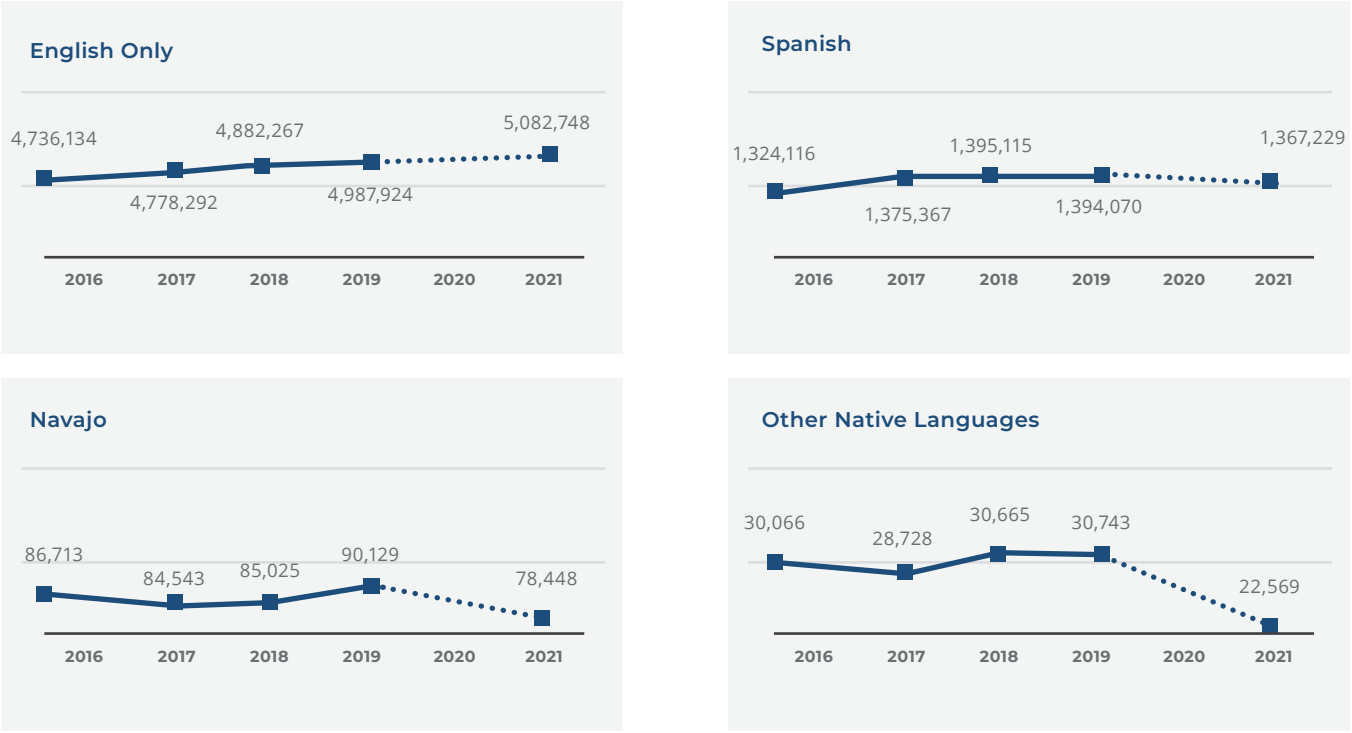
Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table C16001

Note: The 3 percentages in each column should sum to 100%, but may not because of rounding.

FAMILY CHARACTERISTICS

The overall population ages 5 and older increased every year between 2016 and 2021. Generally keeping with that trend, the number of Arizonans identifying as speakers of Native Languages (including Navajo) had also been rising since 2017. However, the latest estimates from the American Community Survey point to a stark shift in that trend. Whereas the population of English-only speakers rose 0.3% between 2019 and 2021, the population of Navajo speakers declined by an estimated 13% and the population of speakers of other Native languages declined by an estimated 27% (Figure 8). While undercount issues discussed above in Population Change may play some role, this decrease also reflects the devastating losses that Indigenous communities experienced during the COVID-19 pandemic.[65,66] These deaths, especially among tribal elders, signify a loss of life and of traditional knowledge, cultural history and language.[67,68] Ongoing support for cultural preservation and language revitalization continues to be a critical need for Indigenous communities in Arizona.

Figure 8. Population ages 5 and older reporting speaking select languages at home in Arizona, 2016 to 2021 ACS



Source: U.S. Census Bureau. (2022). 2016 to 2021 American Community Survey single-year estimates, Table C16001

Note: The overall population ages 5 and older increased every year between 2016 and 2021. Due to the effects of the COVID-19 pandemic on data collection for the 2020 ACS, the 2020 single-year ACS estimate had particularly poor data quality, such that the U.S. Census Bureau deemed the data 'experimental.' Due to these data quality concerns, 2020 data are not presented here.

FAMILY CHARACTERISTICS

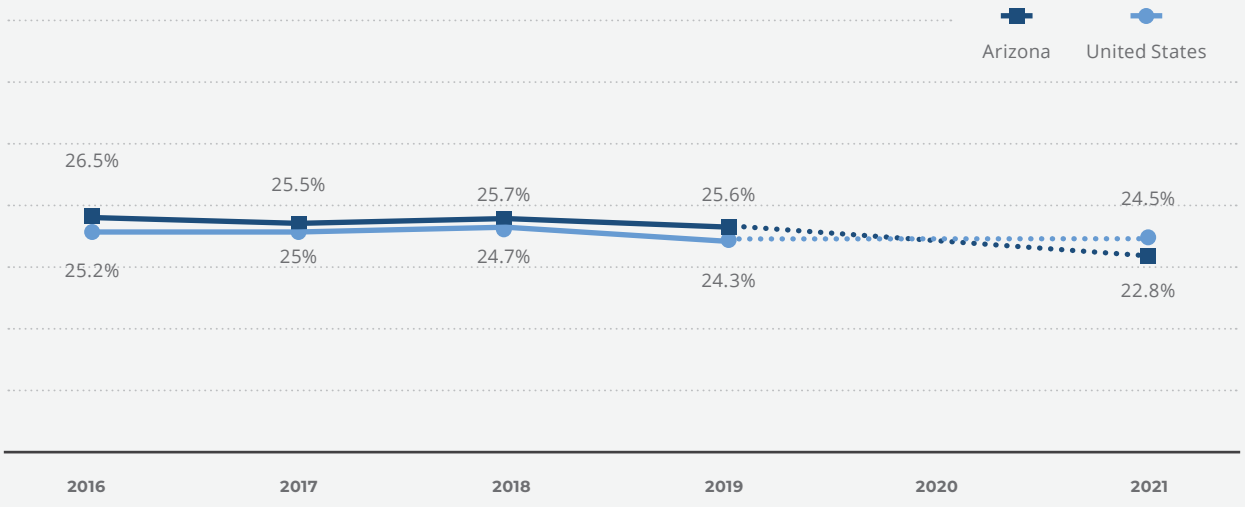
Family Structure

Foreign-Born Parents

In recent years, in both Arizona and the U.S. as a whole, about 1 in 4 children under the age of 6 have 1 or both parents who were born in a different country (Figure 9). This figure has been ticking generally upward for over a decade.[69,70] However, while the proportion in the U.S. as a whole remained steady into 2021, the proportion in Arizona dropped from 25.6% in 2019 to an unprecedented low of 22.8% in 2021. While the causes for this decline are likely complex, the past 4 years have been a tumultuous time for immigrant families. Title 42 was enacted during the COVID-19 pandemic, limiting the abilities of asylum-seekers and others to enter the United States during the public health emergency. Immigration remained a contentious political issue on local, state and national stages.[71,72,73]

Immigrant parents in Arizona have typically lived in the U.S. for at least 9 years, and the vast majority of young children of foreign-born parents are citizens.[74,75,76] Nonetheless, some immigrant parents 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.[77,78,79] 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.[80,81,82,83]

Figure 9. Children (ages 0-5) living with one or two foreign-born parents, 2016 to 2021



Source: U.S. Census Bureau. (2023). 2016 to 2021 American Community Survey single-year estimates, Table B05009

Note: The term "parent" here includes step-parents. Due to the effects of the COVID-19 pandemic on data collection for the 2020 ACS, the 2020 single-year ACS estimate had particularly poor data quality, such that the U.S. Census Bureau deemed the data 'experimental.' Due to these data quality concerns, 2020 data are not presented here.

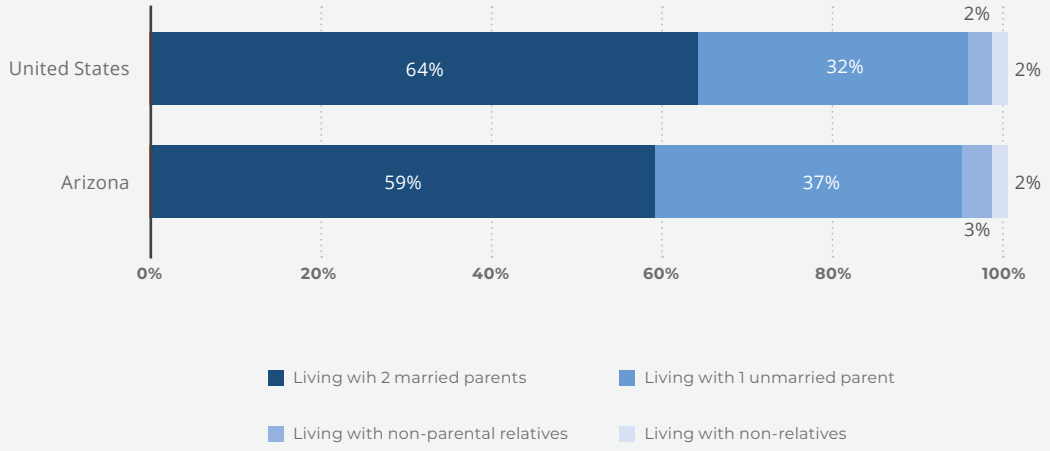
FAMILY CHARACTERISTICS

Living Arrangements

Compared to children nationwide, a smaller proportion of young children in Arizona live with 2 parents or step-parents[v] (64% vs 59%) and relatively more children live with 1 parent or step-parent (32% vs 37%). The remaining children in the state either live with a relative who is not their parent (3%) or with other people not related to them (2%) (Figure 10).

Children living in kinship care (i.e., living with a close friend or relative who is not a parent) can arrive in those situations for a variety of reasons, including but not limited to a parent's absence for work or military service, chronic illness, substance use disorder or incarceration, or due to abuse, neglect or homelessness. Though the proportion of children living in kinship-care arrangements in the state 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 aging caregiver for a young child.[84] 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.[85]

Figure 10. Living arrangements for children ages 0-5, 2017-2021 ACS



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

Note: The 4 percentages in each row should sum to 100%, but may not because of rounding. The term "parent" here includes step-parents.

[v] The American Community Survey does not distinguish between biological, adopted and step-children when reporting data on 'own' children. A child is defined as including a son or daughter by birth, a stepchild, or adopted child of the householder.

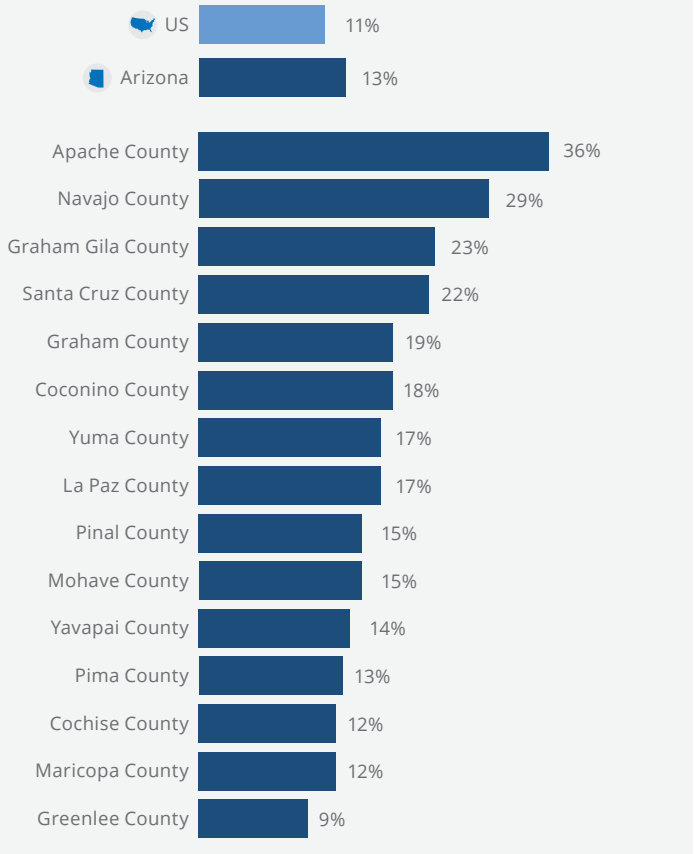
FAMILY CHARACTERISTICS

Multigenerational Homes

Multigenerational homes (i.e., households containing more than 1 generation of adults) are increasingly common across the United States. Such arrangements have long been practiced in some cultures and communities but are a rising trend across nearly all U.S. racial and ethnic groups as families find ways to provide care and financial support.[86,87] While there are benefits to these multigenerational arrangements such as increased emotional support for young children and their parents, provision of child care by a grandparent or pooling of financial resources between multiple working adults, research also indicates that cohabitating families can experience higher levels of stress and that multigenerational environments are not always beneficial for young children.[88] Complicating the research, however, is the reality that for families of young children, multigenerational living is especially common among families with limited educational and financial resources.[89,90,91]

Statewide, an estimated 13% of children under 6 live in a grandparent's household, a slightly higher proportion than young children nationwide (11%) (Figure 11).[vi] However, the proportion of young children who live in a grandparent's household varies greatly across Arizona counties. More than one-fifth of all young children in Apache (36%), Navajo (29%), Gila (23%) and Santa Cruz (22%) counties live in a household headed by a grandparent. In counties with larger urban populations like Maricopa and Pima, these proportions are much smaller (12% and 13%, respectively) (Figure 11). Notably, even when children are not living with grandparents, grandparents often still play an important role in children's daily life.[92]

Figure 11. Children (ages 0-5) living in grandparent's household, 2020 Census



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

[vi] Note that in some of these cases, the child's parent (or parents) also lives in the household. Households in which grandparents, parents and children all live together are commonly referred to as multigenerational or three-generational households. Please note that data from the Census and American Community Survey (ACS) reflect households where the grandparent is the householder (i.e., the owner or renter of the house or identified as head of household by the person completing the Census or ACS questionnaire). These data may not include households where a grandparent is present in the household but not the householder.

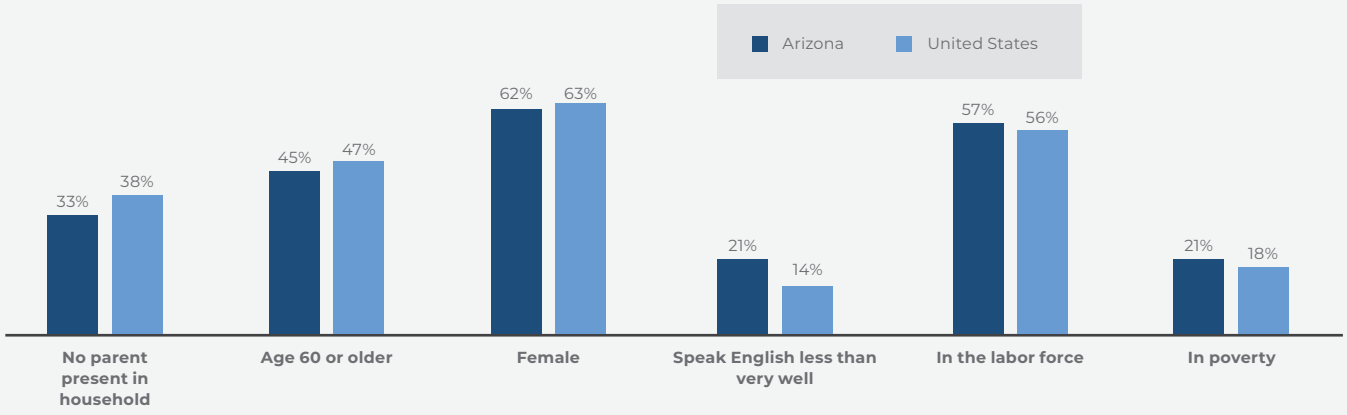
FAMILY CHARACTERISTICS

Understanding the circumstances of grandparents caring for 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, grandparents often encounter multiple barriers when accessing public assistance as caregivers and face unique psychological and physical stressors, such as the challenges of raising children while managing chronic health conditions and disabilities related to aging and navigating conflicts in parenting styles within multigenerational households.[93,94,95,96] 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.[97]

An estimated 56,079 grandparents in Arizona are responsible for 1 or more grandchildren under 18 in their households. In some respects, grandparents caring for their grandchildren in Arizona are similar to their peers nationwide: about two-thirds of them are female (62% AZ; 63% U.S.); nearly half are 60 years old or older (45% AZ; 47% U.S.); and over half are in the labor force (57% AZ; 56% U.S.) (Figure 12). This latter fact suggests that there are many working grandparents who may need child care during working hours while they raise the children in their care. About a fifth (21%) of Arizona co-resident grandparents are not proficient in English. Grandparents with limited English proficiency who are their grandchildren's primary care provider may need additional support to access health care and social services for their grandchildren and engage in important interactions at schools, including but not limited to translated materials, interpretation services and assistance navigating unfamiliar health and social systems.

At both state and national levels, it is more common for children to live with both a parent and grandparent than just a grandparent. In Arizona, 33% of grandparents responsible for their grandchildren are raising children without the child's parent present, compared to the 67% who live with multiple generations of adults (Figure 12). Each of these family structures has implications for child well-being.[98,99]

Figure 12. Characteristics of grandparents living with, and responsible for, grandchildren (ages 0-17), 2017-2021 ACS



Source: U.S. Census Bureau. (2023). American Community Survey five-year estimates 2017-2021, Tables B10051, B10054, B10056, & B10059

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

ECONOMIC CIRCUMSTANCES

Why It Matters

Children who grow up in poverty and unstable economic conditions are more likely to face negative effects on their cognitive, behavioral, social and emotional development compared to those in stable economic environments.[100,101,102,103,104] Poverty is associated with reduced access to nutrition, green space and health care, and greater exposure to psychosocial stress and environmental toxins. These factors can directly and indirectly hinder children's growth and brain development.[105,106,107]

Consequently, children living in poverty are at a higher risk of negative outcomes that include being born at a low birth weight, lower school achievement and poor health.[108,109,110,111,112,113,114] The challenges they face might continue into adulthood, and such difficulties may be passed on to the next generation.[115,116] Poverty also affects children by straining parent well-being and parent-child interactions. Stressors related to poverty, like unemployment, lack of food and housing security and poor mental and physical health, make it difficult for caregivers to provide the necessary support for children's optimal development.[117] In light of these broad impacts, economic stability is a key social determinant of health and is included as a domain in the Healthy People 2030 Objectives.[vii]

Food security is defined by the U.S. Department of Agriculture (USDA) as "access by all people at all times to enough food for an active, healthy life."[118] Food security, or the lack thereof, is linked with many aspects of child and parent well-being.[119,120,121] Food insecurity can be a major source of stress for parents and has been linked to health and behavioral problems for children.[122,123,124]

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

ECONOMIC CIRCUMSTANCES

Unemployment (and underemployment[viii]) and housing instability also can impact families' and children's health and well-being.[125] Unemployment can limit access to resources like health insurance that support children's physical and mental health, and can also contribute to family stress, conflict, homelessness and child abuse.[126,127] Similarly, housing instability can have harmful effects on the development of young children, and high housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health and homelessness.[128,129,130] High relative housing costs also leave inadequate funds for other necessities, such as food and utilities.[131]

Child poverty is estimated to cost the U.S. between $800 billion and $1.1 trillion annually. These estimates take into account increased crime, reduced adult productivity and increased spending on health care.[132] Fortunately, trends in child poverty over time reflect promising news, falling 59% over the past 25 years.[133] This decline can be attributed in large part to the social safety net, including federal tax programs like the Earned Income Tax Credit, and public assistance programs that provide essential resources to meet basic needs. These programs have played a crucial role in reducing child poverty from 1993 to 2019.[134] Safety-net programs such as the federally-funded Supplemental Nutrition Assistance Program (SNAP; also referred to as "nutrition assistance" and "food stamps"),[ix] the Special Supplemental Nutrition Program for Women, Infants and Children (WIC)[x] and Temporary Assistance for Needy Families (TANF),[xi] along with programs such as KidsCare (the state children's health insurance program),[xii] the National School Lunch Program, child care subsidies and housing support, aim to minimize the impacts of economic instability on child and family well-being.[135,136,137] It should be noted that although these are important programs for families, not all key family expenses are covered. Families with more children are more likely to participate in multiple safety-net programs,[138] and the application process across these programs can be burdensome and difficult to navigate.[139] In addition, some programs are time- and/or-age limited, such as Arizona's TANF program which currently has a lifetime benefit limit of 12 months, and in State Fiscal Year 2023, 1,374 TANF cases reached that state benefit limit.[140] Furthermore, some policy changes that increased access or benefits during the COVID-19 pandemic have expired, reducing available resources for many families in Arizona.

In addition to public assistance programs, education and employment support programs for parents and caregivers are important for increasing wages and improving the economic stability of families. "Two-generation" or "2Gen" approaches that address the needs and well-being of both parents and children simultaneously through designing programs to support children and families together, such as a family literacy program that provides educational support to parents while enrolling children in free high-quality preschool, are especially important to single-parent families who may be more likely to need child care when pursuing educational or work opportunities.[141,142,143,144] These programs have the goal of decreasing the intergenerational effects of poverty by building parental capacity and protective factors within families.[145,146,147]

[viii] 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.

[ix] For more information see: https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program and https://des.az.gov/na

[x] For more information see: https://www.fns.usda.gov/wic and https://www.azdhs.gov/prevention/azwic/

[xi] For more information see: https://www.acf.hhs.gov/ofa/programs/temporary-assistance-needy-families-tanf and https://des.az.gov/ca

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

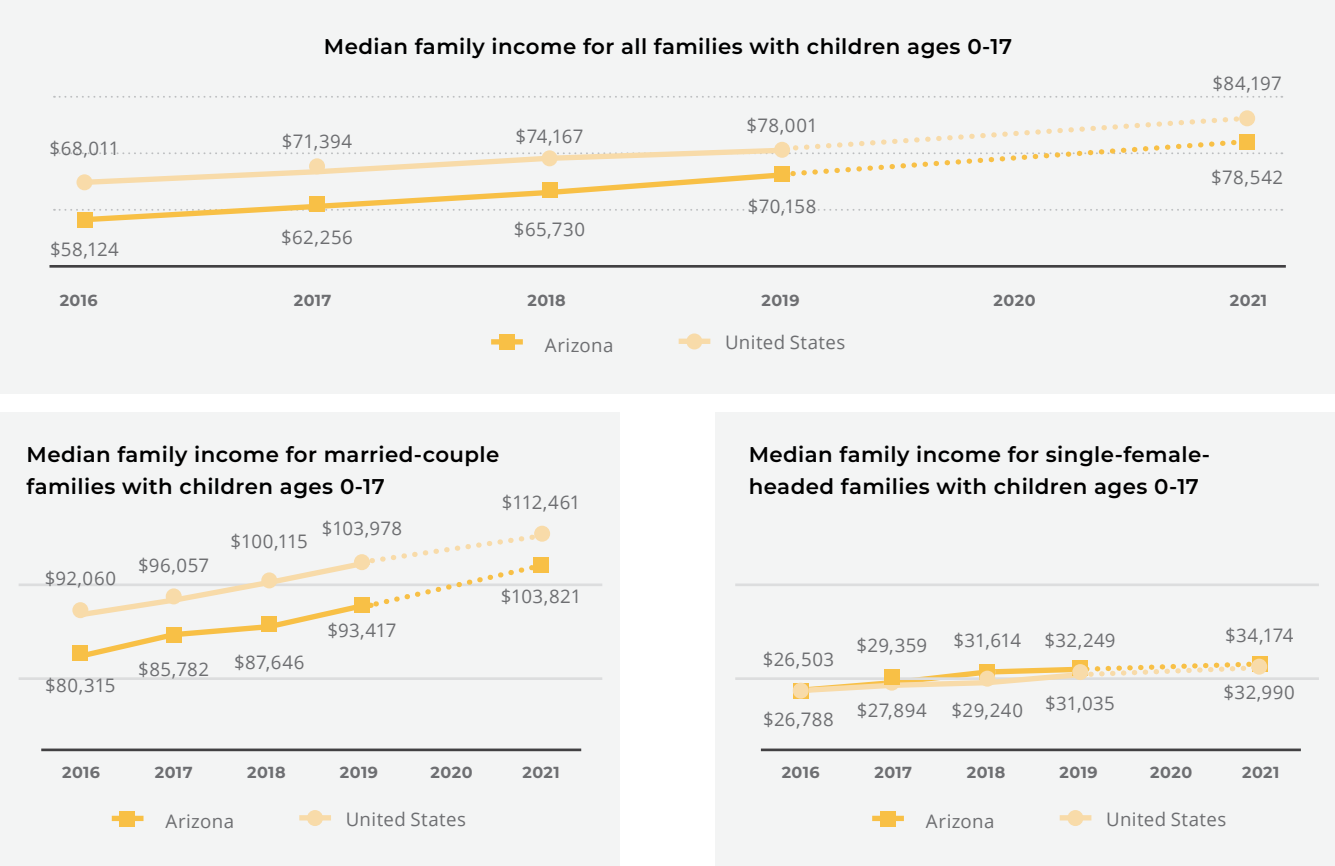
How Arizona's Young Children Are Faring

Income and Poverty

Families in Arizona tend to earn less than other U.S. families. The median family income[xiii] in Arizona in 2021 was $78,542, about $6,000 lower than the U.S. median family income of $84,197 (Figure 13). Although the median family income has risen steadily since 2016, so has the cost of living. For example, in the Phoenix area, the Consumer Price Index[xiv] was 9.7% higher in December 2021 compared to the previous year.[148]

Median income also varies substantially by family type, with single-parent families typically earning much less. Married parents with children (ages 0-17) in Arizona earned a median income of $103,821 in 2021. Single-female-headed families with children earn less than one-third that ($32,990). Furthermore, the median family income for these families only increased 6% since 2019, compared to the 11% increase in median family income for married couples with children during the same period (Figure 13).

Figure 13. Median annual family income for select family types, 2016 to 2021 ACS



Source: U.S. Census Bureau. (2022). 2016 to 2021 American Community Survey Single Year Estimates, Table B19126

Note: Due to the effects of the COVID-19 pandemic on data collection for the 2020 ACS, the 2020 single-year ACS estimate had particularly poor data quality, such that the U.S. Census Bureau deemed the data 'experimental.' Due to these data quality concerns, 2020 data are not presented here.

[xiii] According to the American Community Survey Subject Definitions, a family consists of two or more people living together who are related to each other by birth, marriage, or adoption.

[xiv] The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. For more information, please see https://www.bls.gov/cpi/

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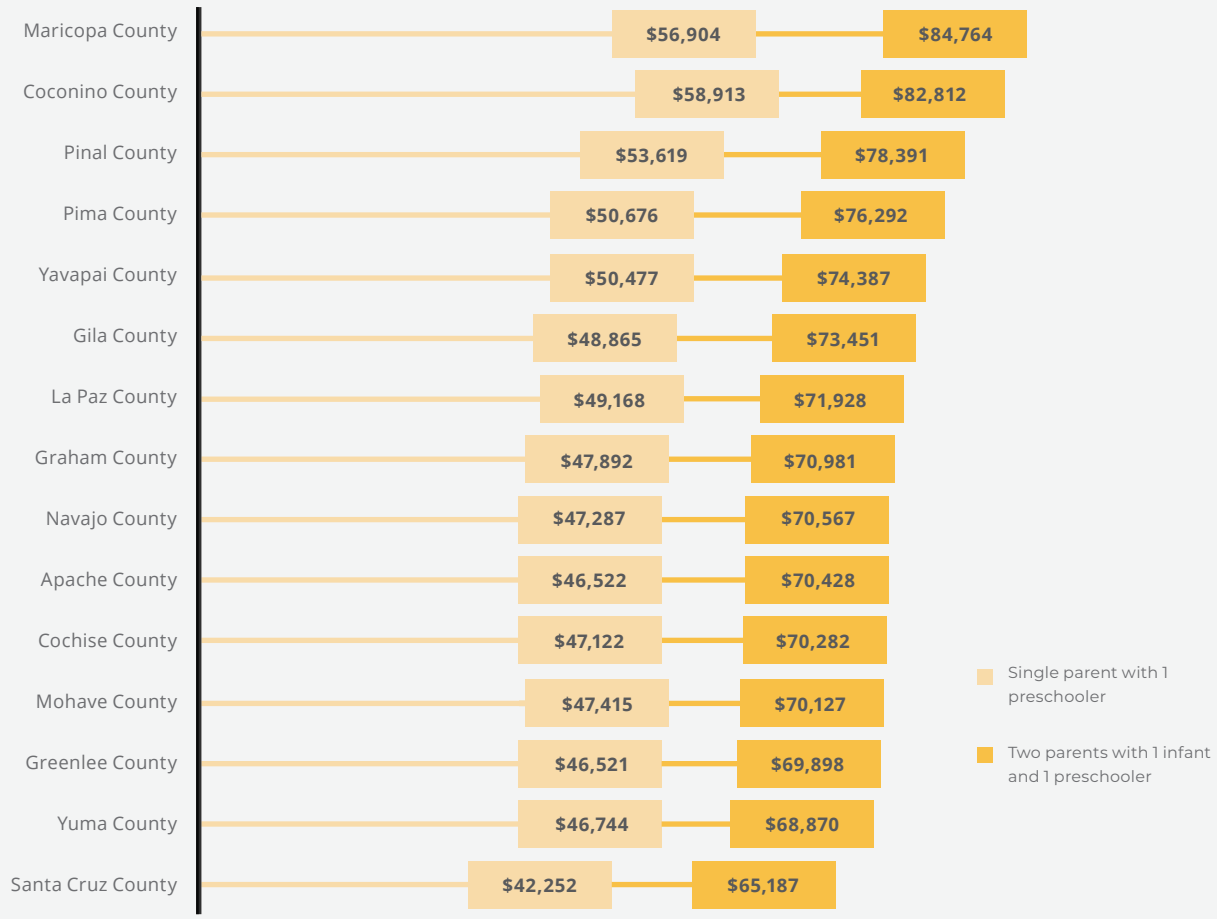
In addition to the median family income as an indicator of economic standing, the "self-sufficiency standard" attempts to estimate how much families need to earn to fully support themselves, accounting for differences in costs of housing, transportation, child care and other budget items across counties.[149] The 2022 self-sufficiency standards are generally highest in counties with larger cities. For a family comprised of 2 parents, 1 infant and 1 preschooler, the funds needed for self-sufficiency are highest in Maricopa ($84,764) and Coconino ($82,812) counties and lowest in Santa Cruz County ($65,187) (Figure 14). These patterns are similar when looking at the standard for families with a single parent and 1 preschooler, with the highest in Coconino ($58,913) and Maricopa ($56,904) counties and the lowest in Santa Cruz County ($42,252).

Figure 14. Self-Sufficiency Standard by county, 2022



Source: Women's Foundation for the State of Arizona (2022). [The Arizona 2022 Self-Sufficiency Standard]. Retrieved from https://womengiving.org/research/ on 14 November 2022

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Given the high costs of child care, families with young children generally need to earn more money to achieve self-sufficiency. The median income of $106,694[xv] for married-couple families with children in Maricopa County in 2021 is higher than the self-sufficiency standards for a wide variety of family types (Figure 15) suggesting that at least half of families (i.e., those at or above the median income) are able to fully support themselves. Single parents, especially single mothers, are far less likely to have incomes above the standard (Figure 16). Single fathers generally have higher incomes than single mothers and are more likely to be able to independently support their families. For single mothers, the self-sufficiency standard is above the median income for 5 common family types, indicating that over half of single mothers cannot independently financially support their families. Single mothers of very young children face especially large gaps between income and costs, largely due to the cost of care for infants and young children. As illustrated in Figure 16, the funds needed for a single parent to support 1 young child are more than the estimated funds needed to support 2 older children.

Figure 15. Median family income by household type for married-parent families with children ages 0-17 (2021 ACS) compared to the 2021 Self-Sufficiency Standard for Maricopa County

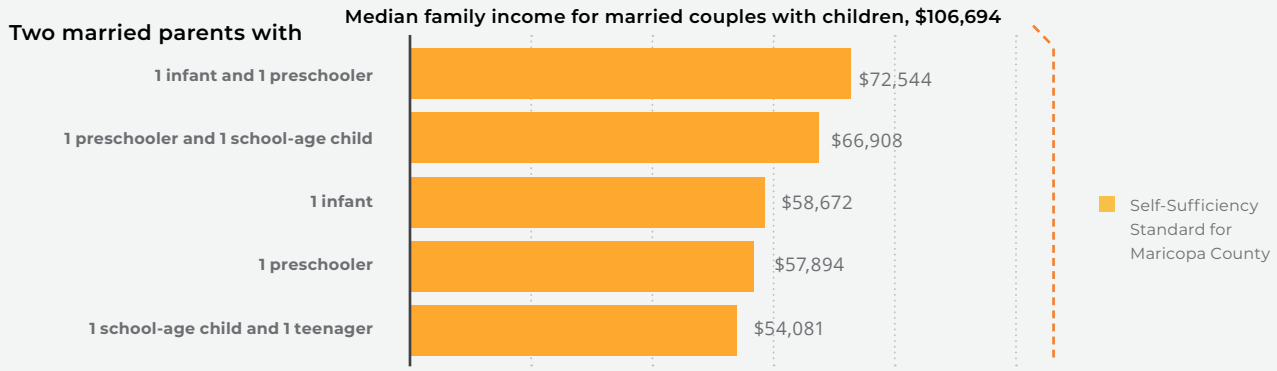
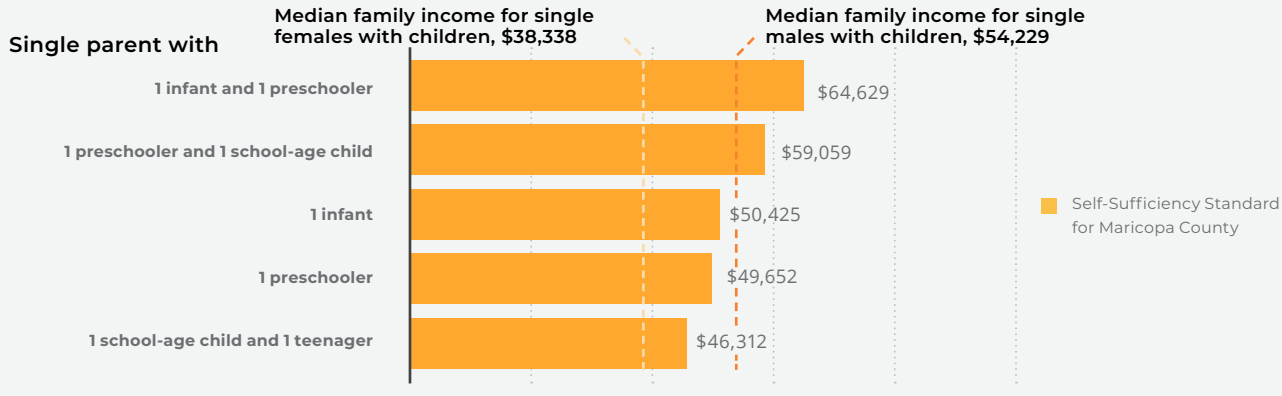


Figure 16. Median family income by household type for single-parent families with children ages 0-17 (2021 ACS) compared to the 2021 Self-Sufficiency Standard for Maricopa County



Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table B19126 and Center for Women's Welfare, University of Washington (2022). [The Arizona 2021 Self-Sufficiency Standard]. Retrieved from https://selfsufficiencystandard.org/arizona/ on 21 July 2023

Note: All dollar amounts in this figure represent 2021 dollars. Self-sufficiency standard bars reflect costs in Maricopa County. Self-sufficiency standards are lower for these family types in all other counties besides Coconino County.

[xv] Note that these figures use Maricopa County as an example, so incomes shown are the median income for Maricopa County families, which are slightly higher than incomes for Arizona as a whole.

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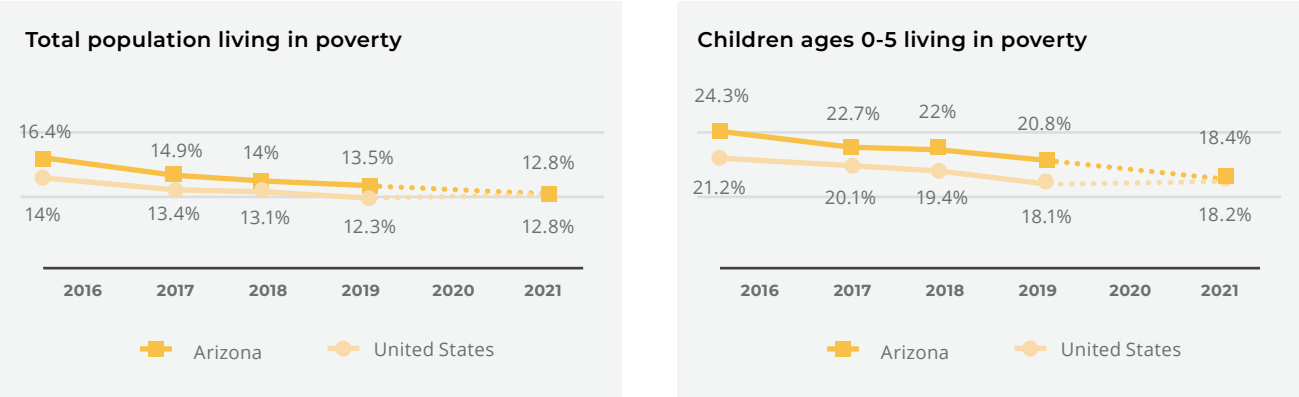
Another indicator of the adequacy of income that depends on family size and family composition is the federal poverty level.[xvi] For example, in 2021, a family of 2 adults and 2 children earning an income lower than $27,479 was considered to be in poverty according to U.S. Census definitions.[150] These amounts are substantially lower than the self-sufficiency standards, meaning that this threshold is capturing very poor families who are very likely to be struggling to provide for themselves and their children.[151] In 2021, 12.8% of the Arizona population lived in poverty, the same proportion as across the United States (Figure 17). Although Arizona is no longer worse than the U.S. as a whole with regard to the proportion of the population living in poverty, this is still a substantial part of the population living with very limited economic resources. The Economic Stability Objectives of Healthy People 2030[xvii] include a target of 8% or fewer people living in poverty, indicating that more progress needs to be made in Arizona.

The proportion of children living in poverty has fallen significantly since the 1980s – by 59% by some estimates[152] – but children are still more likely than adults to live in poverty (Figure 17). Following this national trend, child poverty rates in Arizona have been steadily declining. In 2021, the proportion of Arizona's young children living in poverty decreased to 18.4%, the lowest it has been since the American Community Survey began collecting these data.[153] These declines are attributed to a variety of factors including rising wages, more single mothers participating in the workforce and multiple social safety net programs including the expanded child tax credit available during the pandemic.[154,155,156] However, despite these gains, national data released by the Census Bureau suggests that with the end of many expanded social safety net programs in 2022, poverty rates are again increasing, with marked increases in child poverty rates in 2022 compared to 2021.[xviii,157]

Figure 17. Children (ages 0-5) and total population living in poverty in Arizona and the United States, 2016 to 2021 ACS



Source: U.S. Census Bureau (2022). 2016 to 2021 American Community Survey Single Year Estimates, Table B17001.

Note: Due to the effects of the COVID-19 pandemic on data collection for the 2020 ACS, the 2020 single-year ACS estimate had particularly poor data quality, such that the U.S. Census Bureau deemed the data 'experimental.' Due to these data quality concerns, 2020 data are not presented here.

[xvi] Note that while the U.S. Census and Health and Human Services definitions of poverty are similar, there are slight differences. Means-tested programs like Medicaid (AHCCCS) use the HHS definition when determining eligibility. For more information, please see https://aspe.hhs.gov/2021-poverty-guidelines

[xvii] For more information on the Economic Stability Objectives of Healthy People 2030, please see https://health.gov/healthypeople/objectives-and-data/browse-objectives/economic-stability

[xviii] The U.S. Census Bureau released data on September 12, 2023, indicating the Supplemental Poverty Measure (SPM) child poverty rate more than doubled from 2021 to 2022, which may be related to changes in federal policies in 2022. For more information, please see https://www.census.gov/newsroom/press-releases/2023/income-poverty-health-insurancecoverage.html.

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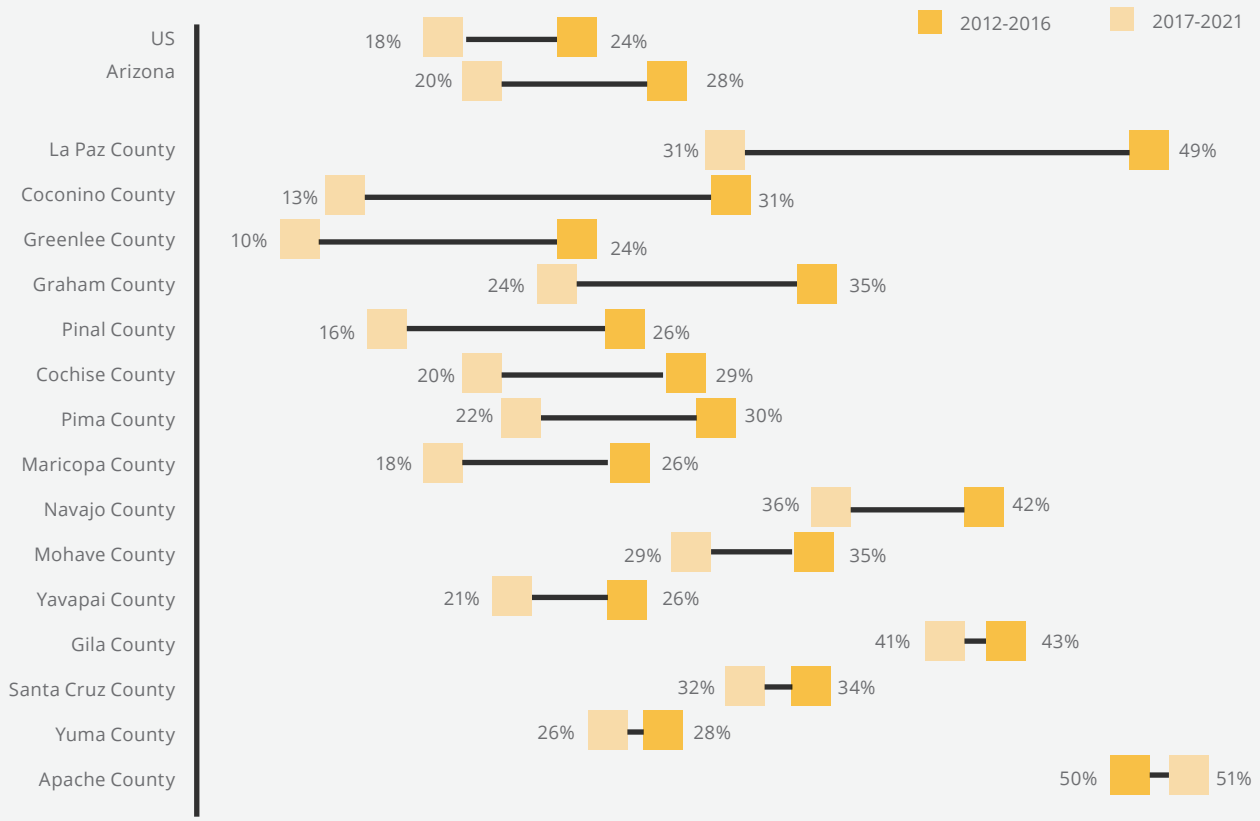
Compared to the U.S., Arizona consistently has a higher proportion of young children who live in poverty, although this gap decreased notably in 2021. Even with this improvement, nearly 1 out of every 5 young children in Arizona still lives in poverty. Furthermore, with the end of pandemic-era supports to many families with young children, these decreasing trends may not persist. In fact, in a national survey of caregivers of children under 6, the rate of material hardship (i.e., difficulty in paying for at least 1 area of basic need, such as food, housing, or child care) was higher in December 2022 than at any time since the monthly survey began in April 2020,[158] indicating that many families in Arizona may be facing increasing financial hardships.

The good news is that the decreases in young child poverty rates seen across the nation and Arizona are also reflected in all Arizona counties, with the exception of Apache County (Figure 18). Apache County was the one county in the state that showed a small increase in child poverty rates (50% to 51%) over the time periods other counties saw a drop. Despite the declines, certain counties still have especially high rates. Over a quarter of young children in Navajo (36%), Santa Cruz (32%), La Paz (31%), Mohave (29%) and Yuma (26%) counties live in poverty (Figure 18). In Apache (51%) and Gila (41%) counties, more than 4 in 10 young children live in poverty, suggesting that programs that support low-income families are still incredibly important to the futures of young children in many parts of Arizona.

Figure 18: Change in poverty rates for children (ages 0-5), 2012-2016 ACS to 2017-2021 ACS



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

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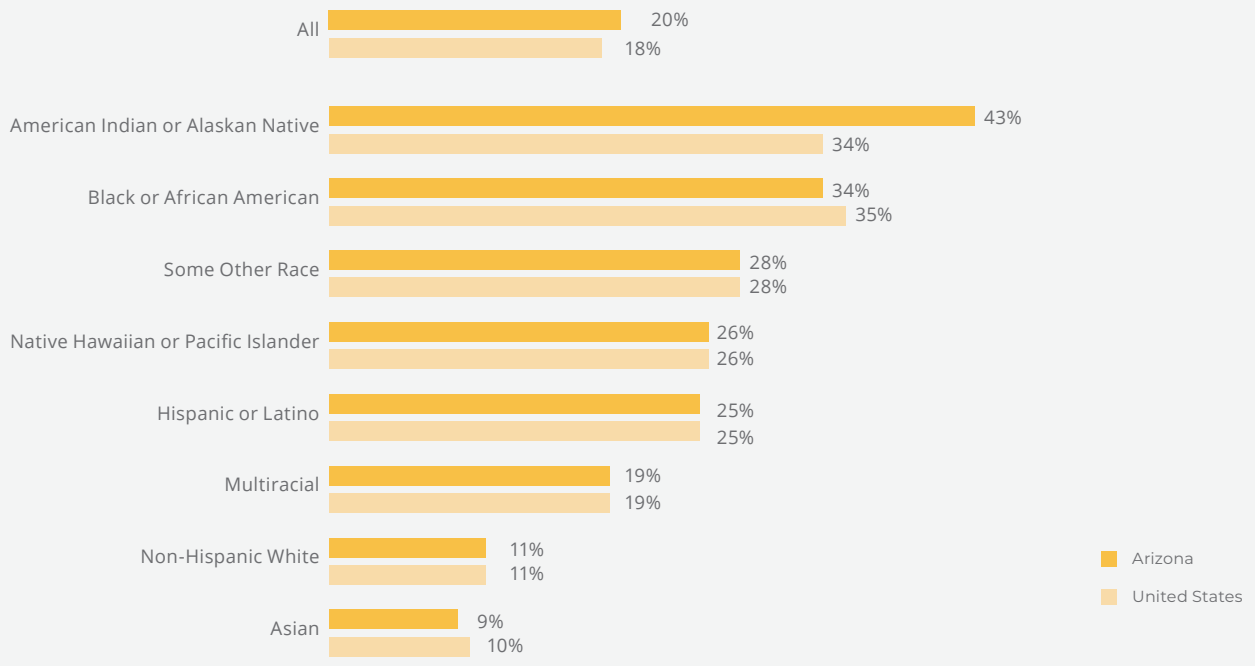
Poverty also varies substantially by race and ethnicity. Among children under 5 in Arizona, poverty rates for American Indian young children (43%) are more than twice those of young children across the state as a whole (20%), and also notably higher than the rates for American Indian and Alaska Native children across the U.S. (34%). Poverty rates for Black or African American (34%), Native Hawaiian or Pacific Islander (26%) and Hispanic or Latino (25%) children in Arizona, as well as children of some other race (28%), are also higher than for all young children across Arizona (20%). In both Arizona and across the country, White (11% in both) and Asian (9% AZ; 10% U.S.) young children are the least likely to be living in poverty (Figure 19). It is therefore important to note that even within the context of historic declines in child poverty, these declines have impacted children from Black, Indigenous, and Latino racial and ethnic backgrounds disproportionally. This may be an even more important consideration when making policy decisions within the context of limited resources.

The pronounced decline in child poverty in the last decades is due in part to the development and growth of federal public assistance programs, like SNAP, WIC and subsidized health insurance. These programs are one way of counteracting the effects of poverty and providing supports to children and families in need. However, when an increase in income (e.g., through a raise or working additional hours) reduces or eliminates eligibility for public assistance programs, families may lose access to financial resources, potentially leaving them in more financial hardship than before the income increase.[159] This problematic phenomenon, known as the "benefits cliff," may lead many families who may not technically be living in poverty or be considered low-income to face difficult decisions and substantial economic hardship.

Figure 19. Percent of children (ages 0-5) living in poverty by race or ethnicity, 2017-2021 ACS



Source: United States Census Bureau (2022). 2017-2021 American Community Survey 5-Year Estimates, Tables B17020, B17020-B, B17020-C, B17020-D, B17020-E, B17020-H, & B17020-I

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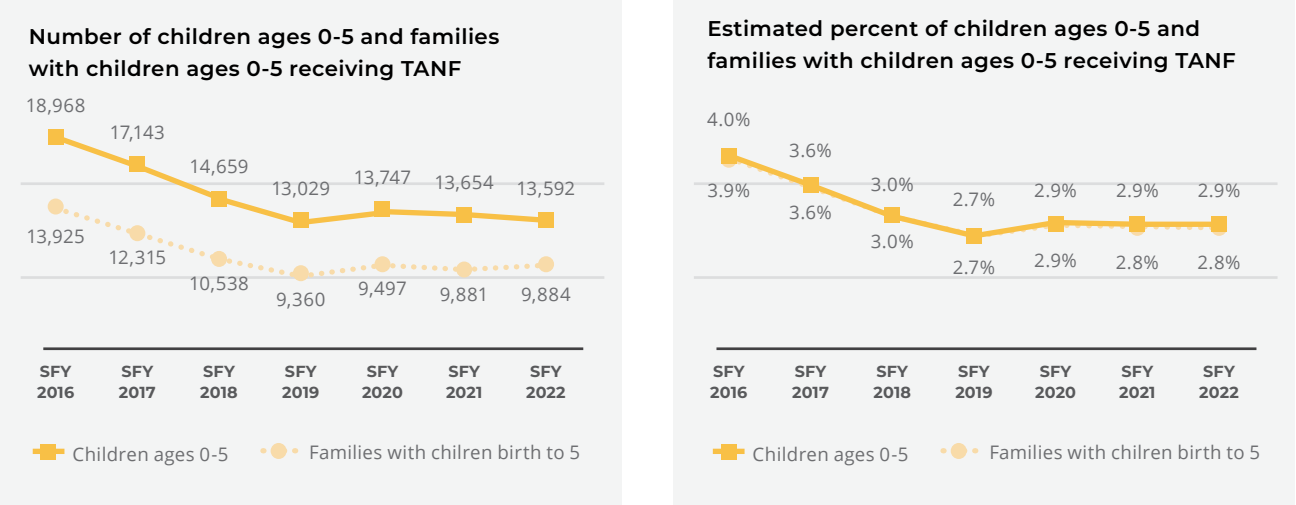
One public assistance program, the Temporary Assistance for Needy Families (TANF) Cash Assistance program, provides temporary cash benefits and supportive services to children and families.[xix] Eligibility is based on citizenship or qualified resident status, Arizona residency and limits on resources and monthly income. The immediate, widespread economic hardship caused by the COVID-19 pandemic resulted in shifts in existing cash assistance programs and the development of additional economic supports. States eased rules for accessing TANF, such as waiving work requirements and automatically recertifying benefits, which resulted in reductions in days of poor physical and mental health experienced by TANF participants.[160] However, these pandemic provisions for TANF have ended in Arizona, and the May 2023 federal Debt Ceiling Agreement reduced state-level flexibility and increased requirements for work participation among participating families.[161] The impact this may have on Arizona TANF policies is still unknown.

The number of young children supported by TANF and the number of households with children under 6 receiving TANF has declined overall in Arizona in recent years, although lows in state fiscal year 2019 were followed by higher numbers in the following years (Figure 20). The percentage of young children (2.9%) and families with young children (2.8%) participating in TANF in SFY2022 were nearly identical and reflect the continued very low participation in TANF across the state. This low level of participation is also less than that seen across the country, where in fiscal year 2022, 1.9% of children under age 18 were receiving TANF, compared to only 0.6% in Arizona.[162]

Arizona spends most (67%) of its TANF grant on child welfare, compared to only 8% nationally,[163] spending only 11% on direct assistance to families.[164] Arizona has instituted a benefit limit of 12 months, shorter than the federal limit of 60 months. This limit does not apply to tribal TANF programs, in which tribal nations administer their own TANF programs, including setting eligibility criteria.[165] Six tribal nations in Arizona operate their own tribal TANF programs: Hopi Tribe, White Mountain Apache Tribe, Salt River Pima-Maricopa Indian Community, San Carlos Apache Tribe, Pascua Yaqui Tribe and the Navajo Nation.[166]

Figure 20. Children ages 0-5 and families with children ages 0-5 receiving TANF, state fiscal years 2016 to 2022



Source: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Tables HCT3 & P20.

[xix] The monthly cash assistance amount for those with an obligation to pay allowable shelter (housing) costs ranges from $164 for 1 family participant to $791 for 12 family participants. If no allowable shelter cost is included the monthly cash assistance payment ranges from $103 for 1 family participant to $499 for 12 family participants. Please see https://des.az.gov/services/child-and-family/cash-assistance/cash-assistance-ca-income-eligibility-guidelines

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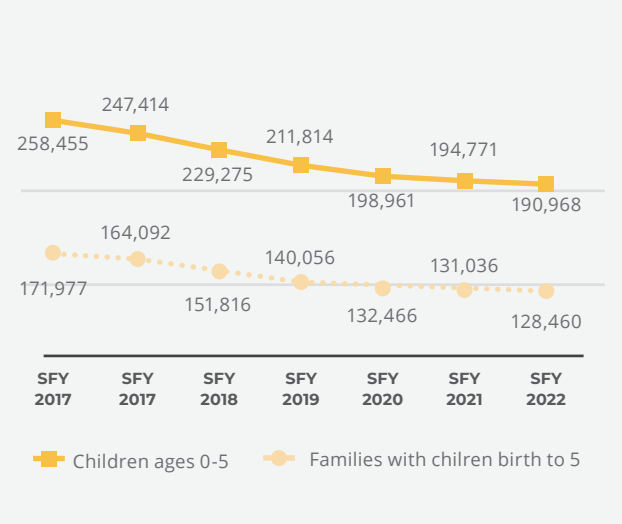
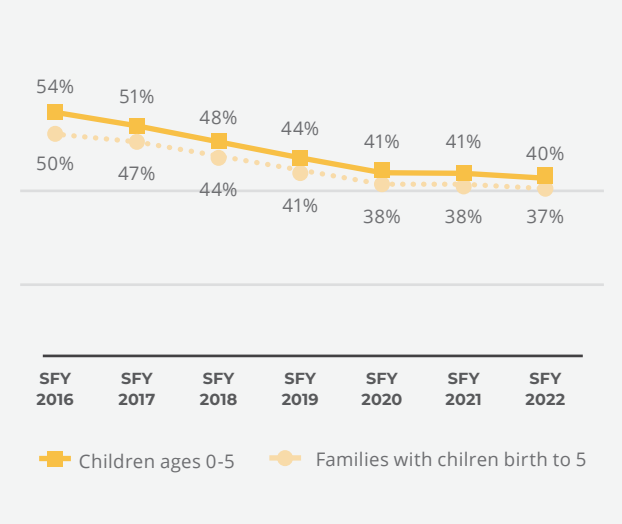
Food Security

Across the country, food insecurity declined from 2020 for households with children (14.8% in 2020 to 12.5% in 2021)[167] and with children under age 6 (15.3% in 2020 to 12.9% in 2021). And while decreases were also seen for single mothers with children (27.7% in 2020 to 24.3% in 2021), these percentages are still markedly higher than for other household types with children. Arizona has seen statistically significant decreases in both household food insecurity and very low food insecurity in recent years, with 10.1% of Arizona households considered food insecure and 3.1% with very low food security (food insecure to the extent that household members reduce their food intake) averaged over the years 2019-2021. In 2021, Maricopa County ranked 4th of counties across the nation with the highest number of food insecure persons, and 6th for the number of food insecure children.[168] In 2021, Feeding America rated 6 counties in Arizona as having 20% or more of children under age 18 as food insecure: Apache (25%), Navajo (22%), La Paz (21%), Yuma (21%), Mohave (20%) and Gila (20%).[169] These levels of food insecurity have implications for the well-being of many families and children around the state.

Arizona's Supplemental Nutrition Assistance Program (SNAP) is designed to combat food insecurity. In the years prior to the pandemic, the proportion of young children birth to 5 and families with young children who participated in SNAP steadily declined across Arizona (Figure 21), likely reflecting the continuing economic recovery from the Great Recession.[170] This decrease stalled during the pandemic, probably due to pandemic-era programs such as the Pandemic Electronic Benefit Transfer Program (P-EBT), a program established to offset the loss of free meals normally received at schools or child care settings. Pandemic-EBT served 631,000 school-aged children in Arizona in the 2020-21 school year, and an additional 750,000 school-aged children in the summer of 2021.[171]

Figure 21. Children ages 0-5 and families with children ages 0-5 receiving SNAP, state fiscal years 2016 to 2022





Source: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Tables HCT3 & P20

ECONOMIC CIRCUMSTANCES

In 2022, receipt of SNAP benefits by families with young children in Arizona varied markedly by county, with a high of 74% in Apache County to a low of 16% in Greenlee County (Figure 22). Six counties had more than half of families with young children receiving SNAP (Apache, 74%; Navajo, 60%; Gila, 57%; Santa Cruz, 55%; Yuma, 54% and La Paz, 52%) and all but one county had a third or more of families with young children receiving the benefit. Unsurprisingly, receipt of SNAP largely mirrors the rate of families with young children living below 185% of the federal poverty level in counties across the state (Figure 23), underscoring how important this support is for increasing childhood food security.

Figure 22. Estimated percent of families with children ages 0-5 receiving SNAP, state fiscal year 2022

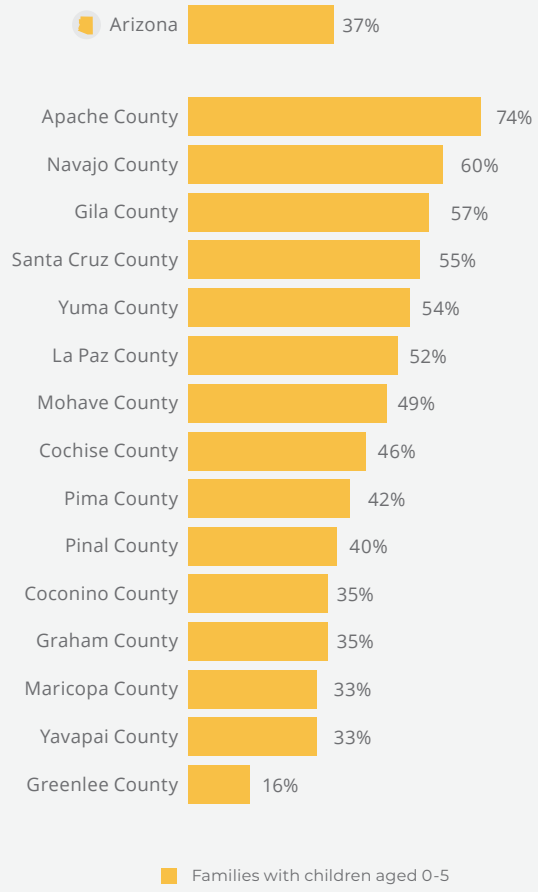
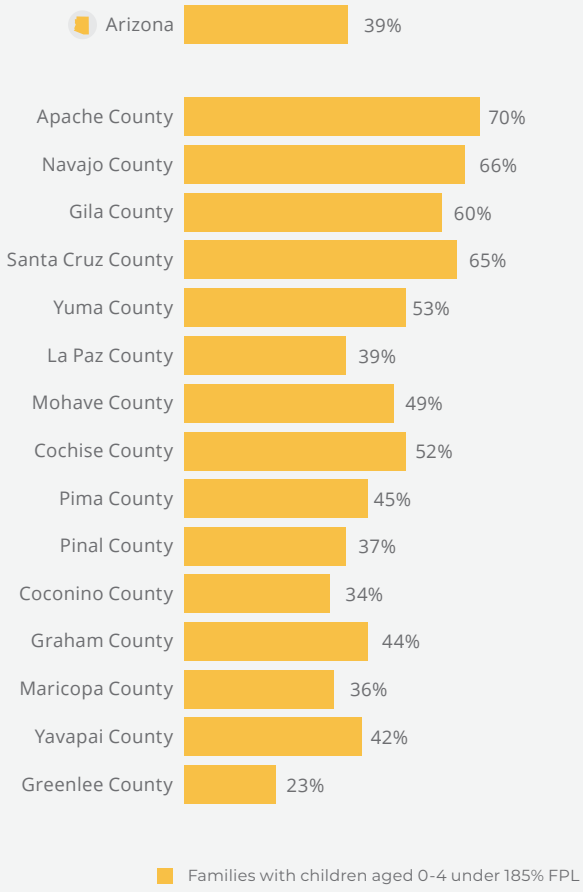


Figure 23. Percent of families with children ages 0-4 living below 185% of the federal poverty level, 2017-2021 ACS

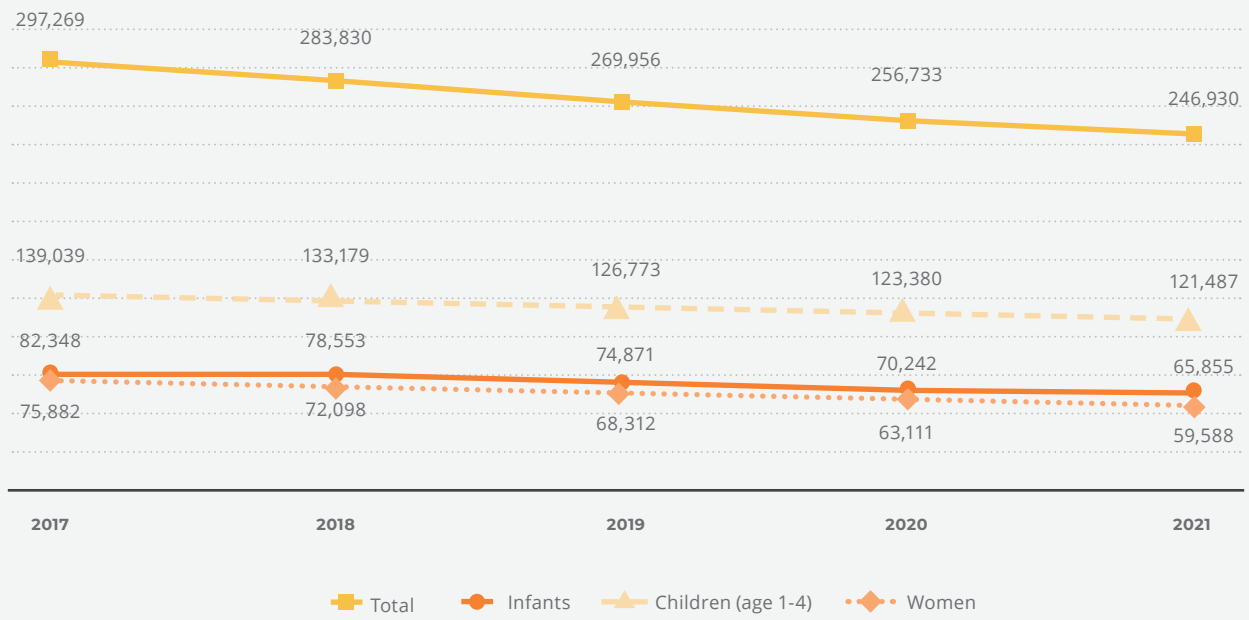


Source: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau. (2022). 2017-2021 and 2012-2016 American Community Survey five-year estimates, Table B17022

ECONOMIC CIRCUMSTANCES

An additional resource to address food security is the Special Supplemental Nutrition Program for Women, Infants and Children, more commonly known as WIC. WIC serves pregnant, postpartum and breastfeeding women, as well as infants and young children (under the age of 5) who are economically disadvantaged and offers funds for nutritious food, breastfeeding and nutrition education and referrals to health and social services.[xx] Participation in WIC has been shown to be associated with decreased food insecurity among other benefits.[172] Like SNAP, WIC enrollment has shrunk in recent years, with a 17% decrease in total enrollment from 2017 (297,269) to 2021 (246,930) (Figure 24). Some of the drop in enrollment may reflect declining birth rates in the state over this same period (see Figure 2), but WIC enrollment among infants has fallen twice as fast (-20%) as birth rates in Arizona (-10%). This indicates that there may be some women and young children who could benefit from the program but are not enrolling.

Figure 24. Number of women, infants and children ages 1-4 enrolled in ADHS WIC programs, 2017 to 2021



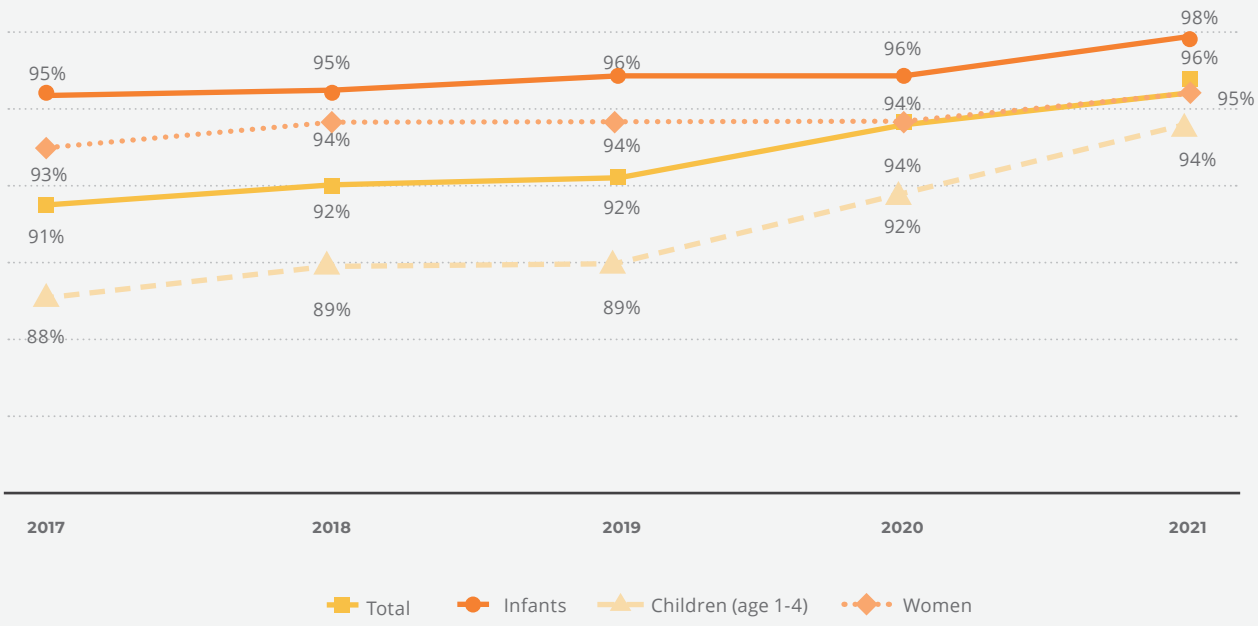
Source: ADHS (2023). [WIC Enrollments and Participation dataset]. Unpublished data.

Note: These figures do not include women, infants and children enrolled in tribally-operated WIC programs such as the Navajo Nation WIC program, the Inter-Tribal Council of Arizona (ITCA) WIC program, and the Colorado River Indian Tribes WIC program

[xx] For more information on the Arizona WIC Program, visit https://www.azdhs.gov/prevention/azwic/

Despite these declines in enrollment, participation (i.e., the percent of women, infants and children enrolled who actually receive benefits) among those enrolled increased over those same years, with total participation increasing from 91% in 2017 to 95% in 2021, and participation of children aged 1 to 4 increasing from 88% to 94% during the same period (Figure 25). Several changes in WIC policy may have contributed to these increases, including transitioning WIC benefits from paper checks to an electronic benefit transfer (EBT) card called "eWIC" in 2017 and a USDA requirement that all WIC programs transition to providing benefits through an EBT card by October 1, 2020.[173] Research has shown that providing WIC benefits through an EBT card instead of checks is associated with a sustained and significant increase in WIC participation rates for women, infants and children by making WIC benefits easier to access and use.[174] Additionally, requirements to attend in-person WIC visits were waived during the COVID-19 pandemic public health emergency declaration in Arizona (and many other states),[175] leading to increased WIC participation rates compared to states that mandated in-person visits.[176]

Figure 25. Participation rates for women, infants and children ages 1-4 enrolled in ADHS WIC programs, 2017 to 2021



Source: ADHS (2023). [WIC Enrollments and Participation dataset]. Unpublished data.

Note: These figures do not include women, infants and children enrolled in tribally-operated WIC programs such as the Navajo Nation WIC program, the Inter-Tribal Council of Arizona (ITCA) WIC program, and the Colorado River Indian Tribes WIC program

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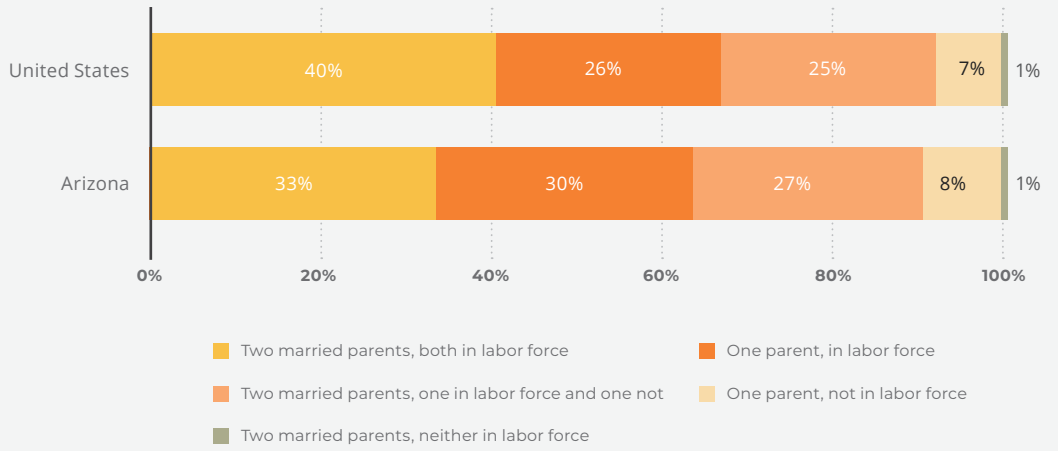
Employment

Over 60% of children under the age of 6 in Arizona live in households where all residential parents are in the workforce (that is, are employed or actively seeking paying work). This includes children in households with a single-parent in the labor force (30%) and those in dual-earner households (33%) (Figure 26). The proportion of young children with all parents in the labor force does differ by county (Figure 27), although more than half of young children in all but one county live in this household type. With this reality, the majority of Arizona households with young children likely require some form of child care. These working families may have especially struggled in recent years; nearly half (49%) of families with young children responding to the national RAPID survey rated balancing work and child care as their top challenge during the COVID-19 pandemic.[177] Adding to the challenge, even before the pandemic, 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 3 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.[178] This includes the majority of Arizona's rural families (67%), low-income families (59%) and Hispanic/Latino families (55%), making them disproportionately impacted by barriers to child care and therefore barriers to employment.[179] A recent report of the U.S. Chamber of Commerce Foundation[180] details the economic impact of the lack of child care in Arizona: a loss of $348 million in tax revenue annually due to child care issues; 71% of Arizona parents of young children responding to a survey reported missing work in the past three months due to child care issues; 34% of parents surveyed reported a child care issue significantly impacted their employment or the employment of someone in their family; and 43% of female parents surveyed cited child care issues as the primary reason for leaving employment. Equally striking is the finding that more than half (55%) of parents surveyed who voluntarily left their jobs did so when their children were 2 or younger, suggesting child care for those youngest children is a keen need.

Figure 26. Percent of children ages 0-5 by parental employment status, 2017-2021 ACS

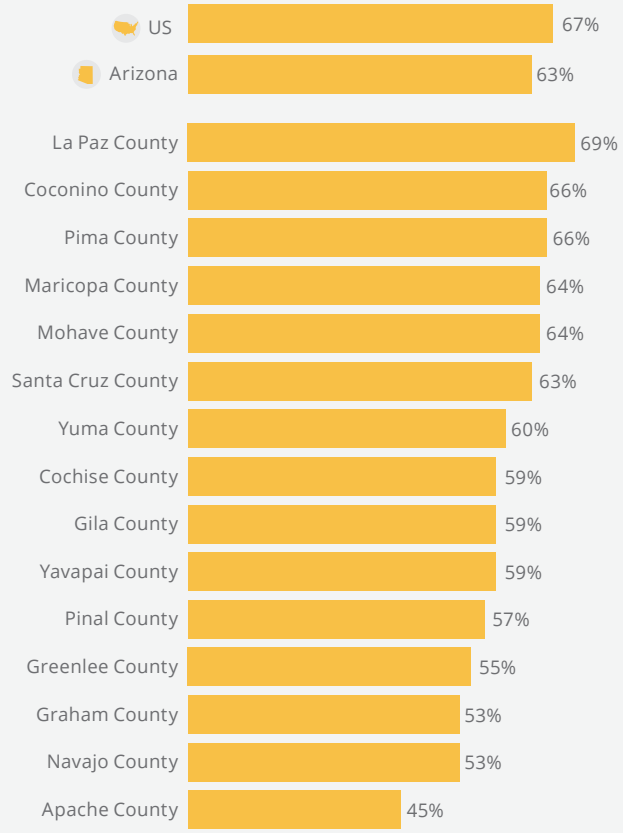


Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table B23008

Note: This figure shows the percent of children in each family type and employment status. The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees and institutionalized people. The term "parent" here includes step-parents. The 5 percentages in each row should sum to 100%, but may not because of rounding.

ECONOMIC CIRCUMSTANCES

Figure 27. Percent of children ages 0-5 with all parents in the labor force

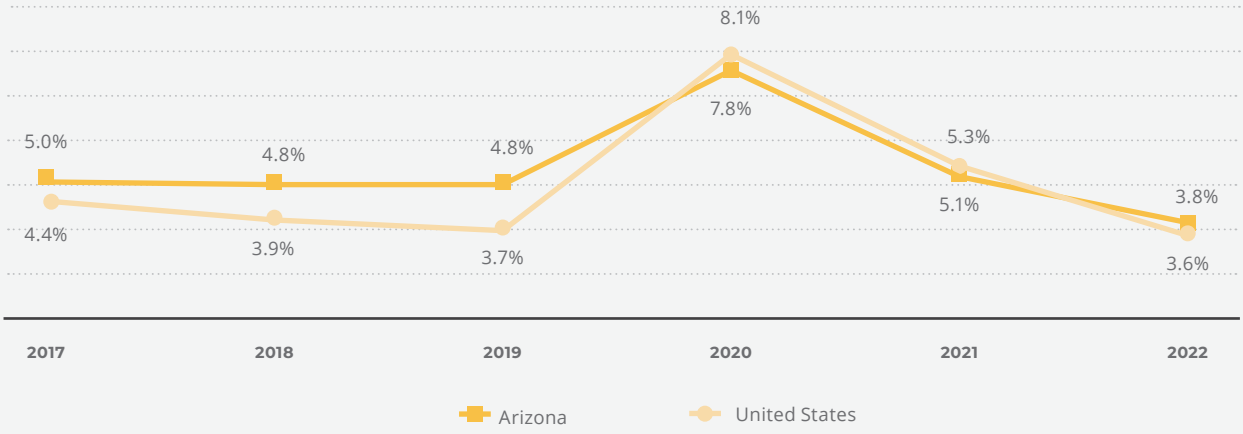


Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table B23008

Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees and institutionalized people. The term "parent" here includes step-parents.

Unemployment rates had been on a steady decline nationwide since the end of the Great Recession in 2009, although Arizona's unemployment rate remained higher than the national rate through 2019. This pattern changed in 2020 with the onset of the pandemic, when the U.S. unemployment rate rose to 8.1%, and Arizona's rate increased to just below that at 7.8% (Figure 28). Following the first phases of the pandemic in 2020, unemployment decreased nationally and in Arizona, ending in 2022 with Arizona's unemployment rate (3.8%)[xxi] again slightly higher than the national rate (3.6%).

Figure 28. Annual unemployment rates, not seasonally adjusted (BLS), 2010 to 2020



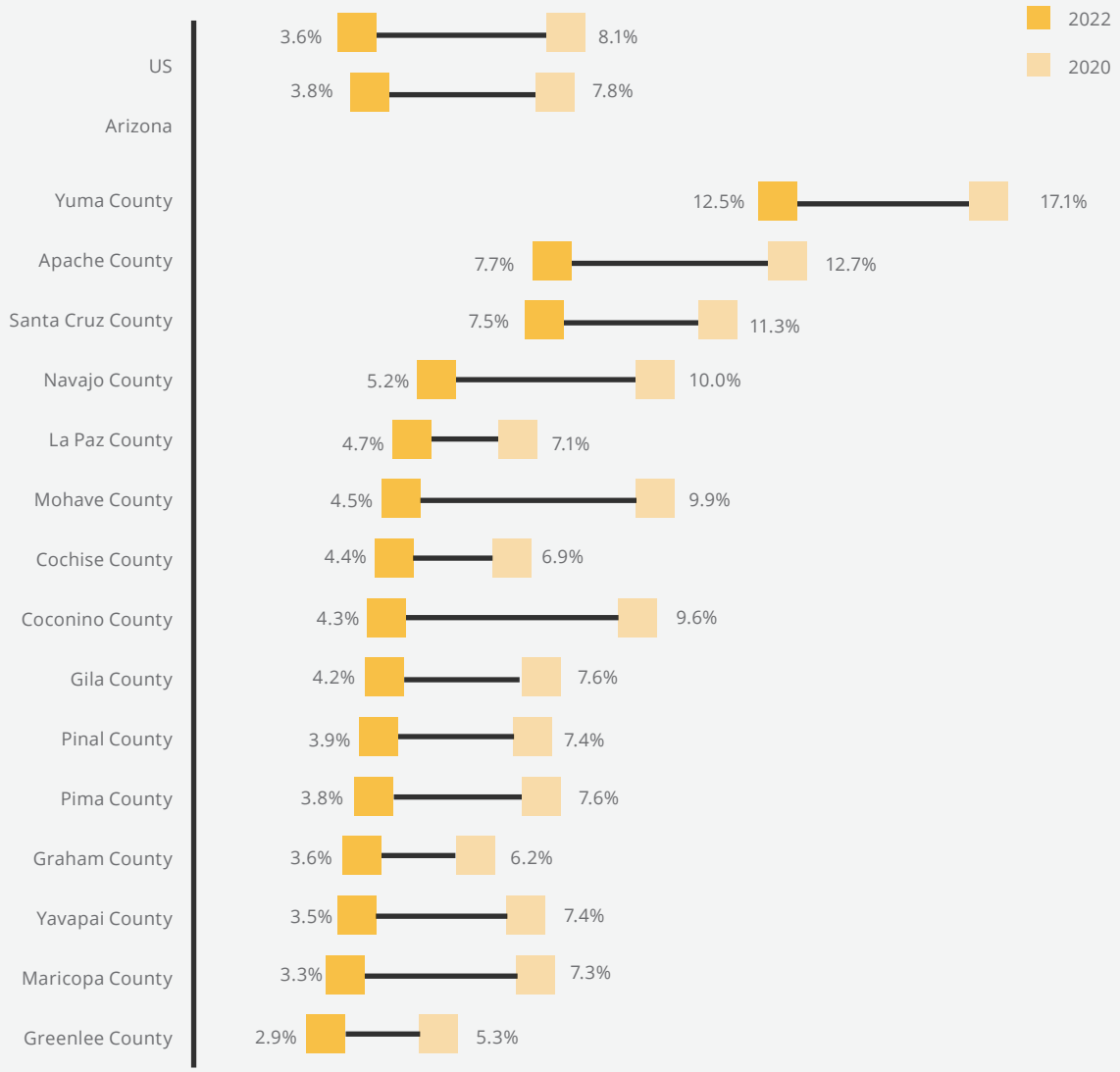
Source: U.S. Bureau of Labor Statistics (2023). Labor Force Statistics from the Current Population Survey, Annual Averages, Table 1. Retrieved from https://www.bls.gov/cps/tables.htm#annual on 14 Jan 2022

[xxi] It is worth noting that a 3.8% unemployment rate does not mean that 96% of the population is working. In administrative terms, there is a difference between someone who is considered unemployed and someone who has dropped out of the labor force entirely. The latter group includes retirees and stay-at-home parents, but also those who wanted but could not find suitable work and so have stopped looking for employment. According to the American Community Survey 5-year estimates, the labor force participation rate in Arizona in 2021 was 61% (Table B23025).

ECONOMIC CIRCUMSTANCES

Unemployment rates also decreased across all Arizona counties from 2020 to 2022, with reductions of 5 percentage points or more in Mohave (5.4%), Coconino (5.3%) and Apache (5%) counties (Figure 29). Counties where unemployment rates remained relatively high in 2022 include Yuma (12.5%), Apache (7.7%) and Santa Cruz (7.5%) counties. In light of these positive decreases in unemployment rates across the state, the need for available and accessible high-quality child care for working parents is even more paramount.

Figure 29. Annual unemployment rates, not seasonally adjusted (BLS), 2020 and 2022

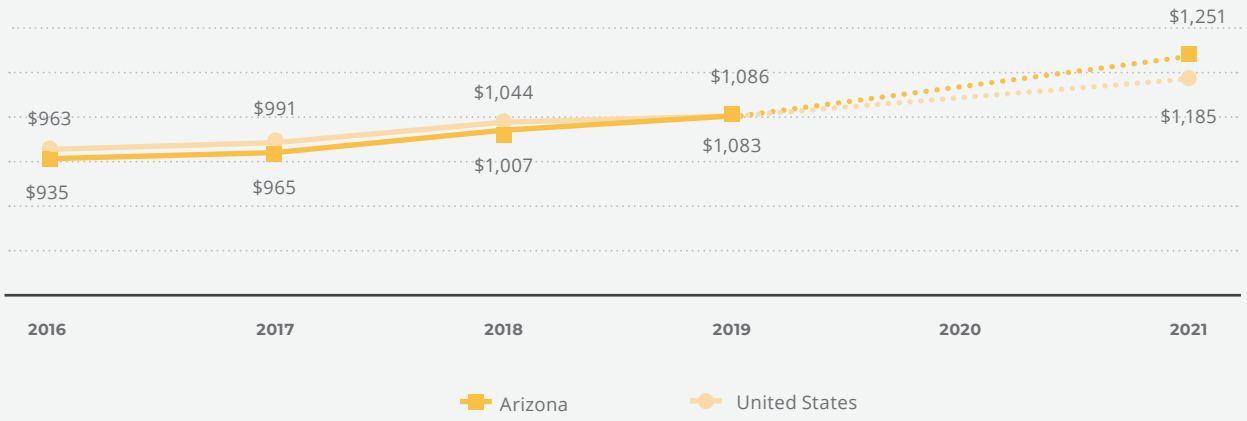


Source: Arizona Commerce Authority (2023). [Local Area Unemployment Statistics]. Retrieved from https://www.azcommerce.com/oeo/labor-market/unemployment/ on 19 February 2022.

Housing

An additional economic stressor faced by families during the pandemic was the lack of available, affordable housing, felt most intensely by low-income families. Likely contributing to the scarcity of available, affordable homes for sale or rent, in 2021, nearly one-third (31%) of single-family homes sold in Arizona were sold to investors, rather than owners who would reside in the home.[181] In addition, it is estimated that across Arizona, there are only 24 rental homes available and affordable for every 100 extremely low-income households, lower than the 33 per 100 across the U.S.[182] Indicative of this difference, in 2021 the median rent for a two-bedroom unit was higher in Arizona ($1,251) than for the U.S. as a whole ($1,185), reversing the trend seen over previous years, where median rents in Arizona fell below those across the country (Figure 30). The proportion of renter households behind on rent also remains high in Arizona with nearly 10% falling in this category as of April 2023, though it has decreased from 14% in August 2020, during the COVID-19 emergency. Those behind on rent in Arizona are predominantly households with children (65% of renters behind on rent), people of color (64%) and unemployed (39%).[183] The proportion of renters behind on rent who are households with children in Arizona (65%) is also higher than the proportion across the country (54%) meaning more families with young children in the state may be struggling with stable housing. Access to affordable and stable housing is thus a pressing need for young children, particularly Black, Indigenous and Latino children and their families given their higher rates of poverty (see Figure 19).

Figure 30. Median rent for a 2-bedroom unit, 2016 to 2021 ACS



Source: U.S. Census Bureau. (2022). 2016 to 2021 American Community Survey Single Year Estimates, Table B25106

Note: Due to the effects of the COVID-19 pandemic on data collection for the 2020 ACS, the 2020 single-year ACS estimate had particularly poor data quality, such that the U.S. Census Bureau deemed the data 'experimental.' Due to these data quality concerns, 2020 data are not presented here.

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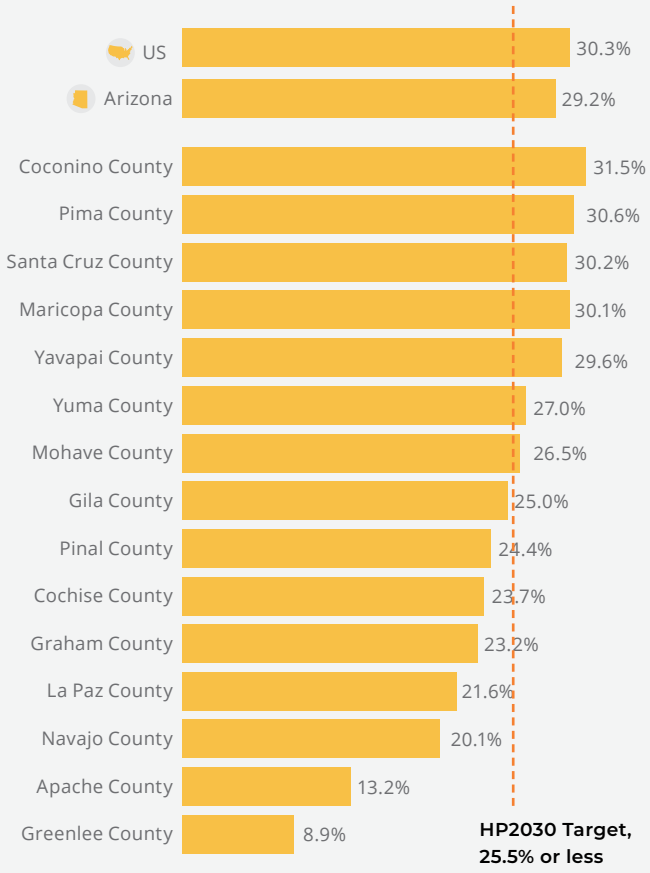
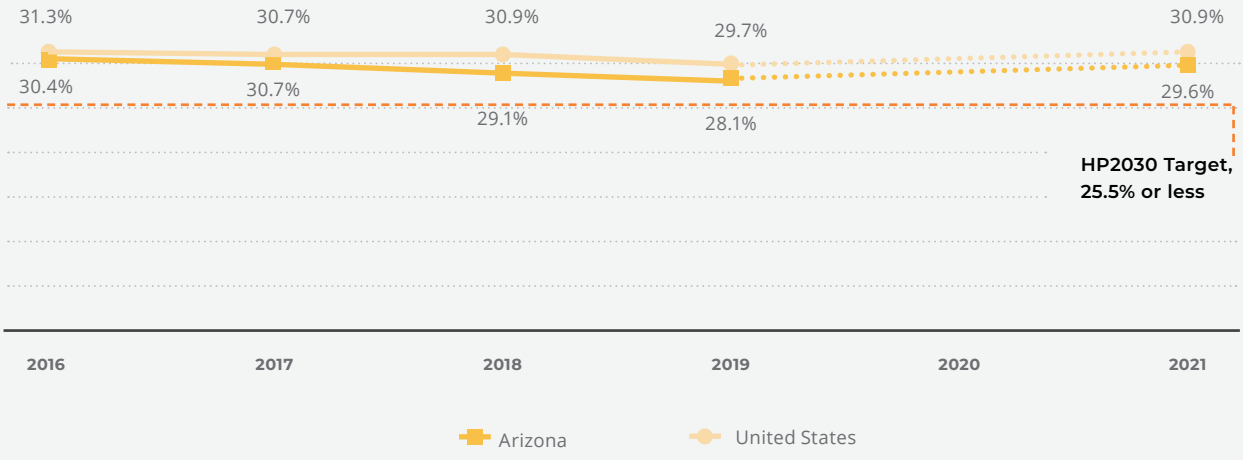
Traditionally, housing has been deemed affordable for a family if it costs less than 30% of their annual income.[184] Across Arizona in 2021, 29.6% of households paid more than 30% of their income on housing, only slightly lower than the 30.9% of households across the country (Figure 31). These proportions have remained relatively stable since 2016 and remained above the Healthy People (HP) 2030 target of no more than 25.5% of households paying 30% or more of their income on housing.[185] Between 2017 and 2021, 7 counties across Arizona were also above this target with more than 1 in 4 households in these counties having housing costs that would be considered unaffordable. Coconino (31.5%) and Pima (30.6%) counties had the highest rates in Arizona, above the national rate of 30.3% (Figure 32). Households in Greenlee and Apache appear to benefit from relatively more affordable housing. This amount of a family's 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 and homelessness.[186,187] Severe forms of housing instability are associated with children's poorer performance and success in school.[188]

Figure 32. Percent of households paying 30% or more of income for housing cost, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). 2017-2021 American Community Survey Five Year Estimates, Table B25106

Figure 31. Percent of households paying 30% or more of income for housing cost, 2016 to 2021 ACS



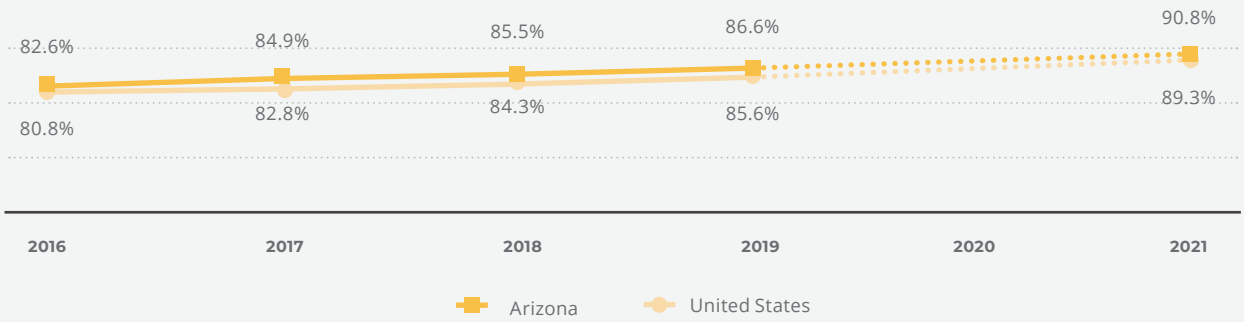
Source: U.S. Census Bureau. (2022). 2016 to 2021 American Community Survey Single Year Estimates, Table B25106

Note: Due to the effects of the COVID-19 pandemic on data collection for the 2020 ACS, the 2020 single-year ACS estimate had particularly poor data quality, such that the U.S. Census Bureau deemed the data 'experimental.' Due to these data quality concerns, 2020 data are not presented here.

Information Access Through Computers and Internet

Access to broadband (high-speed) internet enables quick access to an abundance of resources and information, telehealth and opportunities critical for education and employment. Internet access has been deemed a "super determinant" of health because of its influence on more traditional social determinants of health such as education, employment, health care access and social connection.[189] Lack of access to reliable high-speed internet disproportionately occurs in rural areas and pockets of segregated urban areas, and this disparate access is known as the digital divide. In 2021, it was estimated that 20.9% of tribal lands, and 17.2% of rural lands across the country did not have access to high-speed internet.[xxii,190] In Arizona, the percentage of households that have both a computer and broadband internet has been increasing since 2016. In 2021, 90.8% of households were estimated to have this access, keeping up the trend of being slightly more connected than households across the U.S. (89.3%) (Figure 33).

Figure 33. Percent of households with a computer and broadband internet, 2016 to 2021 ACS



Source: United States Census Bureau (2022). 2016 to 2021 American Community Survey Single Year Estimates, Table B28003.

Note: Due to the effects of the COVID-19 pandemic on data collection for the 2020 ACS, the 2020 single-year ACS estimate had particularly poor data quality, such that the U.S. Census Bureau deemed the data 'experimental.' Due to these data quality concerns, 2020 data are not presented here.

Household access to computers and high-speed internet is also important for school-aged children who may need this technology for school assignments and projects, particularly during the later years of primary education and beyond.[191] Nationally, 93% of children birth to 17 have access to a computer and internet at home, just above the proportion in Arizona (92%) (Figure 34). And while many counties in the state have similarly high levels of access, in three counties, Apache, Navajo and Gila, at least 1 in 5 children still do not have access to an internet-connected computer at home. In addition, in many rural parts of the state, households typically experience more limited coverage from mobile networks and slower-speed internet services.[192] During the first year of the pandemic, 81% of surveyed rural school districts and county superintendents in Arizona identified inadequate or lack of connectivity as a major digital equity issue impacting students.[193] While fully remote learning is not as prevalent today as it was at the height of the pandemic, access to affordable high-speed internet is still key to enhancing educational experiences and allowing opportunities for distance learning.

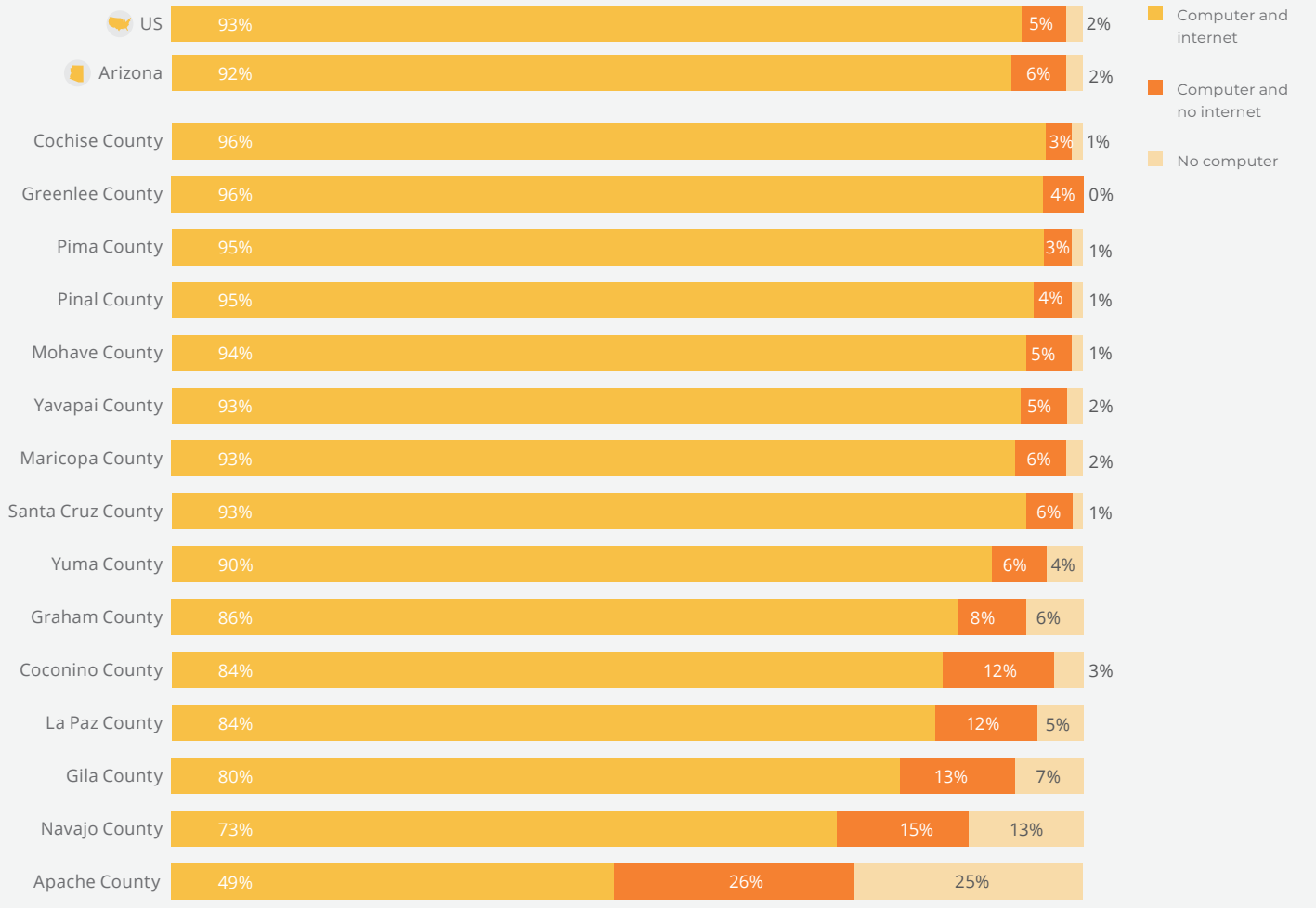
[xxii] High-speed internet is defined here as internet with speeds of at least 25/3 Mbps, the minimum download speed to meet FCC standards for high-speed internet.

ECONOMIC CIRCUMSTANCES

Due to the importance of high-speed internet access, the federal government has instituted several funding mechanisms to improve access to and the affordability of high-speed internet, including four in Arizona.[xxiii] The Broadband Equity, Access and Deployment (BEAD) Program has allocated $993,112,231 across the state to support high-speed internet infrastructure and a $1,116,111 planning grant was awarded through the Digital Equity Act to ensure all communities in Arizona have access to and use affordable, reliable high-speed internet. Both of these mechanisms were funded through the Bipartisan Infrastructure Law.

The Consolidated Appropriations Act also awarded $159,442,842 to 10 Arizona tribes through the Tribal Broadband Connectivity Program to bring high-speed internet to tribal lands, and $12,169,438 to Diné College, the University of Arizona, Tohono O'odham Community College and Phoenix College through the Connecting Minority Communities Pilot Program to support institutions that serve minority and tribal communities.[194] Such programs should continue to improve access to reliable and affordable broadband internet across the state in coming years.

Figure 34. Children (ages 0-17) living in a household with and without computer and internet connection, 2017-2021 ACS



Source: United States Census Bureau (2022). 2017-2021 American Community Survey 5-Year Estimates, Table B28005.

[xxiii] For more information, please see https://internetforall.gov/program/digital-equity-act-programs

Why Early Care & Education Matter

Early childhood is an exciting time for building crucial physical, cognitive and social-emotional skills.[195,196] These skills and experiences are important for healthy brain development and set the stage for lifelong learning and well-being.[197,198,199] Just as rich, stimulating environments can promote healthy development, early negative experiences can have lasting effects.[200,201] However, considering the major COVID-19 pandemic-related challenges experienced by many Arizona families, it remains important to remember that while these short- and long-term effects may be more likely, they are not inevitable.[202,203] Access to quality early care and learning environments can be a powerful protective factor for every child, but the effects can be life-changing for children facing chronic stressors and for children with disabilities.[204,205]

Quality early care and educational experiences help children develop into capable learners by supporting many crucial systems in the body.[206] In addition to promoting healthy brain development, systems that support a child's immune functioning, ability to handle stress in a healthy way and capacity to learn and thrive are also being shaped by both positive and adverse experiences during the first few years of life.[207] Now, more than ever before, it is clear how these factors contribute to being a skillful learner, just as much, if not more than, brain development alone.[208]

Early childhood systems play a key role in supporting children, parents, caregivers and communities as a whole.[209,210] Stable, affordable child care is critical for parents balancing working and parenting. Access to early care and education services helps parents and caregivers stay employed and complete postsecondary degrees.[211] Child care can also support parents' attention and engagement during this critical period of development by reducing stressors.[212] Unfortunately, many Arizona families continue to face obstacles when seeking quality early education and care. Cost and availability are especially challenging for parents seeking care for infants and young children. Fewer children in Arizona are accessing critical early intervention services that can identify disabilities and provide parent-coaching, interventions and strategies to encourage optimal development at home.[213] This matters because, while early education discussions often center around pre-kindergarten for 4-year-olds, research continues to point to the impact of experiences during the first 3 years of life as being just as crucial for healthy brain and body development.[214]

The key ingredients in positive early experiences include responsive relationships, core adaptive skills development, reduced sources of stress and appropriate nutrition – all things that quality early care and education are in a unique position to provide, at the critical time to encourage optimal learning and well-being for years to come.[215] Early care and education shapes far more than a child's future academic achievement, and an investment in early childhood can be one of the most productive investments a community can make.[216]

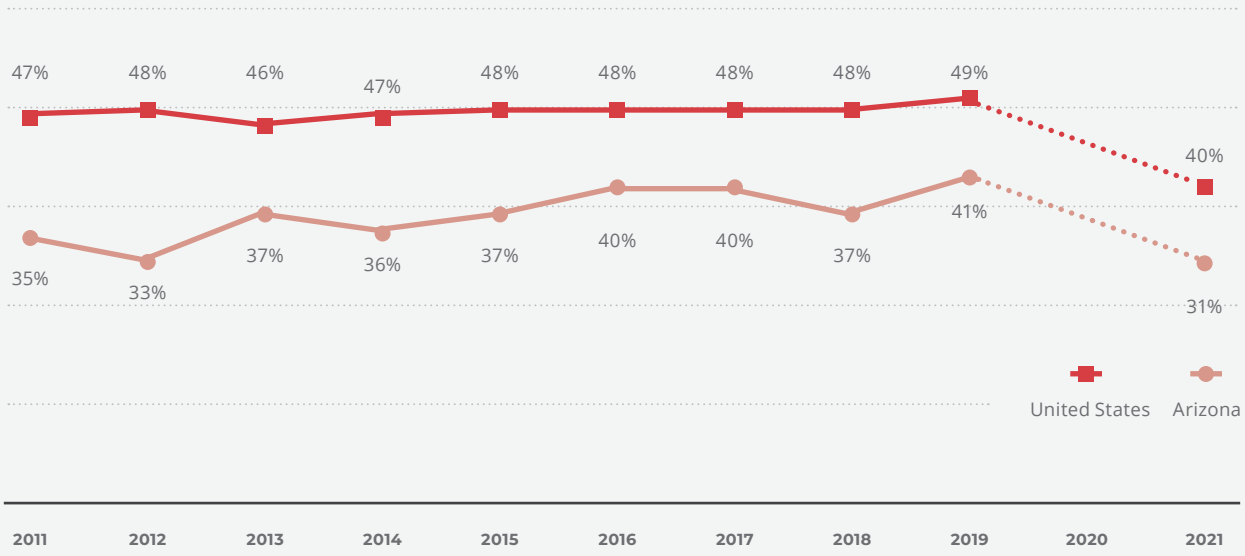
How Arizona's Young Children Are Faring

Preschool Enrollments

Children who begin their education in high-quality preschool programs repeat grades less frequently, obtain higher scores on standardized tests, experience fewer behavior problems and are more likely to graduate from high school.[217] 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.[218,219]

Preschool enrollment in Arizona has consistently lagged the national average, and 2021 was no exception. There were notably fewer 3- and 4-year-old Arizona children enrolled in school (31%) than nationwide (40%) in 2021 (Figure 35). Nationwide, enrollment in state-funded preschool declined by more than a quarter-million children from the prior year, erasing all gains in preschool enrollment over the past 10 years.[220] Many of these enrollment losses were in Head Start and preschool special education, and enrollment rates for low-income children fell much faster and more substantially than rates for their higher-income peers.[221] In 2021, preschool enrollment in Arizona hit a 10-year low, with 69% of preschool-aged children not accessing early education programs in Arizona. According to national surveys conducted by the National Institute for Early Education Research in 2022, the most frequently cited reason for not enrolling children in preschool was the presence of a parent at home, followed by the cost of child care or absence of affordable child care.[222]

Figure 35. Children (ages 3-4) enrolled in school, 2016 to 2021



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

Note: "School" may include nursery school, preschool or kindergarten. Due to the effects of the COVID-19 pandemic on data collection for the 2020 ACS, the 2020 single-year ACS estimate had particularly poor data quality, such that the U.S. Census Bureau deemed the data 'experimental.' Due to these data quality concerns, 2020 data are not presented here.

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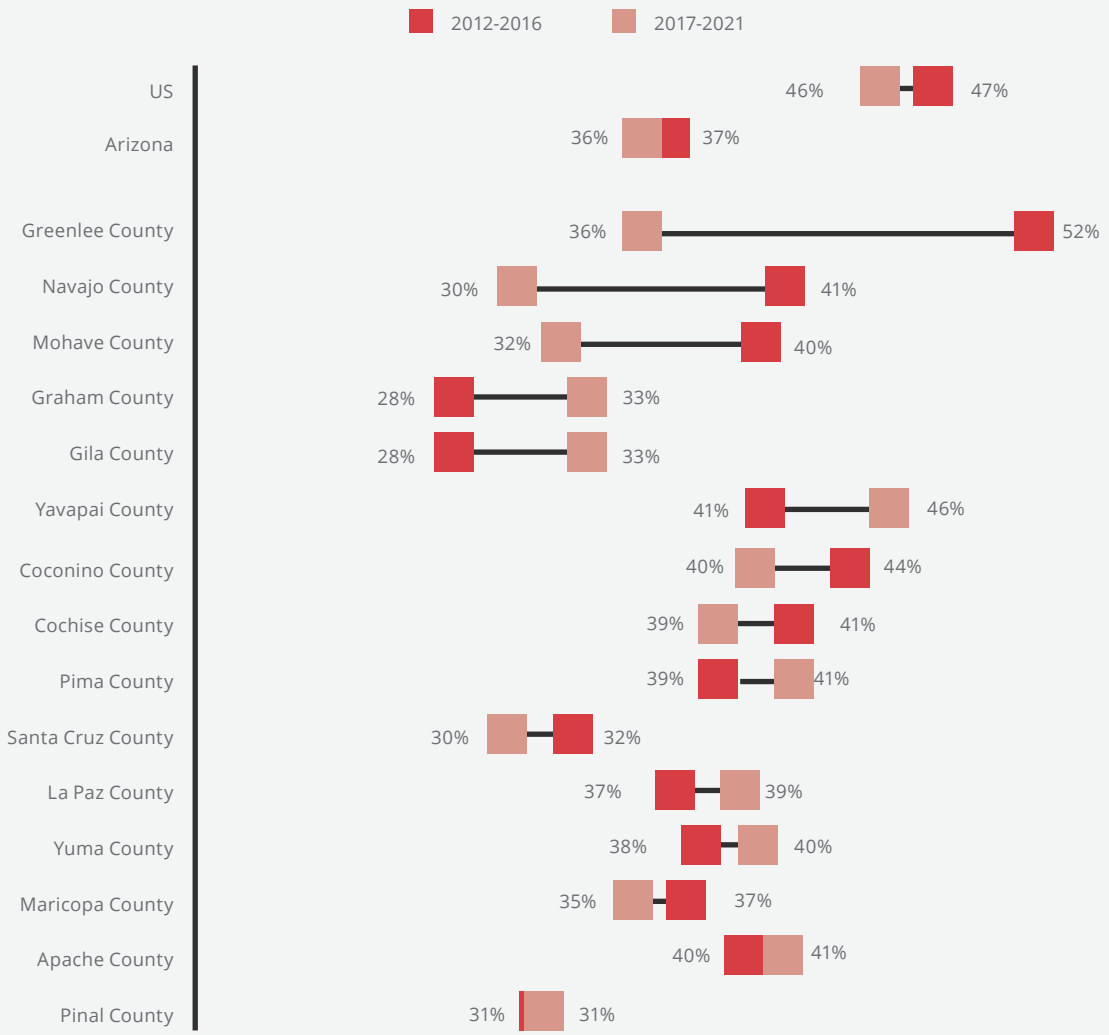
Changes in enrollment of young children (ages 3-4) in school varied across the state between 2012-2016 and 2017-2021.[xxiv] With the exception of Yavapai County (46%), all counties in Arizona fell below the national average for preschool enrollment (46%) between 2017 and 2021 (Figure 36). However, despite the substantial post-pandemic drops in 2021, the most recent 5-year average numbers still managed to increase in eight counties, including Graham, Gila, Yavapai, Pima, La Paz, Yuma, Apache and Pinal.

Figure 36. Percent of 3- and 4-year-olds enrolled in school, 2012-2016 and 2017-2021



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

Note: In this table, "school" may include nursery school, preschool or kindergarten. Dark bars indicate areas where the percent of children enrolled in school fell between 2012-2016 and 2017-2021; light bars indicate an increase in the percent of children enrolled.

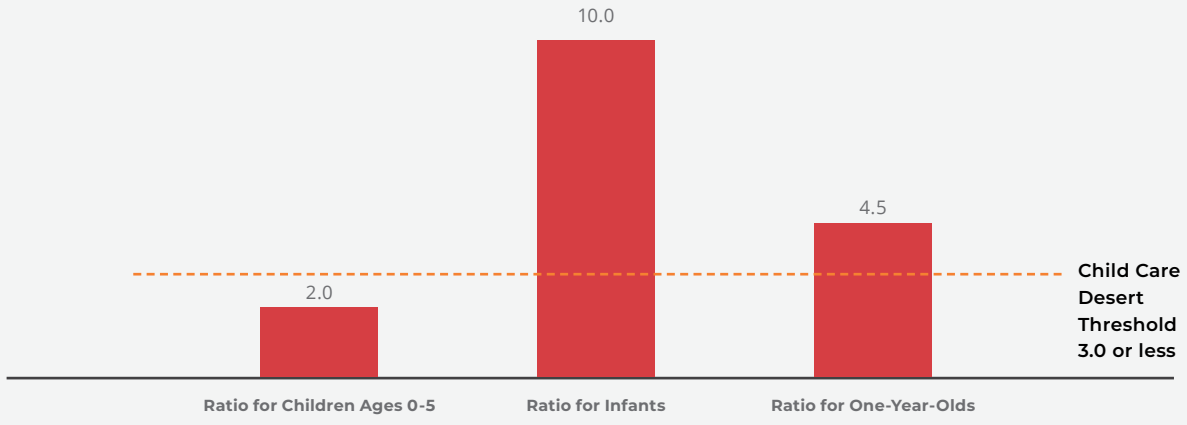
[xxiv] Data at the county level are available as 5-year increments from the American Community Survey.

EDUCATION

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.[223,224,225,226] Before the pandemic, in 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.[227] The COVID-19 pandemic then forced many child care centers and home-based providers to close either temporarily or permanently, disrupting and destabilizing care for many families in Arizona and nationwide.[228] Disruptions to child care arrangements may have been especially burdensome for Latino households,[229] which is meaningful to Arizona given the high proportion of young children who are Hispanic or Latino compared to children nationwide (see Figure 4). Parents and caregivers in Latino households were less likely to use paid leave or to simultaneously supervise their children while working, likely due to less access to paid leave and telework options, and were more likely to leave or lose their job as a result.[230] In addition to maintaining stable child care arrangements, access to child care in the first place is crucial for supporting parents so they can balance work and parenting demands.

Statewide, there are about two children for every slot in state-licensed child care facilities in Arizona (Figure 37). This is below the threshold of a "Child Care Desert", defined as an area where there are at least 3 times as many children as there are child care slots, which means that the absence of accessible, affordable child care may be a barrier to employment.[231] However, this low ratio of children to slots likely reflects the recent decline in the population of young children (see Figure 1), rather than new availability of child care slots alone, and availability of licensed care varies greatly by child age, with very few slots available for infants and young toddlers. New parents returning to work may find establishing early care with a trusted provider to be the most difficult, with only one licensed care setting slot per 10 infants in Arizona.

Figure 37. Ratio of children ages 0-5, infants and one-year-olds to slots in ADHS-licensed child care facilities in Arizona, July 2023



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

Note: This chart uses ADHS licensed child care facilities as a proxy for all licensed care availability. ADHS licenses all child care centers and public schools providing child care in the state, with the exception of centers licensed by tribal authorities and the military. Licensed centers and public schools account for 98% of formal child care slots statewide[232], making this data a strong proxy for overall access to formal child care.

EDUCATION

There is considerable variability across counties in terms of child care slots available in licensed facilities for both children birth to age 5 (Figure 38) and infants (Figure 39), with most counties having a ratio equal to or greater than 3 children per licensed child care slot for both young children and infants. However, state-licensed child care is only one piece of the early care and education sector. While state-licensed child care accounts for 98% of known licensed or registered child care capacity in the state, many families seek care in informal and unlicensed child care settings, including care provided by friends, neighbors and relatives.[233] A recent study in Arizona found that approximately half of families surveyed reported using home-based care that was often a relative or babysitter caring for children within a family's home.[234] Additionally, certain counties may appear to have more limited slots due to tribally-licensed child care settings not being reflected in the state-licensed child care dataset, including Graham, Apache, Navajo, La Paz and Gila.

Figure 38. Ratio of children ages 0-5 to slots in ADHS-licensed child care facilities by county, July 2023

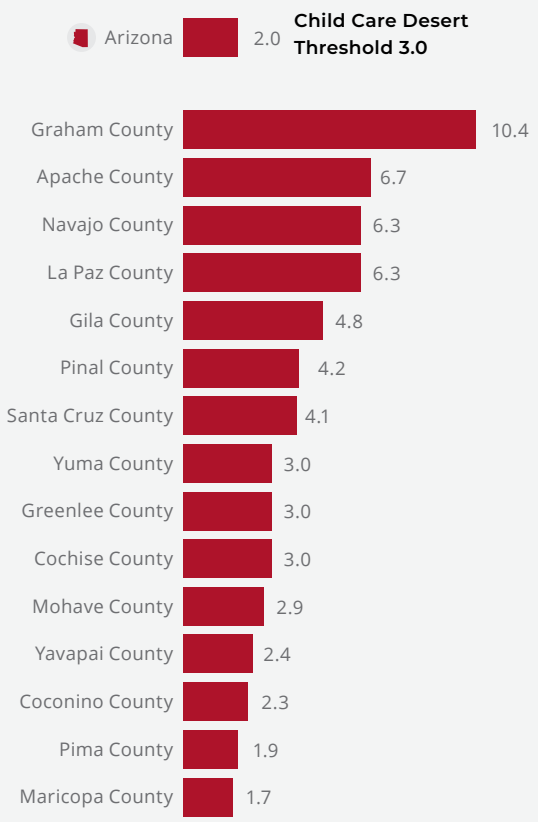
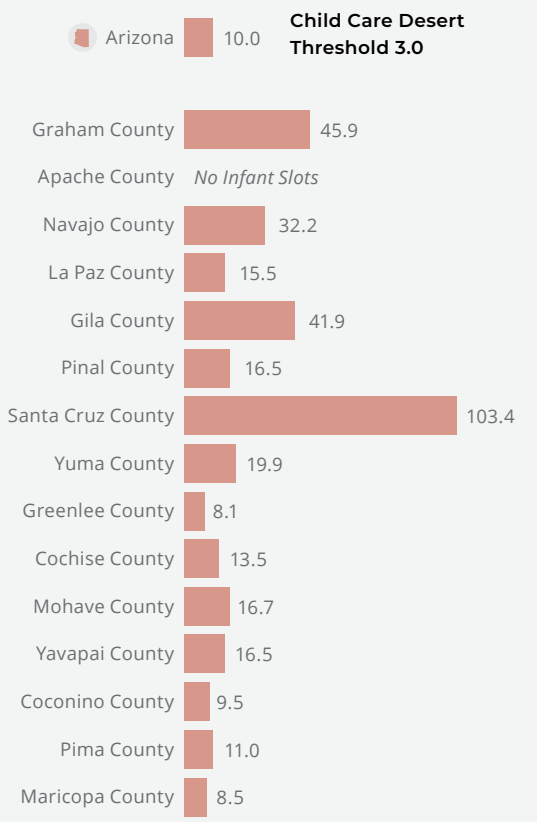


Figure 39. Ratio of infants to slots in ADHS-licensed child care facilities by county, July 2023



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

Note: This chart uses ADHS licensed child care facilities as a proxy for all licensed care availability. ADHS licenses all child care centers and public schools providing child care in the state, with the exception of centers licensed by tribal authorities and the military. Licensed centers and public schools account for 98% of formal child care slots statewide[235], making this data a strong proxy for overall access to formal child care. Counties with a substantial number of tribally-licensed child care facilities include Apache & Navajo Counties (Navajo Nation), Graham & Gila Counties (San Carlos Apache Tribe) and La Paz County (Colorado River Indian Tribes).

Affordability

Another substantial barrier to young children's participation in early education opportunities is cost. The high cost of early care and education can place formal care out of reach for many families. The average monthly cost for child care in Arizona varies based on the type of provider and age of the child, with licensed child care centers often having the highest rates across all age groups (Figure 40). Without accounting for possible family discounts for families with multiple children at the same center, a family with one preschooler and one infant can expect to pay about $1,670 per month for a licensed child care center provider. This monthly cost exceeds what many Arizonans likely pay per month on housing, creating potential financial challenges that are further compounded for families with multiple children under the age of 5.[xxv,236,237] It is also important not to lose sight of the fact that working parents and early care and education staff are often one and the same, as 1 in 4 child care workers have at least one child aged 5 or younger.[238] Nationally, many child care professionals live below the poverty line and nearly half of child care workers rely on public assistance, such as the Children's Health Insurance Program (CHIP), Supplemental Nutrition Assistance Program (SNAP) and the Temporary Assistance for Needy Families program (TANF).[239]

Monthly costs of care for families have risen by between 19% and 31% in the last four years, depending on the type of care and age of children (Figure 41). Rising costs for families are likely in response to increased operating costs for child care providers. This is despite several temporary measures implemented by the state intended to provide financial relief, including using federal funds to reduce some provider licensing fees to only $1.[240] Notably, the number of home-based child care programs in Arizona has declined 12% in the last decade, which means that the most affordable option for child care is becoming less available while also becoming more expensive.[241]

Figure 40. Monthly median cost of care by child age and provider type, 2022

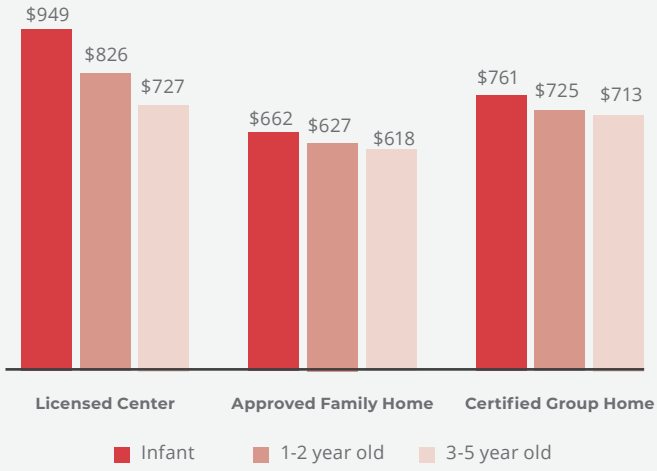
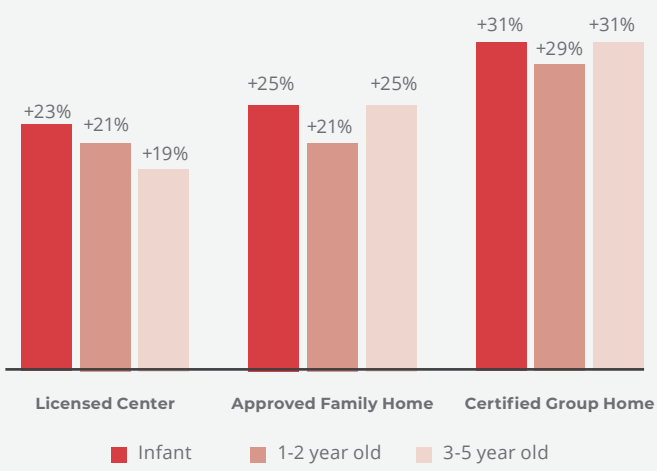


Figure 41. Change in median cost of care by child age and provider type, 2018-2022



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

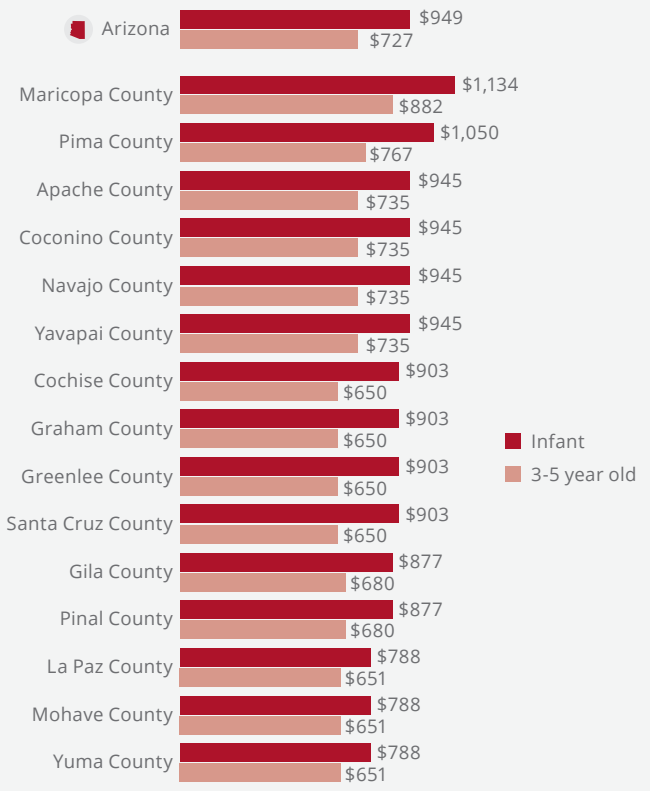
[xxv] In addition to the financial challenges faced by parents paying for child care, the early care and education workforce is one of the most underpaid fields in the country. Nationally, educators working with infants and toddlers are 7.7 times more likely to live in poverty compared to K-8 teachers.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

EDUCATION

Looking at variability in child care costs across the state and comparing these costs to median rents shows that center-based child care, especially for infants, may be financially out of reach for many families. The monthly cost of center-based infant care exceeds the median rent for a 2-bedroom housing unit in eight counties—Pima, Apache, Navajo, Cochise, Graham, Greenlee, Santa Cruz and La Paz (Figure 42 and Figure 43). These high costs mean that many working parents may need to find lower cost and potentially lower quality child care arrangements if they are not able to access supports, such as Arizona Department of Economic Security (DES) child care subsidies.

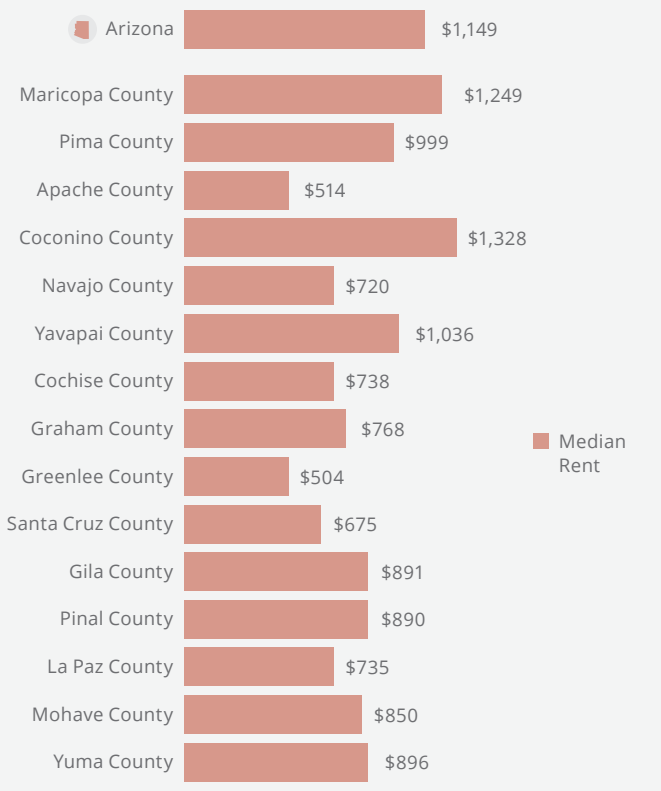
Child care subsidies like those provided by DES can help to offset families' child care costs, reducing financial barriers to accessing child care and ensuring parents can remain employed and provide for their family's needs.[xxvi,242] In June 2019, for the first time since the Great Recession, the Arizona Department of Economic Security's (DES) child care subsidy waiting list was suspended, meaning all children who qualify for subsidies are able to receive them, assuming that they are able to find a provider.[243]

Figure 42. Monthly median center-based cost of care for an infant and for a preschooler, 2022



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

Figure 43. Median monthly rent for a 2-bedroom housing unit, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table B25031.

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

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 also allowed DES to increase provider reimbursement rates, which may make it easier for families to use their child care subsidies.[244] However, child care subsidy usage has been substantially impacted by the COVID-19 pandemic. In 2020, the number of children receiving subsidies, both those involved with the Arizona Department of Child Safety (DCS) and not involved, declined substantially (Figure 44) while the percent of families not using subsidies spiked to an all-time high of 18.3% (Figure 45). In 2021, the number of children eligible for and receiving subsidies for both groups increased compared to 2020, but as of 2022, the number of children eligible for and receiving subsidies remains lower than that of 2019, the year the waitlist was suspended. The declining numbers of children receiving subsidies may reflect the decreasing population of young children (see Figure 1), but these declines may also represent a shrinking number of providers who accept DES subsidies. The 2022 Child Care Market Rate survey found only 220 certified family home providers on the DES roster in 2022, compared to over 1,300 in 2018, a more than 80% decline.[245]

Figure 44. Children receiving DES child care subsidies, 2017 to 2022

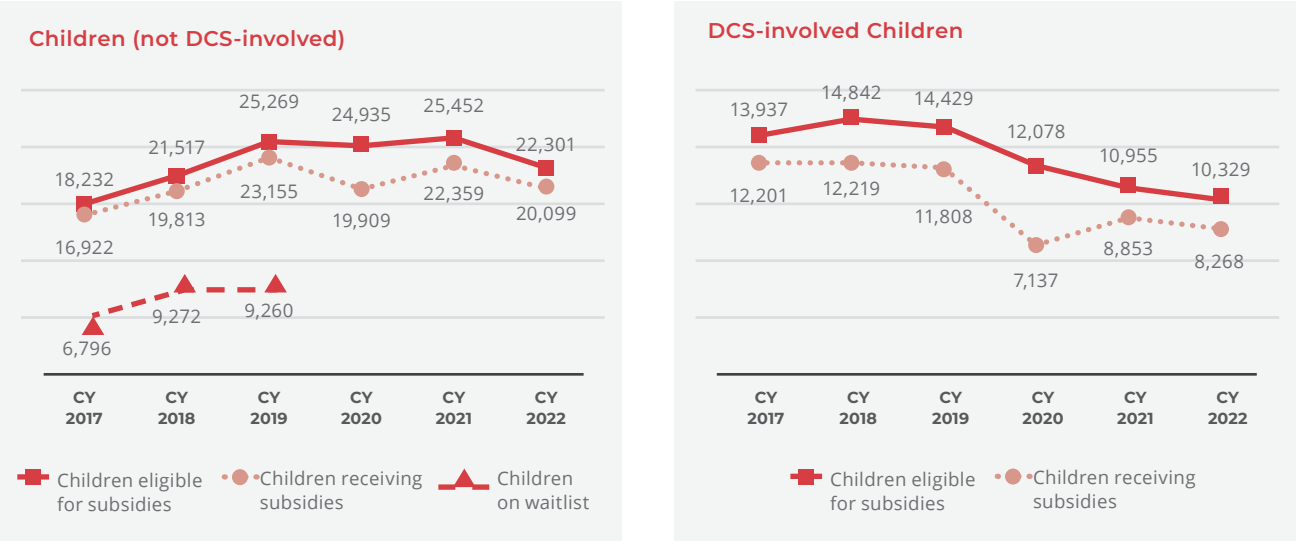
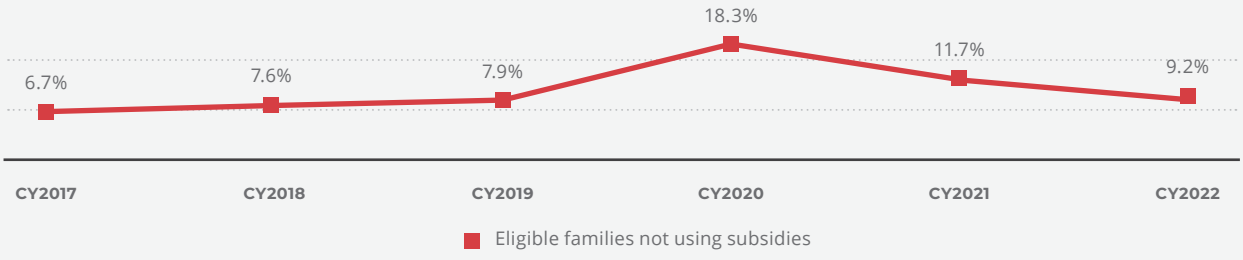


Figure 45. Eligible families not using DES child care subsides, 2017 to 2022



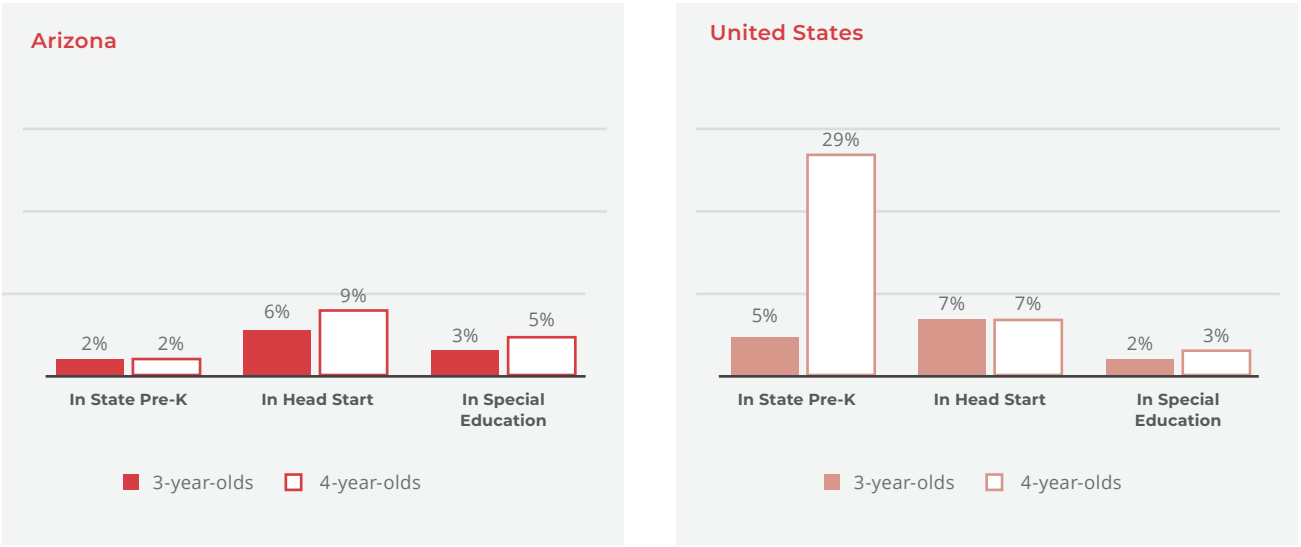
Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540

EDUCATION

In addition to subsidies, publicly funded free or reduced-cost preschool programs can also help families struggling to afford the high cost of care. However, only 16% of 4-year-olds in Arizona were enrolled in publicly funded free or reduced-cost preschool programs, compared to 39% nationally in 2021. This lower enrollment exists even though poverty rates among young children in Arizona are higher than those in the U.S. overall, meaning that more children should be eligible for these programs.[246] In 2021, Arizona enrolled a greater proportion of 4-year-olds in Special Education (5%), compared to typically developing children in state-funded preschool (2%) (Figure 46). This difference reflects the lack of state-funded early childhood sites for typically developing children. Quality First scholarships are the only source of state-funded preschool in Arizona beyond some limited preschool programs provided by public schools. Out of 2,909 early learning sites in Arizona, only 553 are school district sites, and only 267 of those sites have a 3-5 star Quality First rating.[247] Access to preschool through local school districts varies considerably by county. In Maricopa County there are 175 school district early learning sites with "high capacity," meaning they have slots for 60 or more preschool students. Pima County has 27 high-capacity school district early learning sites, and the remaining 13 Arizona counties have 5 or fewer.[248] Without state investments in early education, given the upcoming end of many federal child care program supports authorized during the pandemic, enrollment in free or reduced-cost preschool programs will likely decline even further as providers close or reduce program slots.[249]

Taken together, declining preschool enrollments, low enrollments in publicly-funded preschool (due to limited slots in publicly-funded preschool) and rising costs of child care in licensed settings indicate an ongoing need for investment in high-quality, affordable early care and education to ensure that all children in Arizona can access these opportunities.

Figure 46. Preschoolers ages 3-4 in public preschool programs, 2021



Source: National Institute for Early Education Research (2022). The state of preschool yearbook, 2021. Retrieved from https://nieer.org/state-preschool-yearbooks-yearbook2021

Note: State Pre-K is defined by NIEER as preschool education programs where a program is "funded, controlled, and directed by the state," early childhood education is the primary goal of the program, serves a substantive number of 3- and 4-year-old children in the state, is not specifically targeted for children with disabilities, and is distinct from subsidized child care or federal head start programs.

Special Needs

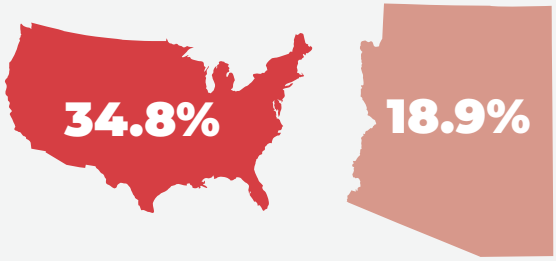
Timely intervention can help young children with, or at risk for, developmental delays to improve language, cognitive and socio-emotional development.[250,251,252] It also reduces educational costs by decreasing the need for special education.[253] In Arizona, services available to families with children with special needs include those provided through the Arizona Early Intervention Program (AzEIP),[xxvii] the Division of Developmental Disabilities (DDD),[xxviii] and the Arizona Department of Education (ADE) Early Childhood Special Education Program.[xxix]

The Arizona Early Intervention Program (AzEIP)[xxx] is an interagency system of services and supports for families of young children (birth to 3) with disabilities or developmental delays in Arizona. 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.[xxxi,xxxii] There is particularly strong evidence to support the effectiveness of early intervention services for improving child health and development for children born premature or low birthweight, and currently 33 states include low birthweight and 22 states include prematurity in their service eligibility criteria.[254,255] Unfortunately Arizona does not yet include either of these as a qualifying condition or risk factor.[256]

Arizona lags the United States overall in terms of developmental screening. Only 18.9% of young children ages 9-35 months were estimated to have been screened through a parent-completed developmental screening tool according to the 2020-2021 National Survey of Children's Health (Figure 47). By comparison, nearly twice that proportion of young children (34.8%) were estimated to have completed screenings nationally. The American Academy of Pediatrics recommends that pediatric health care providers ask parents to complete a standardized development screening test at a child's 9-, 18-, and 30-month appointments in addition to asking parents about developmental concerns at infant and child well-visits.[257] However, despite this recommendation, not all pediatric health care providers report using standardized tools; as of 2016 (the most recent survey year available), 63% of pediatricians surveyed nationally reported using standardized tools to screen young children for developmental delays, a 3-fold increase from only 21% of pediatricians in 2002.[258] Ensuring children receive appropriate developmental screenings remains essential to ensure that children have access to early intervention services if needed.

Figure 47. Percent of young children (ages 9-35 months) who received a developmental screening using a parent-completed screening tool in the past year, 2020-2021 National Survey of Children's Health

Young children whose parents reported completing a developmental screening, 2020-2021



Child and Adolescent Health Measurement Initiative (2022). National Survey of Children's Health 2020-2021. Retrieved on 08 Jan 2023 from www.childhealthdata.org

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

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

[xxix] For more information on ADE's Early Childhood Special Education program, visit http://www.azed.gov/ece/early-childhoodspecial-education/ and http://www.azed.gov/special-education/az-find/

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

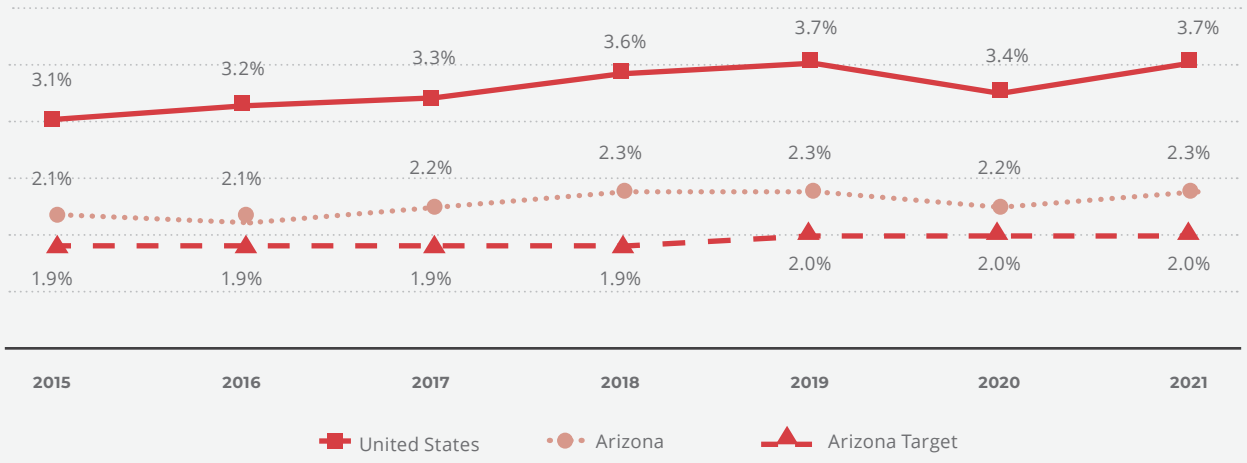
[xxxi] DDD provides services to individuals with qualifying disabilities through adulthood. Qualifying children may receive services from both AzEIP and DDD.

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

EDUCATION

In 2021, Arizona provided early intervention services to 2.3% of children birth to age 2, a substantially lower rate than the 3.7% of children in this age range served nationwide (Figure 48). According to national research, insufficient funding and staffing are the greatest obstacles to identifying and providing resources for all children who would benefit from early intervention.[259] Arizona falls in the bottom 10 states in the nation for early intervention service provision,[260] likely due in part to having some of the most narrow eligibility requirements for early intervention services compared to most other states in the U.S.[261] Eligibility criteria, which is determined by each state, are categorized into three categories: broad (15 states), moderately inclusive (24 states) and narrow (12 states, including Arizona) and these criteria may impact access to services.[262] However, the strongest contributing factors associated with more children accessing early intervention resources seem to be the state's allocation of resources and investment in outreach and identification efforts, such as Child Find.[263,264,265,266,267] Arizona has taken steps toward improving funding by being 1 of 10 states to cross-reference Medicaid and Early Intervention data to maximize federal Medicaid matching of funds.[268]

Figure 48. Percent of children ages birth to age 2 with Individualized Family Service Plans, 2015 to 2021



Source: ADES (2022). 2022 AzEIP Public Report. Retrieved from https://des.az.gov/services/developmental-disabilities/early-intervention/reports; U.S. Department of Education (2022). IDEA Section 618 Data Products Static Tables Part C, Table 1. Retrieved on 08 January 2022 from https://data.ed.gov/dataset/idea-section-618-data-products-static-tables-part-c

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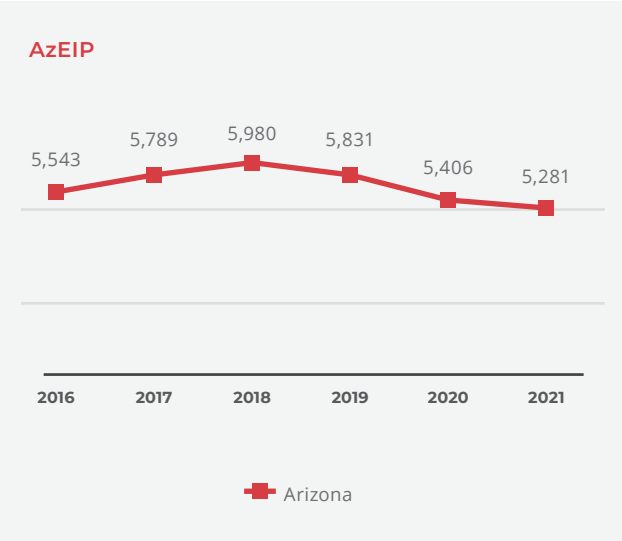
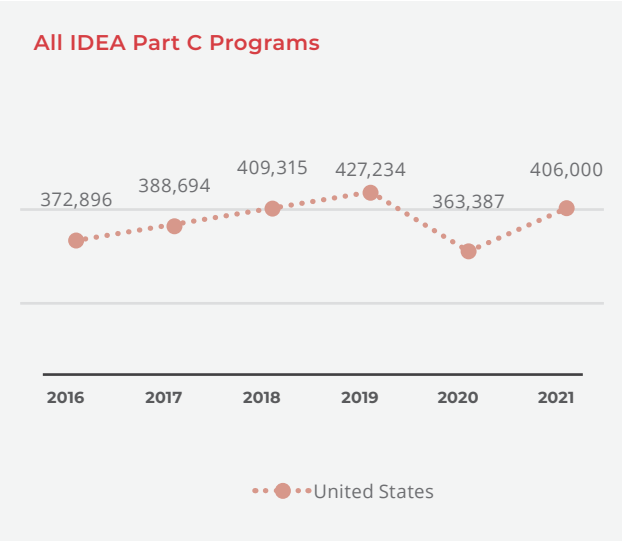
In addition to Arizona's strict eligibility criteria and low rate of provision of early intervention services, the effects of the COVID-19 pandemic are still evident in the number of children receiving early intervention services. In spring 2020, AzEIP halted in-home and community services and switched to virtual visits (computer- or phone-based).[269] The transition to remote services meant that the form of services often transitioned to more of a family-coaching approach rather than direct interaction with the child.[270] In both Arizona and early intervention programs nationwide, the number of children birth to age 2 receiving early intervention services fell to a 5-year low in 2020 (Figure 49). However, while nationwide the number of children receiving services recovered to at least the level served in 2018, in Arizona, the number of children receiving services continued to fall in 2021. This decline may be in part due to the decreasing population of young children in the state (see Figure 1) but given the already low rates of service provision compared to nationwide programs, declining service numbers may indicate that children who could benefit from early intervention are not receiving services.

Figure 49. Single-day active count of children birth to 2 receiving early intervention services, 2016 to 2021





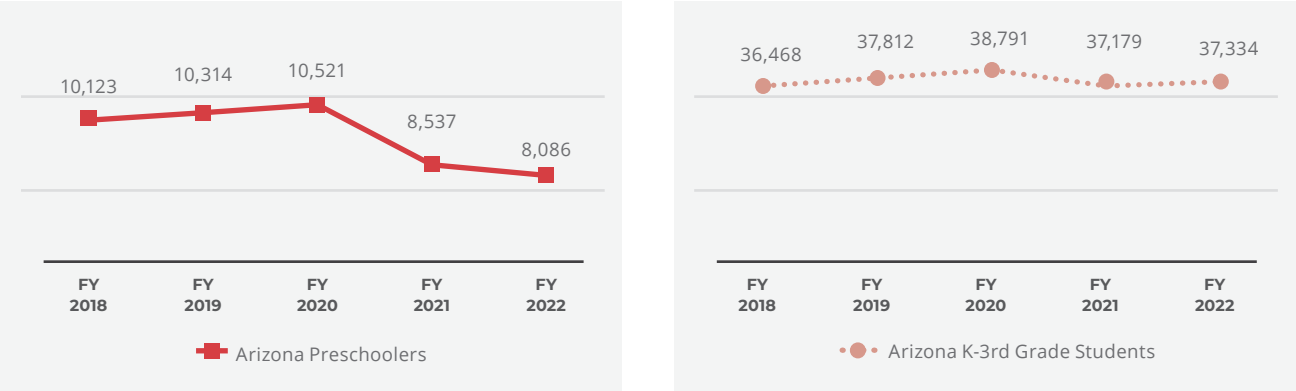
Source: ADES (2022). 2022 AzEIP Public Report. Retrieved from https://des.az.gov/services/developmental-disabilities/early-intervention/reports; U.S. Department of Education (2022). IDEA Section 618 Data Products Static Tables Part C, Table 1. Retrieved on 08 January 2022 from https://data.ed.gov/dataset/idea-section-618-data-products-static-tables-part-c

EDUCATION

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 ADE show that the number of young children (ages 3 to 5) with special needs receiving services from LEAs has dropped substantially since fiscal year 2020, with only 8,806 children receiving services in fiscal year 2022 compared to 10,521 children receiving services in fiscal year 2020 (Figure 50). By contrast, the number of students in kindergarten to 3rd grade receiving services also declined between fiscal years 2020 and 2021 but increased in fiscal year 2022, with over 37,000 children receiving services. This again may reflect the decreasing young child population statewide (see Figure 1) but also may be a result of declining numbers of children receiving early intervention services and then being referred to LEAs, as well as children not being identified as needing special education services during the preschool years.

Providing early intervention and special education services for young children in the preschool years has been shown to reduce the need for special education services later in childhood,[271] so ensuring 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. Outreach efforts that frame early education as a protective factor against stressors and an intervention with possible life-long benefits are necessary to ensure parents of all children, and especially children with suspected developmental delays, can access developmental screenings and any necessary special education services.

Figure 50. Preschoolers ages 3-5 and kindergarten to 3rd grade students receiving special education services through local education authorities, fiscal year 2018 to 2022



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

Among preschool-age children receiving special education services in Arizona in fiscal year 2022, the majority had either a developmental delay[xxxiii] (43%) or a speech or language impairment (30%) (Figure 51). This pattern is consistent across most counties with a few notable exceptions. Mohave County had a high proportion of children with preschool severe delay (41%), and in Graham, Navajo and Greenlee counties a higher proportion of children had speech or language impairments compared to developmental delays.

[xxxiii] Some special education eligibility categories are related to the child's age, rather than disability type and severity alone. For example, a child eligible under the category 'preschool severe delay' must be re-evaluated and determined to be eligible under a different category during the kindergarten transition process. Similarly, children eligible under the Development Delay category must be re-evaluated before their 10th birthday. Each child's special education services and accommodations are individualized, so it is important to keep in mind that eligibility category data does not necessarily represent the amount or frequency of special education services students are receiving or the proportion of time they spend learning outside of the general education classroom. For more information on ADE's Special Education Disability Categories, visit: https://www.azed.gov/specialeducation/disability-categories/

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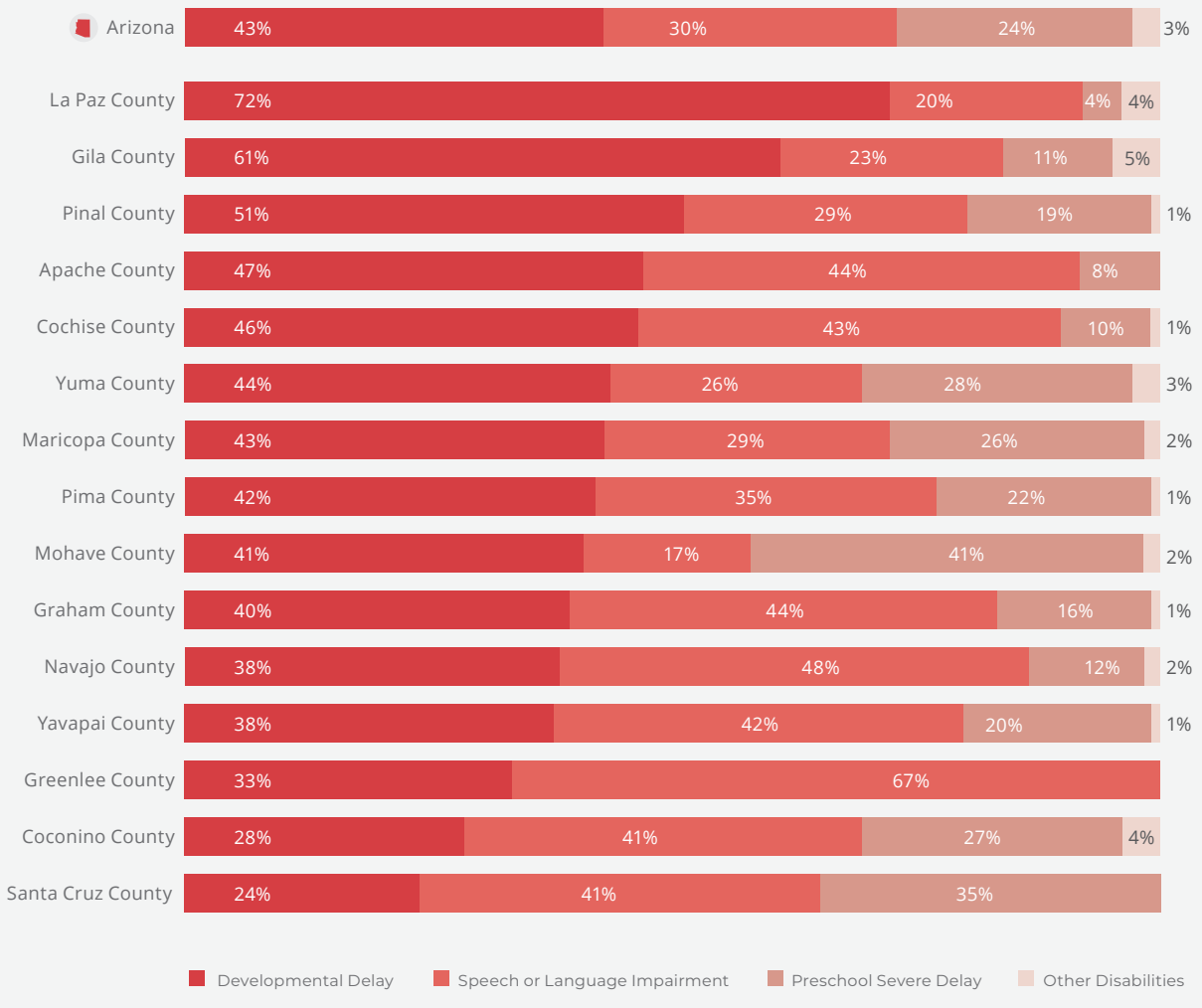
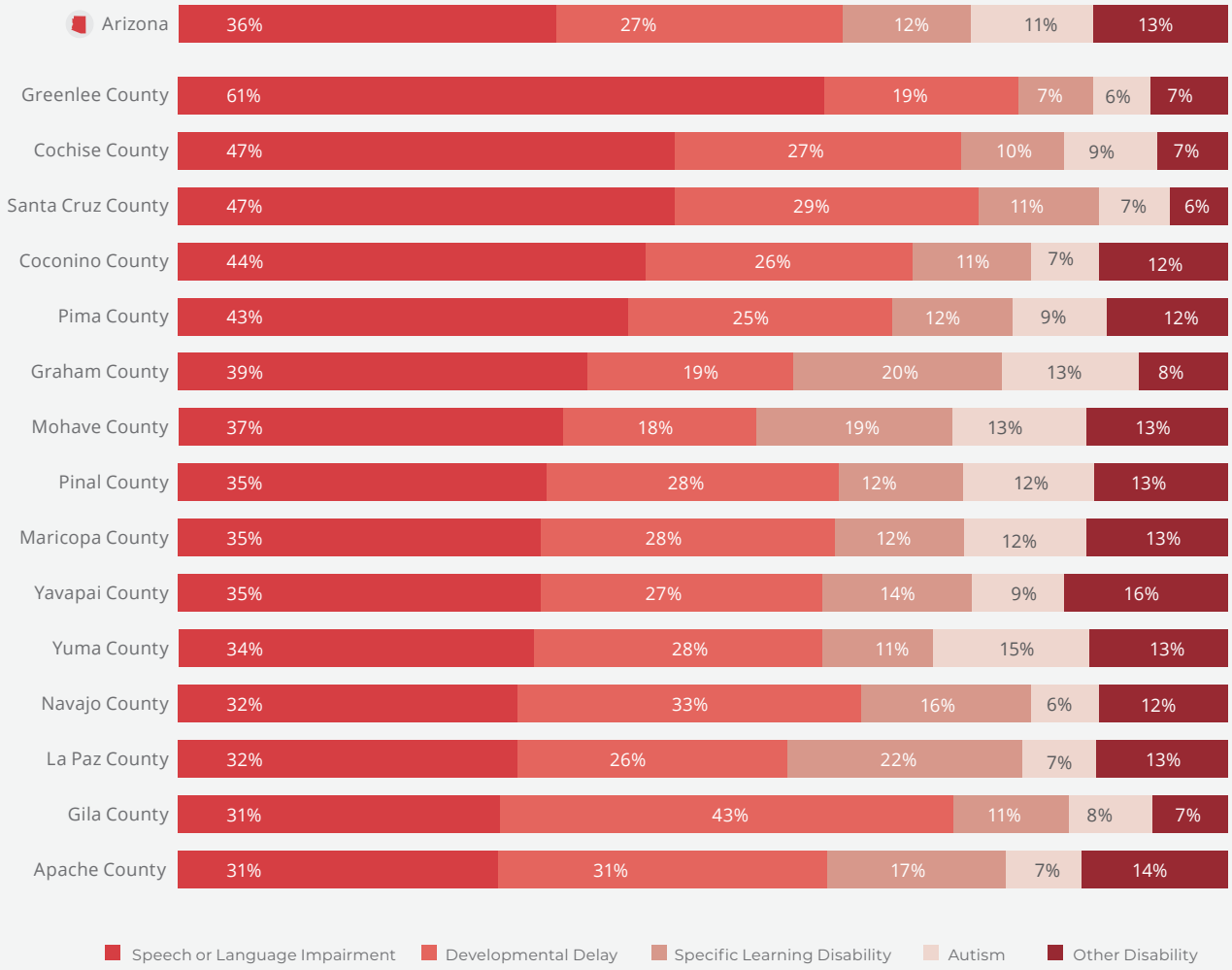
Among kindergarten to 3rd grade students receiving special education services, by comparison, speech and language impairments were the most frequent disability type statewide and in most counties, except for Gila, Navajo and Apache counties (Figure 52). The share of children receiving services for an autism diagnosis varied greatly by county, with some of the lowest rates seen among more rural counties in the state such as Greenlee, Navajo, La Paz, Santa Cruz and Apache counties. National research suggests that children in rural areas and Latino children tend to be diagnosed with autism spectrum disorders at lower rates and later than children in urban areas and White children, due to multiple reasons, including less awareness of autism spectrum disorders, less access to professionals skilled in diagnosing autism and challenges navigating behavioral and mental health systems to get a diagnosis and services.[272,273] Local schools play a vital role in ensuring that children with autism and other disabilities receive appropriate diagnoses and the services they need to thrive in educational settings and beyond.

Figure 51. Preschoolers ages 3-5 receiving special education services by primary disability type, fiscal year 2022



Source: Arizona Department of Education (2023). [Exceptional Student Services dataset]. Unpublished data received by request.

Figure 52. Kindergarten to 3rd grade students receiving special education services by primary disability type, fiscal year 2022



Source: Arizona Department of Education (2023). [Exceptional Student Services dataset]. Unpublished data received by request.

Why K-12 Education Matters

A community's K-12 education system can support positive outcomes for children, families and the overall well-being of the community. Individuals who have higher levels of education tend to live longer and healthier lives.[274] Graduating from high school, in particular, is associated with better health, financial stability and socio-emotional outcomes as well as lower risk for incarceration compared to dropping out of high school.[275,276]

High-quality early learning experiences set a strong foundation for children's learning in kindergarten, elementary school and beyond.[277] When children participate in high-quality early education, they are more likely to perform better in reading and math in school.[278] Early educational performance is an important predictor of later academic learning and success. For example, students reading at or above grade-level in 3rd grade are more likely to graduate high school and attend college.[279]

Parents' educational attainment is also associated with positive outcomes for children. Higher parental educational attainment is associated with lower rates of child poverty.[280] Children of parents who have at least a high school diploma or GED also score higher in reading, math and science in their first 4 years of school.[281,282] Young children that participate in two-generation programs that provide educational supports for parents and access to quality early education for children are more likely to graduate from high school and attain a bachelor's degree in the future.[283]

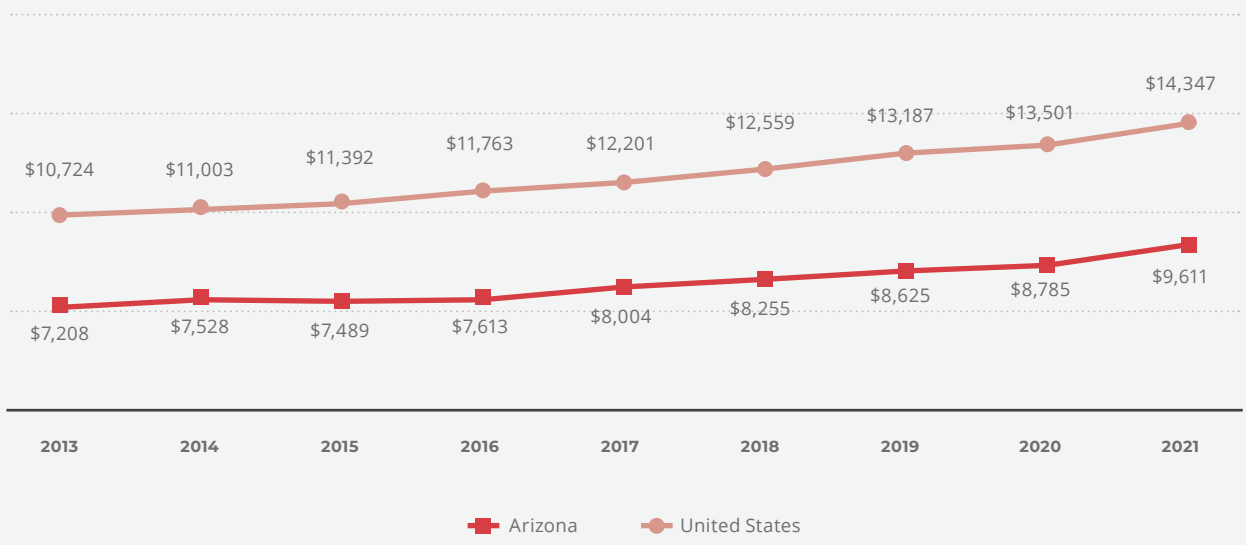
Given these intergenerational impacts of educational attainment and early education's impact on later academic achievement and success in adulthood, it is critical to provide substantial support for early education and promote policies and programs that encourage the success of Arizona's children.

How Arizona's K-12 Children Are Faring

Educational Investment

Since 2013, Arizona has steadily spent more per child on public K-12 education. However, the state has consistently lagged behind the U.S. average by several thousand dollars per student. In 2021, Arizona increased per pupil spending from $8,785 to $9,605, or $802 more per student (Figure 53). This represents the largest ever annual increase in per pupil spending in Arizona, though it is still $4,725 less than the national average ($14,330). Despite increases in spending, data from the 2019-20 school year show that 87.5% of Arizona students attended inadequately funded school districts, with spending in the highest-poverty districts falling an average of $5,539 per student below what was considered adequate.[284] Increased per-pupil spending is linked to improved test scores, greater educational attainment, lower poverty rates and improvements in intergenerational economic mobility, showing the broader economic impacts that investment in education can have on a community.[285,286,287]

Figure 53. Trends in per pupil spending on public education, 2013 to 2021

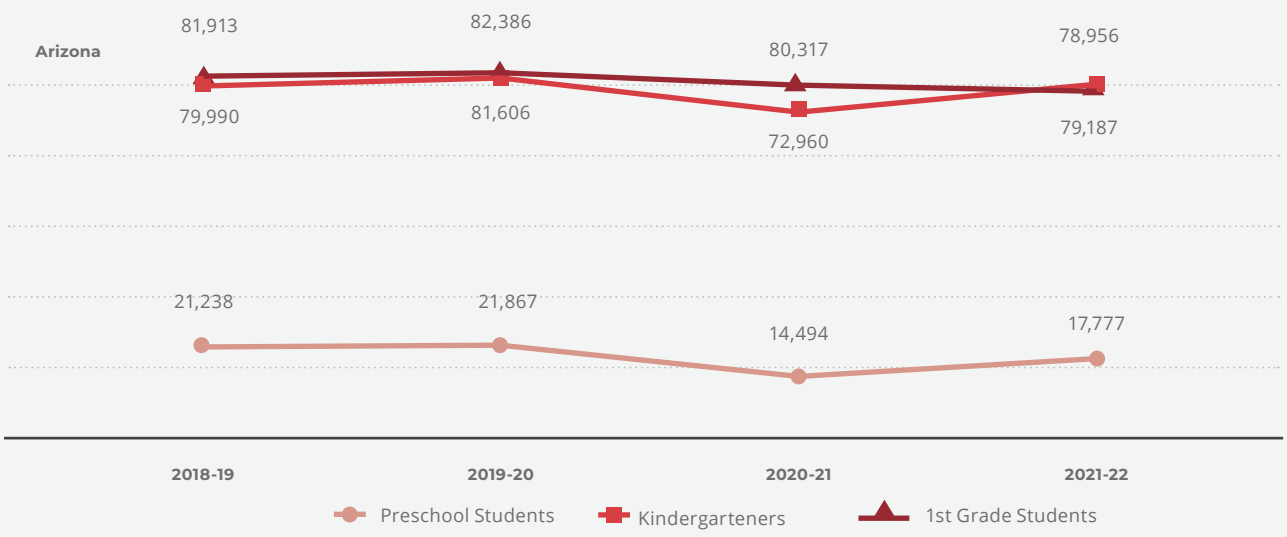


Source: U.S. Census Bureau (2022). Annual Survey of School System Finances: Per Pupil Amounts for Current Spending of Public Elementary-Secondary School Systems by State: Fiscal Years 2013-2021. Retrieved from https://www.census.gov/programs-surveys/school-finances/data/tables.html

Enrollment

From 2018 to 2021, trends in preschool, kindergarten and 1st grade enrollment show the impacts of the COVID-19 pandemic on early education enrollment in Arizona (Figure 54). Preschool and kindergarten, neither of which are mandatory in the state of Arizona, showed notable declines in enrollment during the 2020-21 school year compared to 1st grade, reflecting national trends.[288] As was seen nationally, enrollments mostly recovered from historic 2020-21 lows during the 2021-22 school year, though enrollment in preschool remained well below pre-pandemic levels (Figure 54). Participation in high-quality preschool has been shown to reduce disparities in kindergarten readiness, particularly for low-income, Hispanic and Black children, highlighting its potential role in promoting more equitable outcomes in education for young children.[289] Recent enrollment trends indicate that students now entering kindergarten may need more support to build early learning skills disrupted by the pandemic.

Figure 54. Trends in preschool, kindergarten and 1st grade enrollment in public and charter schools, 2018-19 to 2021-22 school years



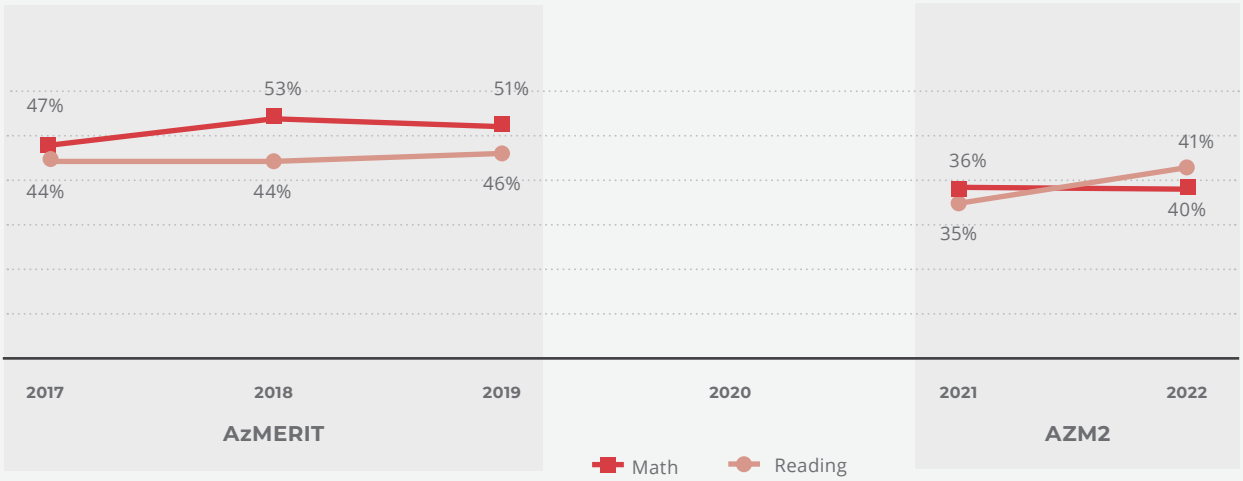
Source: Arizona Department of Education (2022). [October 1 Enrollment Dataset]. Retrieved from https://www.azed.gov/accountability-research/data on 15 January 2023

Achievement on Standardized Testing

All Arizona public schools, including district schools and charter schools, are required to administer state and federally mandated standardized tests. Between 2019 and 2022, the statewide English language arts (ELA) and math assessment tool for 3rd through 8th graders in public schools was Arizona's Statewide Achievement Assessment for English Language Arts and Math (AzM2), previously called Arizona's Measurement of Educational Readiness to Inform Teaching (AzMERIT).[xxxiv,290,291] The Move on When Reading policy, enacted by the Arizona legislature in 2010, states that a 3rd grade student shall not be promoted to 4th grade if their reading score falls far below the 3rd grade level, as established by the State Board of Education.[xxxv,292] These policies are intended to help identify struggling readers who may benefit from more targeted literacy interventions.

In the three years prior to the COVID-19 pandemic, under half of Arizona's 3rd graders passed the statewide reading assessment (Figure 55). A slightly larger proportion passed the math assessment, peaking at 53% in 2018. In March 2020, Arizona passed legislation (H.B. 2910) to support schools during pandemic-related closures and transitions to distance learning, including cancelling required statewide assessments for the 2019-20 school year.[293] Testing resumed in April 2021. Only about one-third of 3rd graders in Arizona achieved passing scores on the new AZM2 reading (35%) and math (36%) assessments in 2021. While AZM2 passing rates increased in 2022, they still remained below pre-pandemic passing rates for AzMERIT.

Figure 55. AzMERIT/AZM2 Passing Rates for 3rd Grade Students, 2017 to 2022



Source: Arizona Department of Education (2023). 2017 to 2019 AzMERIT Assessment Results & 2021 to 2022 AzM2 Assessment Results.

Note: Statewide assessments were cancelled in the 2019-20 school year due to the COVID-19 pandemic.

[xxxiv] In 2022, AzM2 was replaced by Arizona's Academic Standards Assessment (AASA).

[xxxv] Exceptions exist for students identified with or being evaluated for learning disabilities or reading impairments, English language learners and those who have demonstrated reading proficiency on alternate forms of assessment approved by the State Board of Education. Students who test in the 'far below' proficiency range can also be promoted to 4th grade if they complete summer school and then demonstrate reading at a proficient level. Given these exceptions, historically very few 3rd grade students (<1%) have been retained due to Move on When Reading.

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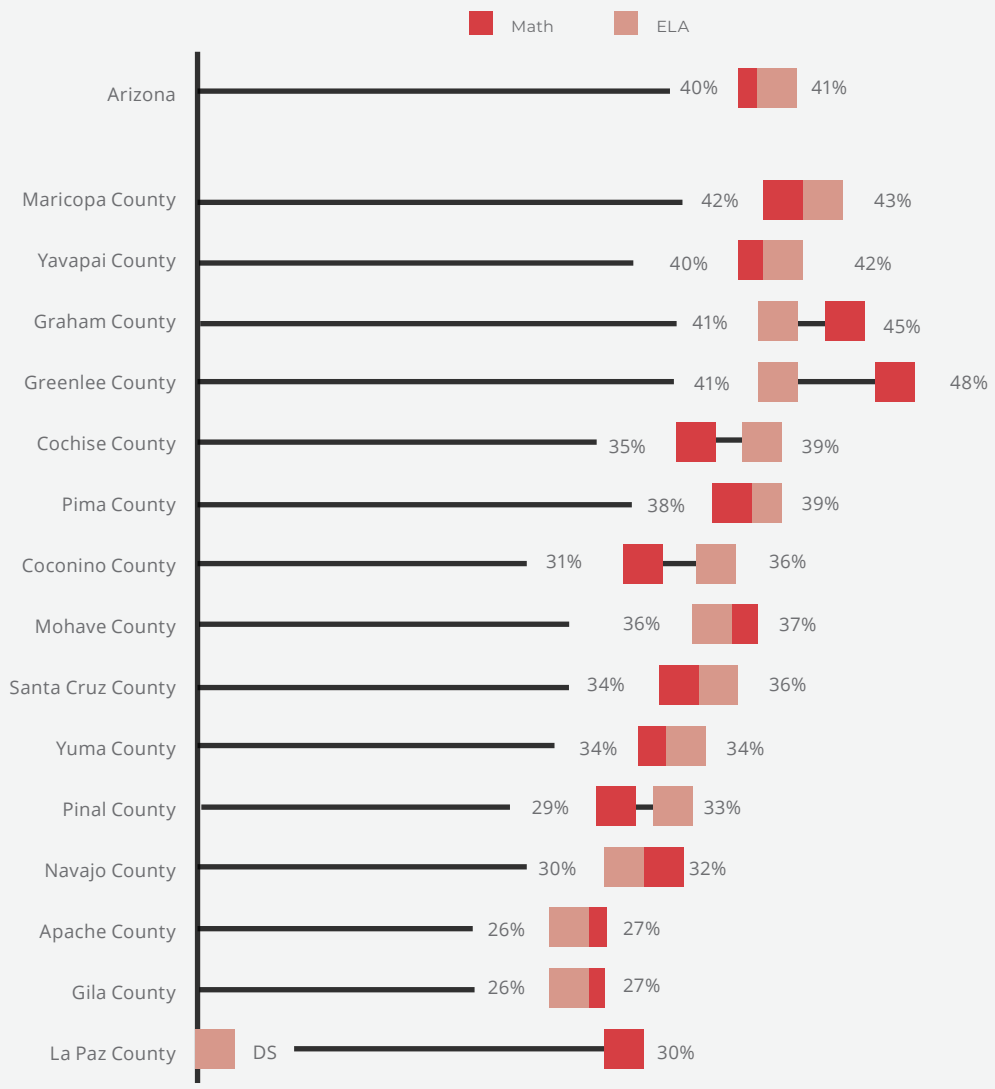
Across all Arizona counties, fewer than half of 3rd graders passed the AZM2 English language arts and math assessments in 2022 (Figure 56). Passing rates on English language arts ranged from about a quarter of 3rd graders in Apache and Gila counties (26%) to rates slightly above the statewide average in Maricopa and Yavapai counties (43% and 42%, respectively). Math passing rates were highest in Greenlee and Graham counties (48% and 45%, respectively).

Figure 56. AZM2 passing rates for 3rd grade students, 2022



Source: Arizona Department of Education (2023). 2022 AzM2 Assessment Results.

Note: 'DS' indicates that data could not be displayed to protect student privacy due to small numbers of students in certain categories

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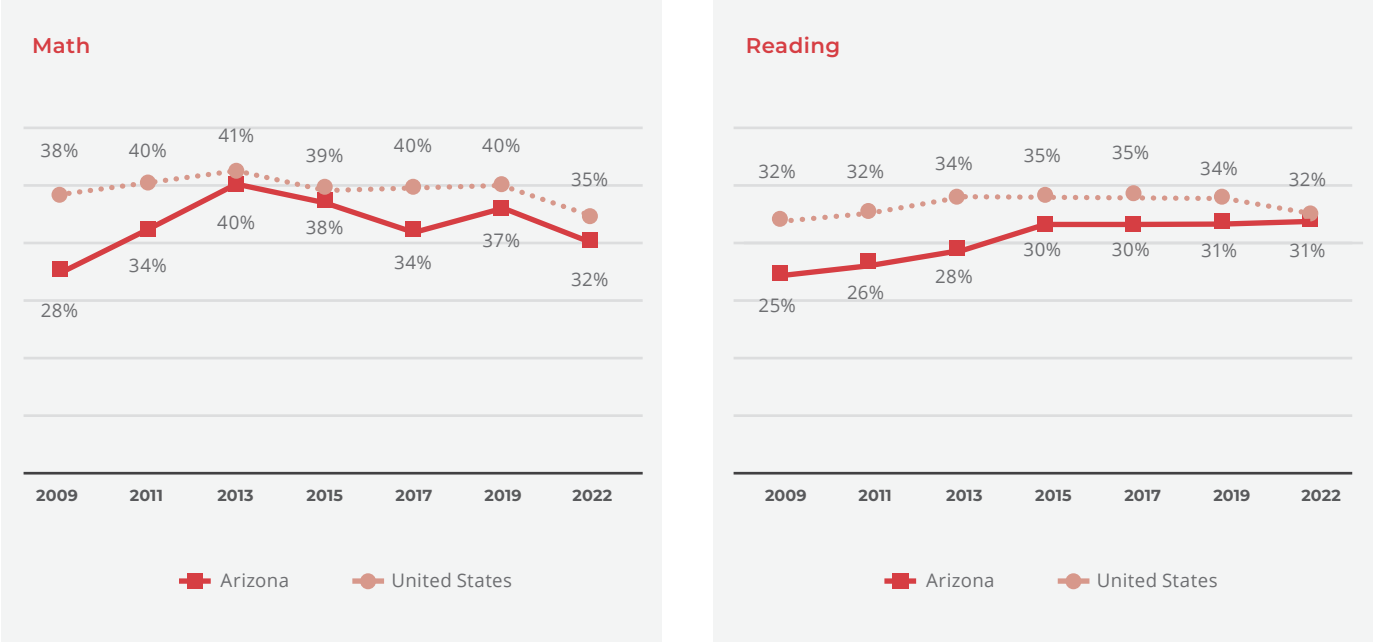
The National Assessment of Educational Progress (NAEP) is a large-scale assessment that is intended to measure changes in educational achievement over time and convey differences in achievement by geography and key demographics, including race, ethnicity and gender.[294] Data since 2009 show that NAEP math and reading proficiency rates for Arizona 4th graders have consistently fallen below overall U.S. rates (Figure 57). While math proficiency rates fluctuated over time at the state and national levels, reading proficiency rates steadily increased between 2009 and 2017. Math proficiency rates suffered the largest decline during the pandemic, dropping by 5% for both Arizona and the U.S. between 2019 and 2022. Interestingly, reading proficiency rates in Arizona remained stable over this time period (31%), nearly closing the gap with U.S. proficiency rates in 2022 (32%).

Nationally, average scores for 9-year-old students on NAEP long-term trend assessments experienced the largest decline since 1990 for reading and the first ever decline for math (declining 5 points and 7 points, respectively).[295] Decreases were greater for students who were already in lower percentiles for scores, meaning that disparities in performance across students increased during the pandemic. Among students who participated in remote learning, those that scored higher on the NAEP were more likely to have access to key resources that supported remote learning, including technology to access educational materials, a quiet place to study and daily assistance from a teacher.[296]

Figure 57. Percent of students achieving at or above proficient in 4th grade NAEP math and reading scores, 2009 to 2022



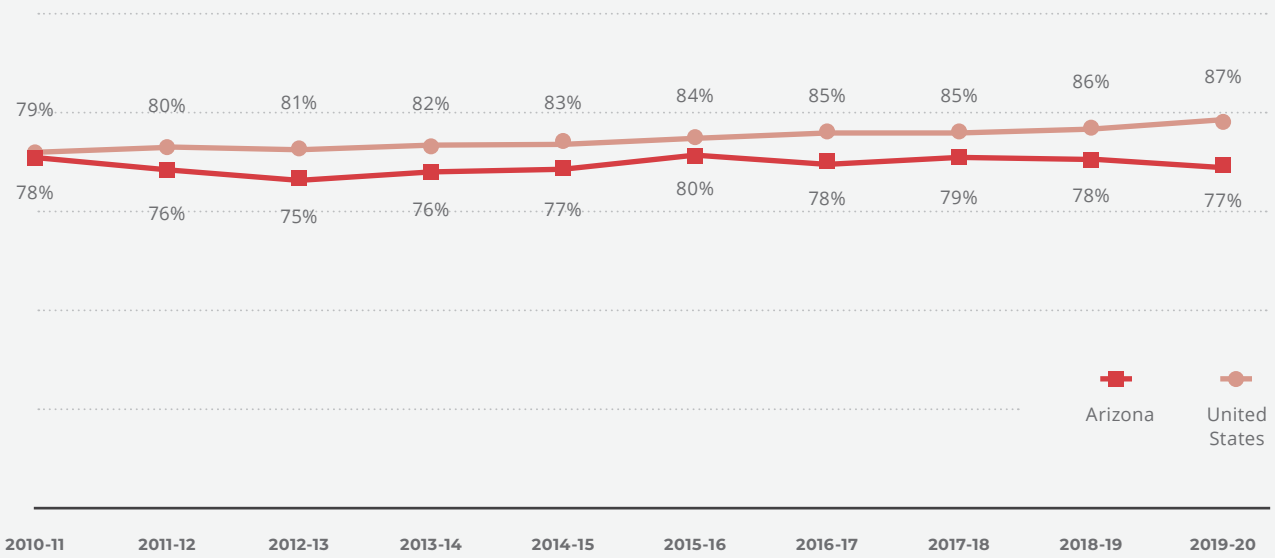
Source: The Nation's Report Card (2023). National Assessment of Educational Progress (NAEP) State Profiles. Retrieved from www.nationsreportcard.gov/profiles/stateprofile

High School Graduation

Understanding current high school graduation and dropout rates within the state provides insight into the assets and challenges faced by a community and its future workforce. In contrast to adults who dropped out of high school and even those that received a high school equivalency degree (GED), adults who graduated from high school have higher rates of employment, higher incomes and better overall health.[297] In recognition of this critical link between educational attainment and health, a new objective for high school graduation was added to the Healthy People 2030 national benchmarks, with a target of 90.7% of high school students graduating in 4 years by 2030.[298]

In contrast to steadily increasing high school graduation rates across the nation, Arizona's 4-year high school graduation rates have fluctuated over the past decade, declining slightly in the most recent years. Across the past 10 years, the difference between Arizona and the U.S. in graduation rates was greatest in the 2019-20 school year (77% vs. 87%, respectively). Notably, both graduation rates were below the Healthy People 2030 target of 90.7% (Figure 58).

Figure 58. Public high school 4-year adjusted cohort graduation rate, 2010-11 to 2019-20



National Center for Education Statistics (2022). Public high school 4-year adjusted cohort graduation rate (ACGR), by selected student characteristics and state: 2010-11 through 2019-20

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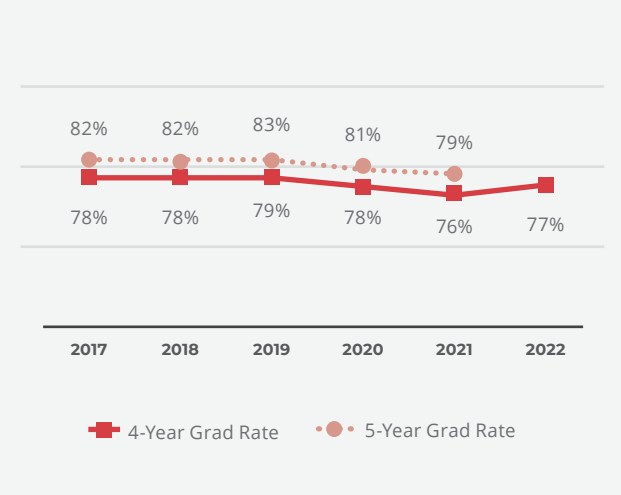
More recent data from the Arizona Department of Education show that both 4- and 5-year graduation rates dipped to 5-year lows in 2021 (76% and 79%, respectively), with 4-year graduation rates recovering slightly in 2022 (77%) (Figure 59). While high school dropout rates were decreasing prior to the pandemic, they increased notably from FY2020 (3.3%) to FY2022 (5.4%) (Figure 60). Compared to the U.S., Arizona has a larger proportion of disconnected youth, defined as teenagers ages 16 to 19 who are neither attending school nor employed,[xxxvi] which has been linked to negative physical and mental health outcomes and higher rates of unemployment. In 2020, 8.2% of youth in Arizona were neither working nor in school compared to 6.8% of youth nationwide. Native American youth, both nationally and at the state-level, were disproportionately disconnected, with nearly 1 in 3 (30.9%) Native American youth in Arizona considered disconnected in 2020.[299]

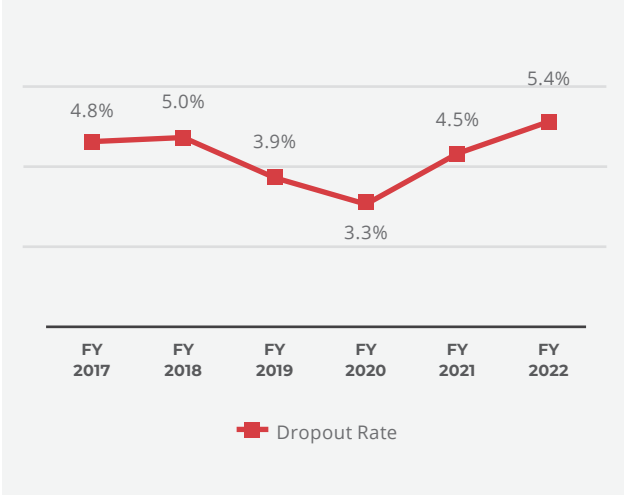
Figure 59. Four- and five-year graduation rates, 2017 to 2022



Source: Arizona Department of Education (2023). Cohort 2017 to 2022 Four Year Graduation Rate Data, Cohort 2017 to 2021 Five Year Graduation Rate Data. Retrieved from https://www.azed.gov/accountability-research/data/

Note: These rates are calculated as the percentage of students in a cohort (typically those who enter ninth grade together) who graduate within 4 or 5 years.

Figure 60. 7th to 12th grade dropout rates, 2017 to 2022



Source: Arizona Department of Education (2023). FY2017 to FY2022 Dropout Rates. Retrieved from https://www.azed.gov/accountability-research/data/

Note: "Dropouts are defined as students who are enrolled in school at any time during the school year, but are not enrolled at the end of the school year and did not transfer, graduate or die" [State of Arizona Department of Education Graduation, Dropout & Persistence Rate Technical Manual].

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

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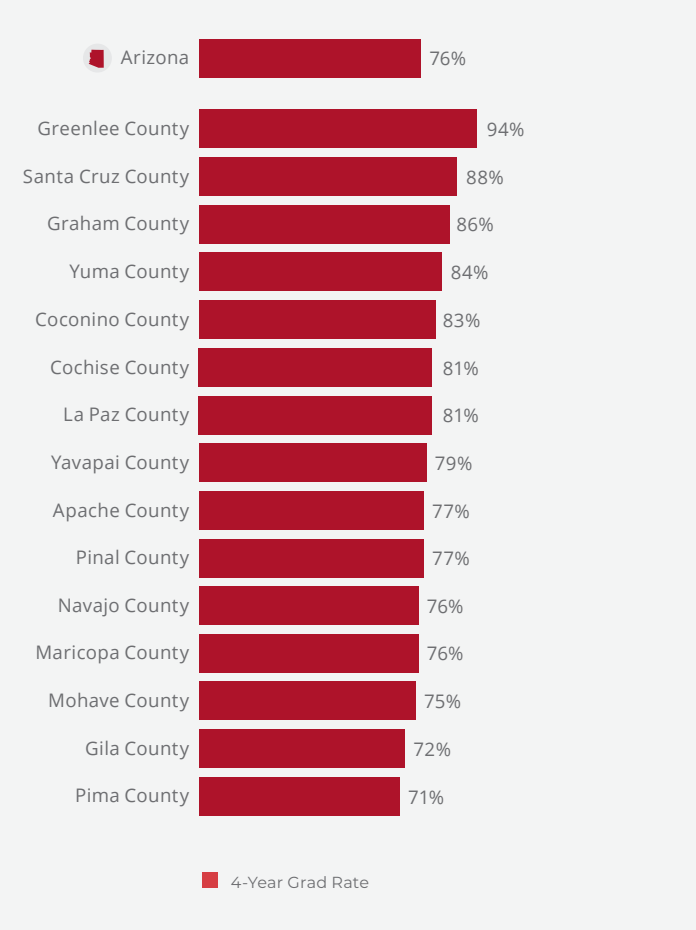
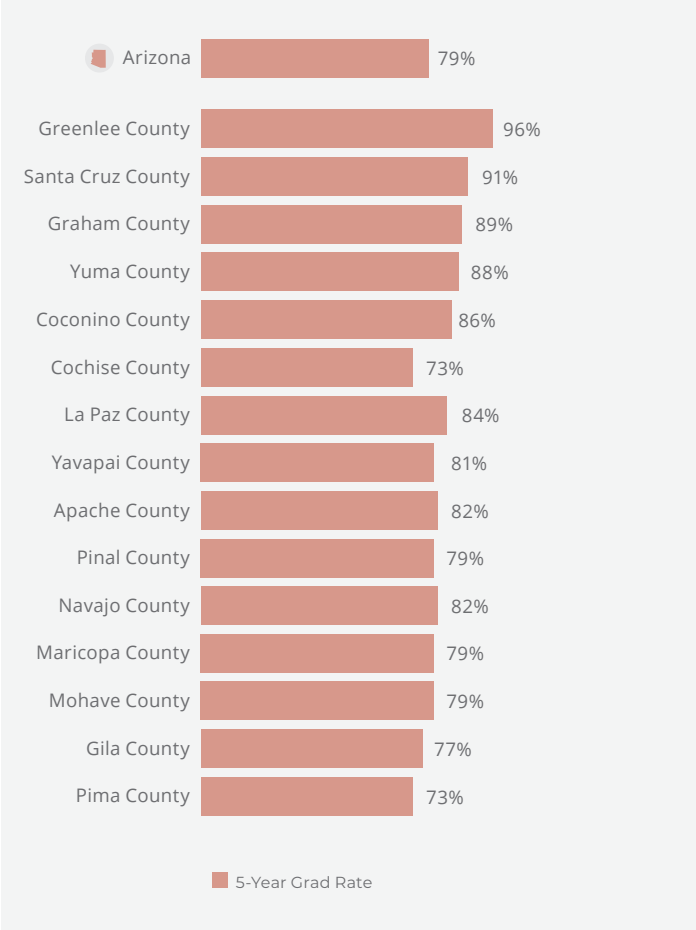
Both 4- and 5-year graduation rates varied widely by county. Pima and Gila counties had the lowest graduation rates, with less than three-quarters of students graduating in 4 years in 2021 (71% and 72%, respectively) (Figure 61). In contrast, most students in Greenlee County (94%) graduated in 4 years in 2021. While most Arizona counties had comparable drop-out rates in 2022 (between 5-7%), there were a few outliers. Santa Cruz (2%), Graham (3%) and Yuma (3%) counties had notably low drop-out rates, while in Navajo County, 1 out of every 10 students in 7th through 12th grade dropped out of school in 2022 (Figure 62).

Figure 61. Four- and five-year graduation rates, 2021

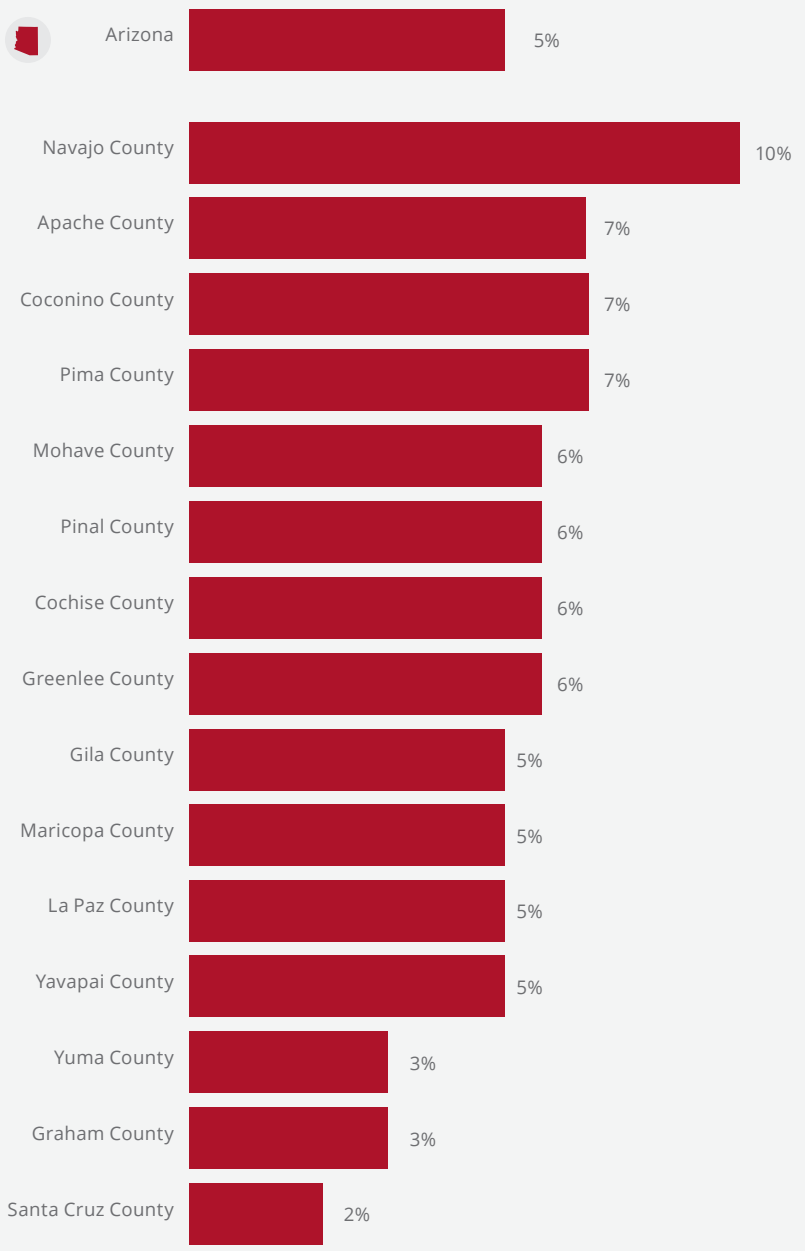




Source: Arizona Department of Education (2023). Cohort 2017 to 2022 Four Year Graduation Rate Data, Cohort 2017 to 2021 Five Year Graduation Rate Data. Retrieved from https://www.azed.gov/accountability-research/data/

Note: These rates are calculated as the percentage of students in a cohort (typically those who enter ninth grade together) who graduate within 4 or 5 years.

Figure 62. Drop-out rates for 7th- to 12th-grade students, fiscal year 2022



Source: Arizona Department of Education (2023). FY2022 Dropout Rates. Retrieved from https://www.azed.gov/accountability-research/data/

Note: "Dropouts are defined as students who are enrolled in school at any time during the school year, but are not enrolled at the end of the school year and did not transfer, graduate or die" [State of Arizona Department of Education Graduation, Dropout & Persistence Rate Technical Manual].

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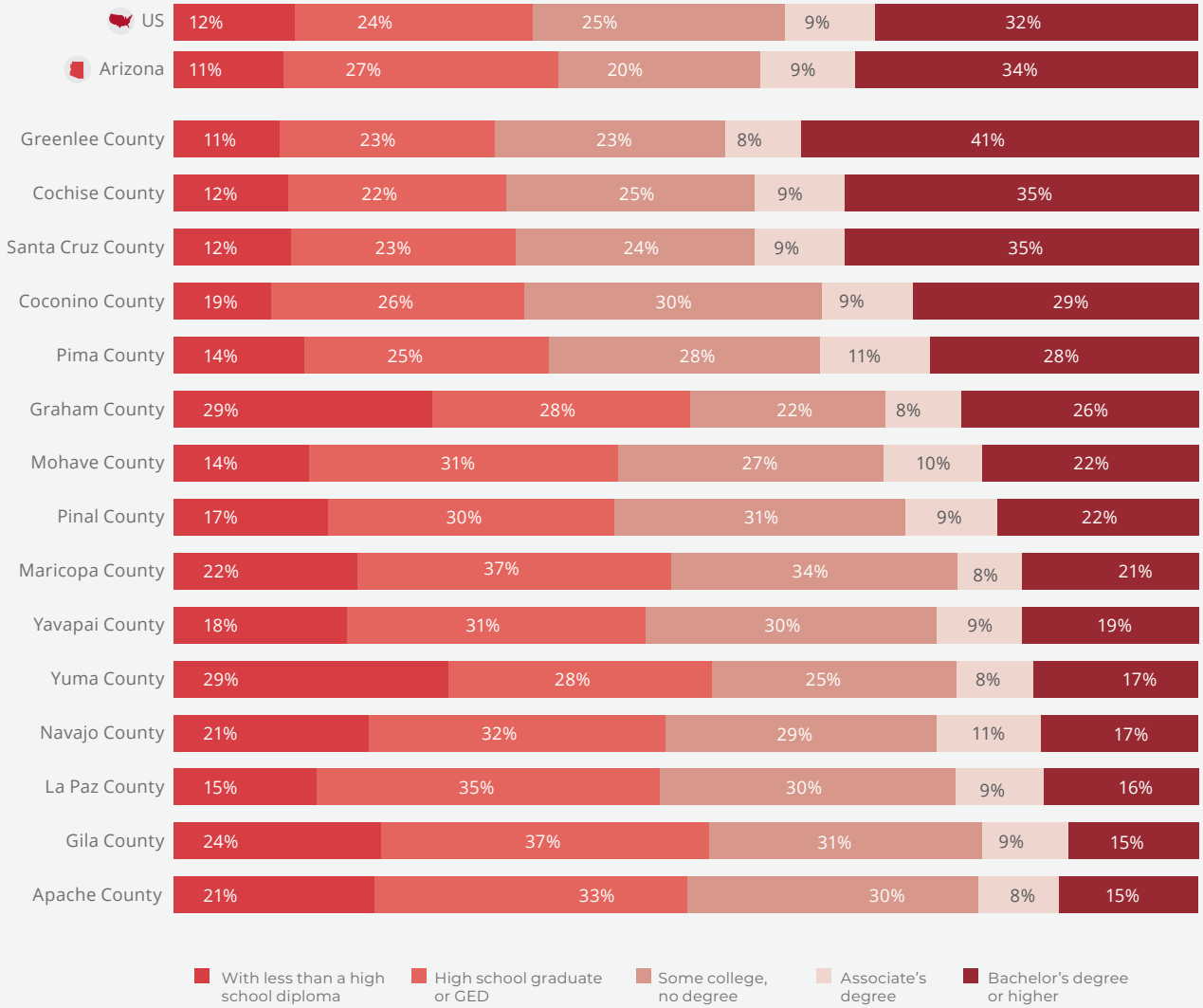
Educational Attainment Among Adults

Education is a key mechanism for upward economic mobility; as educational attainment in a population increases, wages increase and rates of unemployment decrease.[300] Of U.S. adults working full time in 2021, median earnings for those with a bachelor's degree were $29,000 higher than those with a high school degree.[301] Just under one-third (32%) of Arizona adults have a bachelor's degree or higher, a slightly lower proportion compared to the U.S. (34%) (Figure 63). However, bachelor's degree attainment across Arizona counties ranges from just 15% in Apache and La Paz counties to 41% in Coconino County. The counties with the largest proportion of adults with a bachelor's degree or higher are also the counties where the state's three public universities are located – Coconino County (41%), Pima County (35%) and Maricopa County (35%).

Figure 63. Level of education for the adult population (ages 25 and older), 2017-2021 ACS



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

CHILD HEALTH & WELL-BEING

Why It Matters

The physical and mental health of both children and their caregivers are important for optimal child development and well-being. Early childhood health, and even maternal health before pregnancy, has lasting impacts on an individual's quality of life.[302,303] Experiences during the prenatal and early childhood periods can result in lifelong impacts on immune functioning, brain development and risk for chronic diseases.[304,305] Poor health in childhood can also result in lower educational attainment and socioeconomic status in adolescence and adulthood, impacting the health and economic well-being of individuals and their future children, perpetuating intergenerational poverty.[306,307]

Adverse childhood experiences (ACEs) also impact children's immediate and long-term well-being. ACEs include 8 categories of traumatic or stressful life events experienced before the age of 18 years, including 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.[308] ACEs have been associated with developmental disruption, mental illness, drug and alcohol use and overall increased health care utilization. These negative outcomes are more likely to occur as the number of ACEs an individual experiences increases.[309,310] Therefore, adequate access to preventive care and treatment services is vital to support a child's long-term health, development and success.[311,312,313]

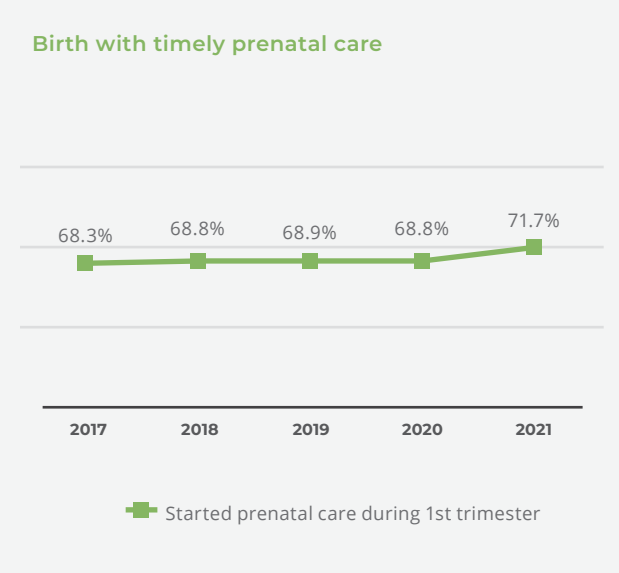
One useful set of metrics for evaluating child health in Arizona is the Healthy People 2030 objectives. These science-based objectives define priorities for improving the nation's health and are updated every 10 years. Understanding where Arizona children and mothers fall in relation to these national benchmarks can help highlight areas of strength and those in need of improvement.[314] 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 level. These objectives include increasing the proportion of pregnant women who receive timely and adequate prenatal care, reducing low birth weight births and increasing abstinence from cigarette smoking among pregnant women.[315]

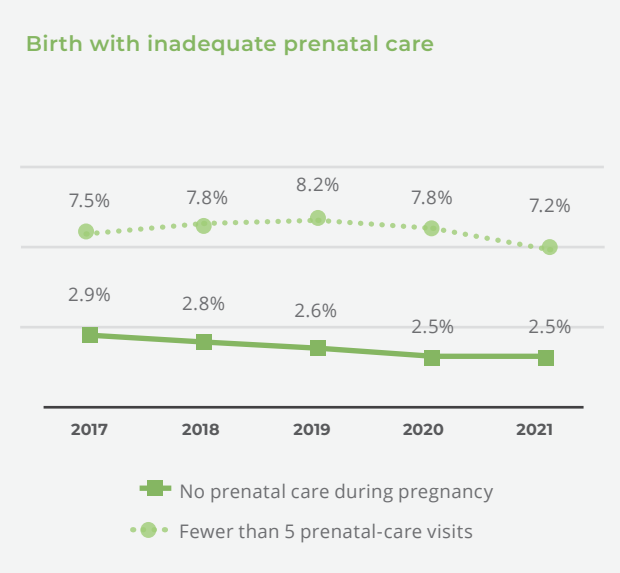
How Arizona's Young Children Are Faring

Prenatal Care

A variety of health outcomes for both mothers and infants depend on access to quality health care and support before, during and after pregnancy. Early utilization of prenatal care during pregnancy reduces the risk of prenatal smoking, pregnancy complications, premature births and maternal and infant mortality.[316,317,318,319,320] The percentage of births to mothers in Arizona who began prenatal care during their first trimester increased from 68.3% in 2017 to 71.7% in 2021 (Figure 64). While this is an improvement, it is still below the Healthy People 2030 target of 80.5% of births to mothers who receive early and adequate prenatal care, highlighting the need for continued attention to this issue.[321] However, there are other promising signs of improvement in access to prenatal care in Arizona. Births to mothers receiving fewer than five prenatal care visits decreased from a high of 8.2% in 2019 to 7.2% in 2021, and the percentage of births to mothers receiving no prenatal care fell slightly from 2.9% to 2.5% between 2017 and 2021.

Figure 64. Prenatal care for mothers giving birth in Arizona, 2017 to 2021

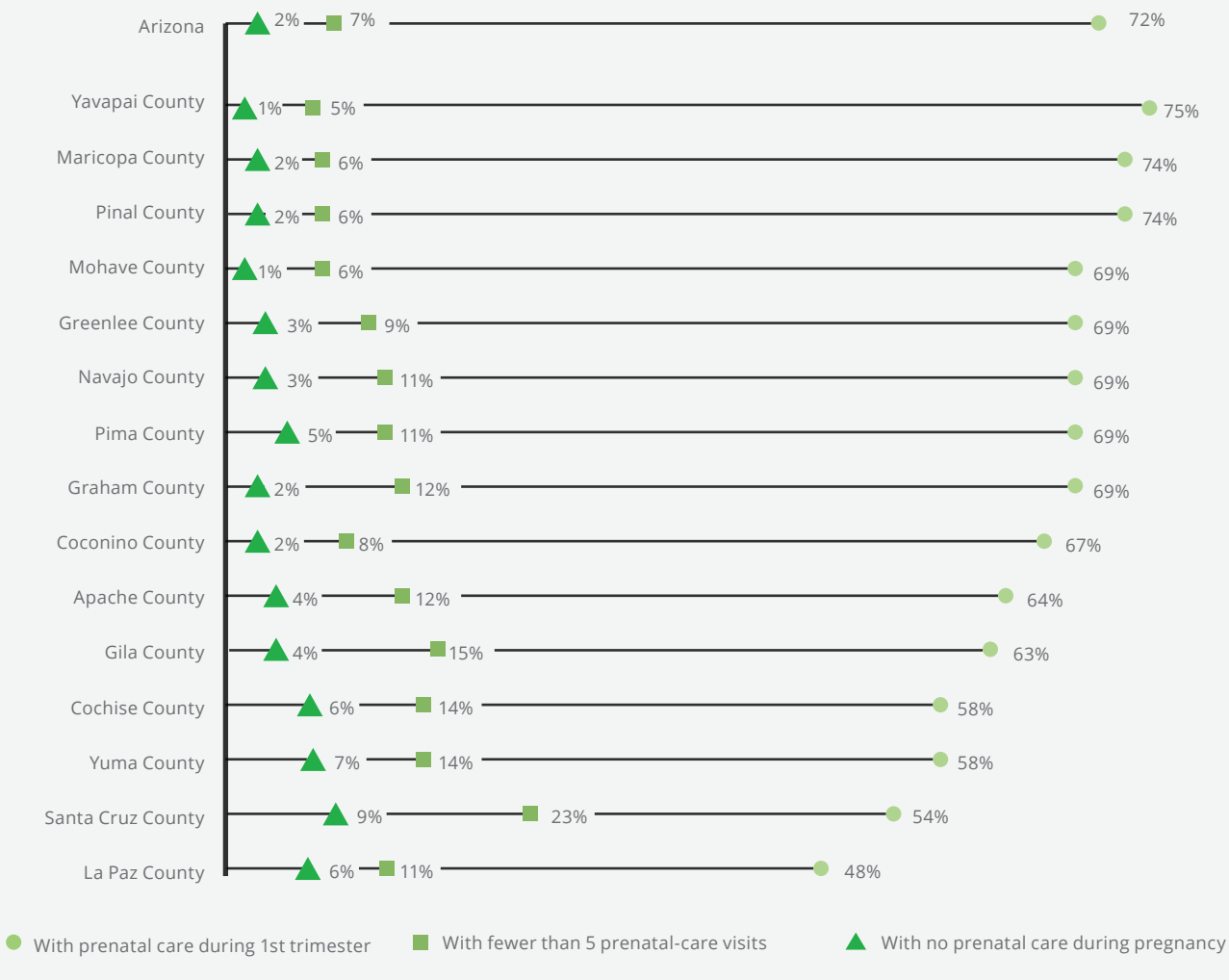




Source: Arizona Department of Health Services (2023). [Vital Statistics dataset]. Unpublished data received by request

Yavapai, Maricopa and Pinal counties had higher rates of births with prenatal care in the first trimester than the state as a whole, ranging from 74% to 75% (Figure 65). Conversely, less than half (48%) of births in La Paz County were to mothers who received prenatal care within their first trimester. Additionally, eight Arizona counties reported more than 1 in 10 births (10%) in which the mother had less than 5 prenatal care visits. In Santa Cruz County, 9% of births were to mothers who received no prenatal care during their first trimester, and 23% were to those who received fewer than five visits. Poor access to maternal health care (hospitals with labor and delivery units, birth centers and obstetric providers) is one factor these counties have in common that can contribute to these outcomes.[322,323,324] As of 2019, La Paz and Greenlee counties had no hospitals with labor and delivery units, birth centers or obstetric providers and Apache, Graham, Cochise and Santa Cruz counties had only one hospital or birth center each, many of which are not equipped to handle care for pregnant women and infants with health complications. Efforts to increase the number of women in Arizona with access to early prenatal care could improve the health outcomes of the state's mothers and babies, especially in these counties with lower access to maternal health care services.[325]

Figure 65. Prenatal care for mothers giving birth in Arizona, 2021



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

Maternal Characteristics

The immediate and long-term health outcomes of infants can be influenced by certain maternal characteristics, such as substance use. Babies born to mothers who smoked cigarettes during pregnancy are more likely to be born preterm, have low birth weight, die from sudden infant death syndrome and have weak lungs.[326,327] The percentage of births to mothers in Arizona who reported no cigarette smoking during pregnancy was consistently higher than the U.S. from 2016 to 2021, increasing from 92.3% in 2016 to 94.5% in 2021 (Figure 66). While the percentage of births to mothers in Arizona who did not smoke during pregnancy was higher in comparison to the U.S. as a whole, the reported percentage was still lower than the Healthy People 2030 target of 95.7% of pregnant women not smoking cigarettes.[328] Additionally, in 8 Arizona counties over 4.3% of births were to women who reported smoking during pregnancy in 2021, with Greenlee County reporting the highest percentage at 17.9%, meaning that nearly 1 in 5 births were to mothers who reported smoking cigarettes while pregnant (Figure 68).

Teenage parents often experience increased stress and hardship in comparison to other teenagers and older parents as they are more likely to maintain a lower socioeconomic status, require public assistance and are less likely to complete high school or college.[329,330,331,332] This can result in poor environments for supporting infant health and a higher likelihood of child abuse, neglect, neonatal death and sudden infant death syndrome.[333] Children born to teenage parents also tend to have poorer social outcomes, educational attainment and lower income as adults.[334,335] Births to teenage mothers declined in both Arizona (4.1%) and the U.S. (4.6%) from 2016 to 2021 (Figure 67). This varied by county, from nearly 1 in 10 births in Gila County (9.5%) and La Paz County (8.5%) to only 4% in Maricopa County (Figure 69). The Healthy People 2030 target for adolescent pregnancy is no more than 31.4 pregnancies for every 1,000 female adolescents ages 15-19.[336] In 2020, the pregnancy rate for female adolescents ages 15-19 in Arizona was 22.3 per 1,000, meaning Arizona clearly met the Healthy People target.[337] This aligns with a 30-year decline in birth rates seen nationally since 1990, a decline that accelerated between 2010 and 2020 and has been attributed to increased access to contraceptives and declines in teen sexual activity.[338,339]

Figure 66. Births to mothers who did not smoke cigarettes during pregnancy, 2016 to 2021

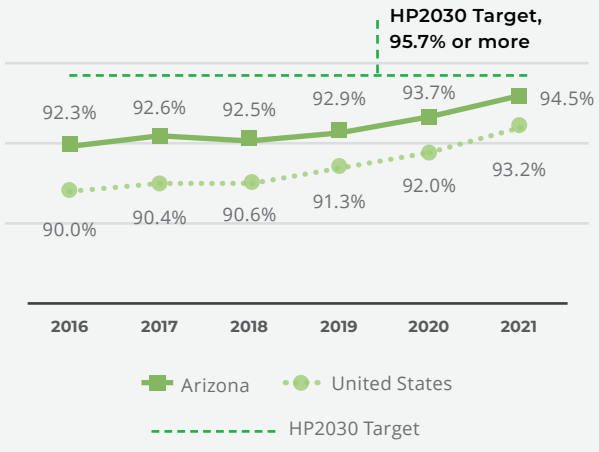
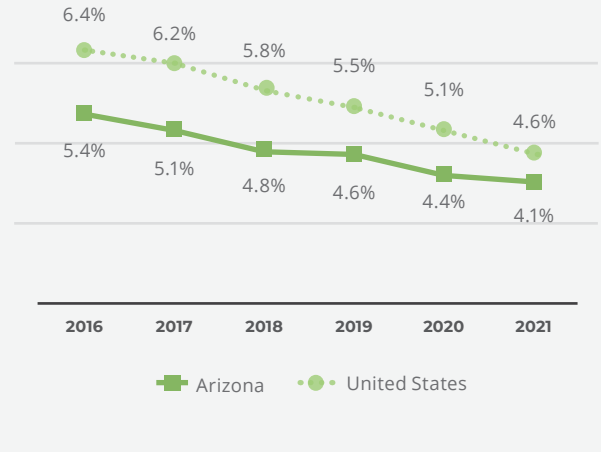


Figure 67. Births to mothers who were ages 19 and younger, 2016 to 2021



Source: Centers for Disease Control and Prevention, National Center for Health Statistics (2022). [Natality 2016 - 2021 on CDC WONDER Online Database, released in 2022]. Accessed at http://wonder.cdc.gov/ucd-icd10.html on Dec 2, 2022.

Note: The Healthy People 2030 target for maternal use of tobacco during pregnancy was decreased to 95.7% of females reporting abstaining from smoking cigarettes during pregnancy (from 98.6% for Healthy People 2020).

CHILD HEALTH & WELL-BEING

Figure 68. Births to mothers who reported smoking cigarettes during pregnancy, 2021

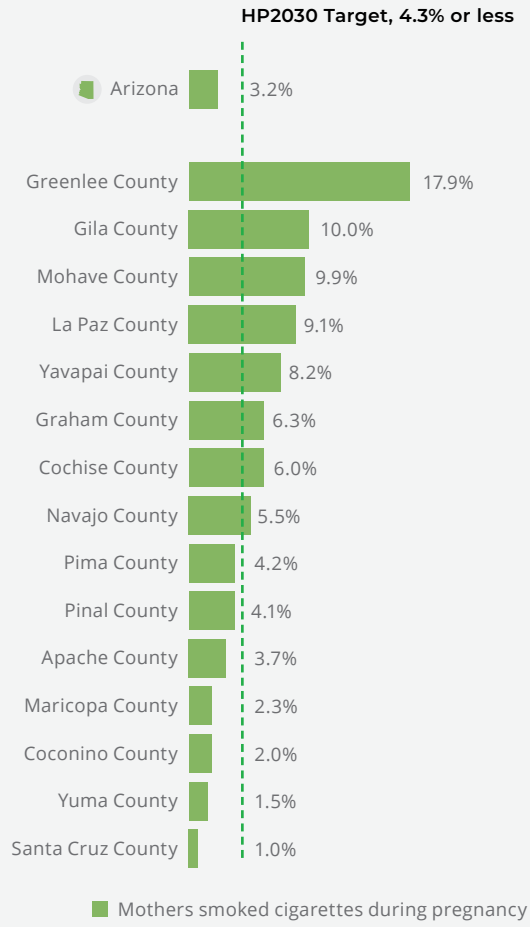
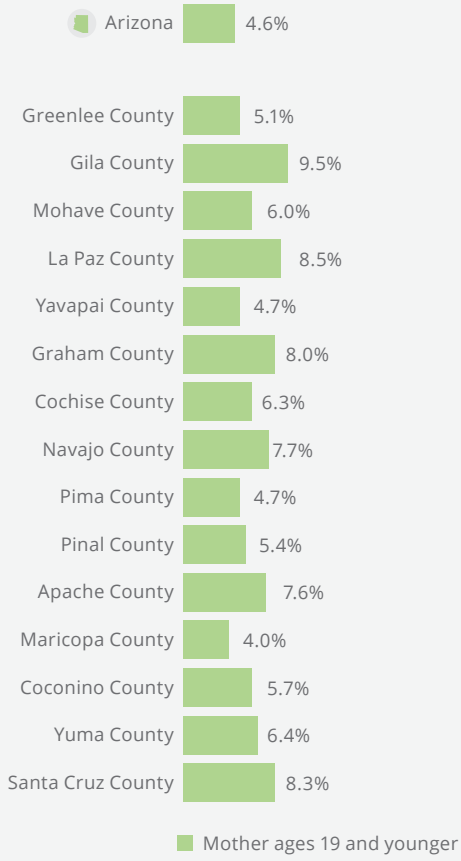


Figure 69. Birth to mothers who were ages 19 and younger, 2021

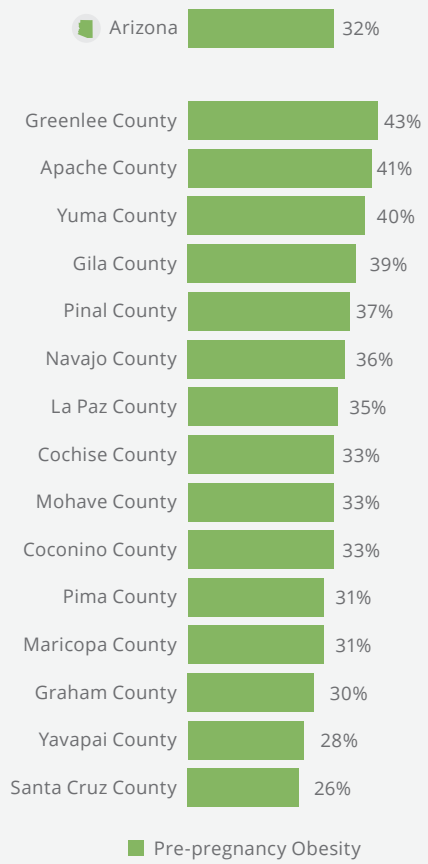


ADHS (2023). [Vital Statistics dataset]. Unpublished data received by request. Office of Disease Prevention and Health Promotion (2022). Healthy People 2030: Pregnancy & childbirth objectives, Indicator MICH-10.

CHILD HEALTH & WELL-BEING

There is an increased risk of birth complications, asthma, diabetes, heart disease and neonatal and infant mortality among children of mothers categorized as having maternal obesity.[340,341,342] In 2021, 32% of births, or approximately 1 in 3, in Arizona were to mothers identified as having obesity prior to their pregnancy (Figure 70), slightly higher than the national pre-pregnancy obesity rate (29%).[343] The rates of obesity prior to pregnancy varied across Arizona counties, from 43% in Greenlee County to 26% in Santa Cruz County. A variety of social determinants of health have been linked to the development of obesity, including low socioeconomic status, employment struggles, lack of health insurance and living in rural areas with fewer resources.[344,345,346] Adequate access to health care before, during and after childbirth can prevent maternal, neonatal and infant complications. This is accomplished through more maternal health care visits and planned deliveries at hospital facilities with more resources and technical expertise to mitigate potential complications.[347,348] Pregnant women in counties with low access to maternal health care such as La Paz, Greenlee, Apache, Graham, Cochise and Santa Cruz counties face more barriers to accessing necessary care for pregnancy-related complications, and these same counties have higher rates of pre-pregnancy maternal obesity that may necessitate more specialized care for optimal maternal and infant health.[349,350]

Figure 70. Births where mother had obesity pre-pregnancy, 2021



ADHS (2023). [Vital Statistics Births dataset]. Unpublished data.

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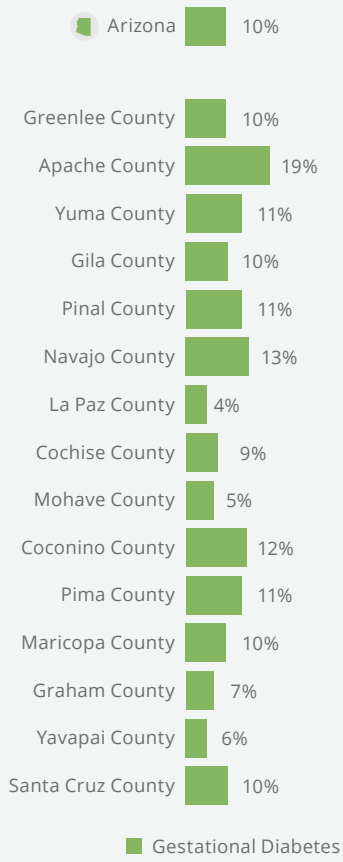
Gestational diabetes describes the development of insulin resistance during pregnancy. The condition increases the chances of an infant having low blood sugar, being larger than average at birth, needing to be delivered through cesarean section, being born preterm and developing type 2 diabetes and cardiovascular diseases later in life.[351,352] In 2021, 10% of births in Arizona were to mothers who had been diagnosed with gestational diabetes (Figure 71), compared to 7.8% of births nationally in 2020. This varied across Arizona counties from 19% of births in Apache County to 4% of births in La Paz County. Gestational diabetes is more common in pregnant women who have a family history of type 2 diabetes, have polycystic ovarian syndrome (PCOS) or who are African American, American Indian, Alaska Native, Hispanic or Latina, Native Hawaiian, Pacific Islander or Southeast Asian.[353,354] In areas with less resources and inadequate access to quality maternal health care, there is an increased likelihood of pregnant women developing gestational diabetes and potentially fewer resources for helping these women manage their condition and plan for a safe delivery.[355]

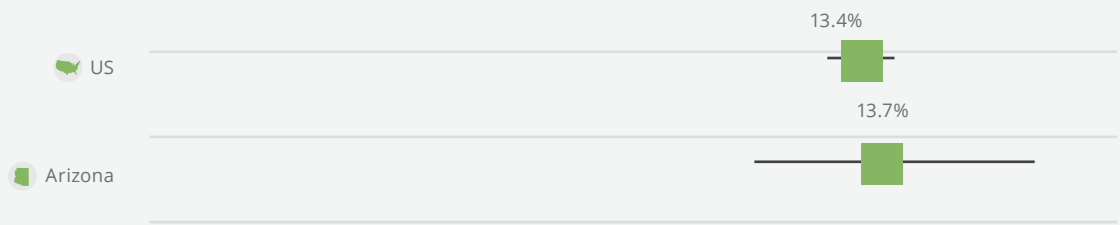
Figure 71. Births where mother was diagnosed with gestational diabetes, 2021



ADHS (2023). [Vital Statistics Births dataset]. Unpublished data.

Postpartum depression has a clear link to negative outcomes in infant health and development. Untreated postpartum depression can lead to infant sleeping, eating and behavioral problems, issues with maternal and infant bonding and increased infant developmental delays.[356,357] These delays have been observed in the cognitive, social, behavioral, emotional and motor development of infants. The prevalence of postpartum depression in Arizona and the U.S. do not significantly differ from one another (Figure 72). Addressing postpartum depression through early intervention is considered a high priority for Healthy People 2030 due to its health implications.[358] The United States Preventive Services Task Force (USPSTF) and American Congress of Obstetricians and Gynecologists (ACOG) recommend that women have their mental health assessed both during pregnancy and after birth during a postpartum visit to facilitate early identification and intervention.[359] In 2022, Arizona's state Medicaid program, the Arizona Health Care Cost Containment System (AHCCCS), implemented a policy requiring depression screenings during pregnancy and postpartum for all enrolled mothers.[360] Mothers who screen positively for depression are given referrals to treatment services. Groups that have higher rates of postpartum depression include American Indian and Alaska Native mothers, mothers who are under the age of 19 and mothers who smoked during or after pregnancy.

Figure 72. Mothers reporting postpartum depressive symptoms, 2020



Source: U.S. Centers for Disease Control and Prevention (2022). Selected 2016 Through 2020 Maternal and Child Health (MCH) Indicators. Retrieved from https://www.cdc.gov/prams/prams-data/selected-mch-indicators.html

Note: Error bars reflect 95% confidence intervals.

Preterm Birth and Low Birth Weight

Preterm birth is defined as birth at less than 37 weeks of gestation. It poses dangers and complications to infant health including increased risk of respiratory, immune, neurological, vision, hearing, intestinal and developmental issues.[361] Infants born preterm also have increased rates of mortality during their first 28 days to 1 year of life, longer hospitalization after birth, increased health care costs and physical impairments.[362,363] The risk of preterm birth is increased with teen pregnancies, pregnancies over the age of 35, low income, infection and substance use.[364] The Healthy People 2030 target for the percentage of preterm births is 9.4% or fewer.[365] Preterm births in Arizona and the U.S. were consistently above this target from 2016-2021 and reached a 15-year high between 2020 and 2021.[366] Arizona preterm births increased to a high of 12.3% in 2021 (Figure 73). Twelve Arizona counties were above the 9.4% target, with Greenlee County (19.7%) and Gila County (14.6%) having the highest rates of preterm births (Figure 75). These 2 counties also had the highest reported rates of cigarette smoking during pregnancy, which is likely a contributing factor (see Figure 68). The COVID-19 pandemic may have also contributed to this increase in preterm births, both because COVID-19 infections during pregnancy increase risk of preterm birth by 40% and the strain on the health care system during the pandemic may have resulted in an increase in medically unnecessary Cesarean sections.[367]

Low birthweight is defined as weighing less than 5 pounds and 8 ounces at birth. Babies born in this condition are at an increased risk of infant mortality and long-term health problems such as diabetes, hypertension and cardiac disease.[368,369] Low birthweight risk factors include low maternal weight during pregnancy, preterm birth, teen pregnancies, pregnancies over the age of 35, air pollution, high blood pressure, diabetes and substance use.[370] While there is no Healthy People 2030 target for low birthweight, Arizona low birthweight births were higher than the Healthy People 2020 goal of 7.8% from 2016-2021 and were last reported to be 8.5% in 2021 (Figure 74).[371] Nine Arizona counties had higher percentages than the Healthy People 2020 goal in 2021. Greenlee County had the highest rate of preterm birth at 14.5% (Figure 76). As with preterm birth, this may be explained, in part, by the county's higher rates of maternal smoking during pregnancy (see Figure 68).

Figure 73. Births that were preterm (less than 37 weeks gestation), 2016 to 2021

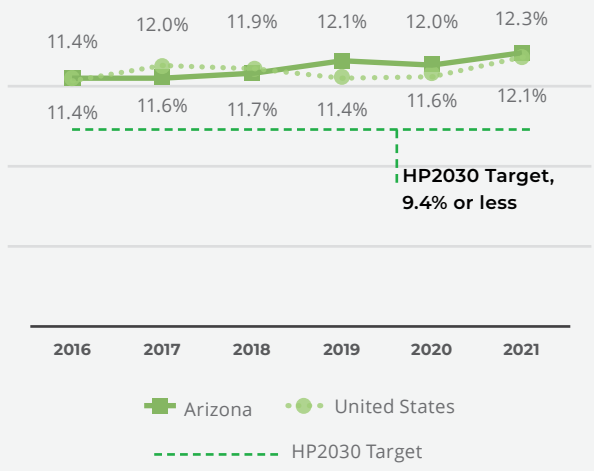
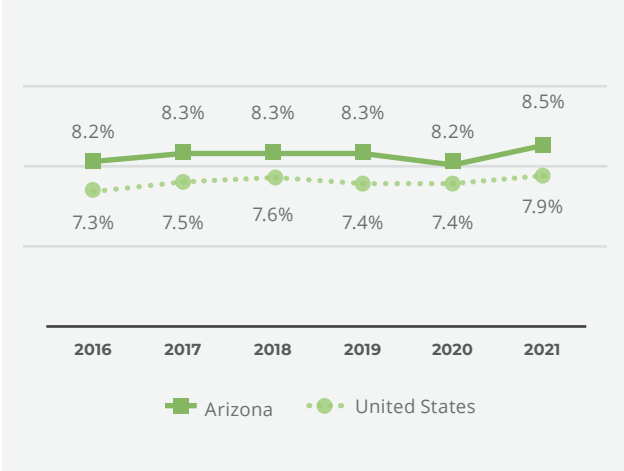


Figure 74. Births with low birthweight (less than 2,500 grams), 2016 to 2021



Sources: Centers for Disease Control and Prevention, National Center for Health Statistics (2022). [Natality 2016 - 2021 on CDC WONDER Online Database, released in 2022]. Accessed at https://wonder.cdc.gov/natality.html on Dec 2, 2022.

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Figure 75. Births that were preterm (less than 37 weeks gestation), 2016 to 2021

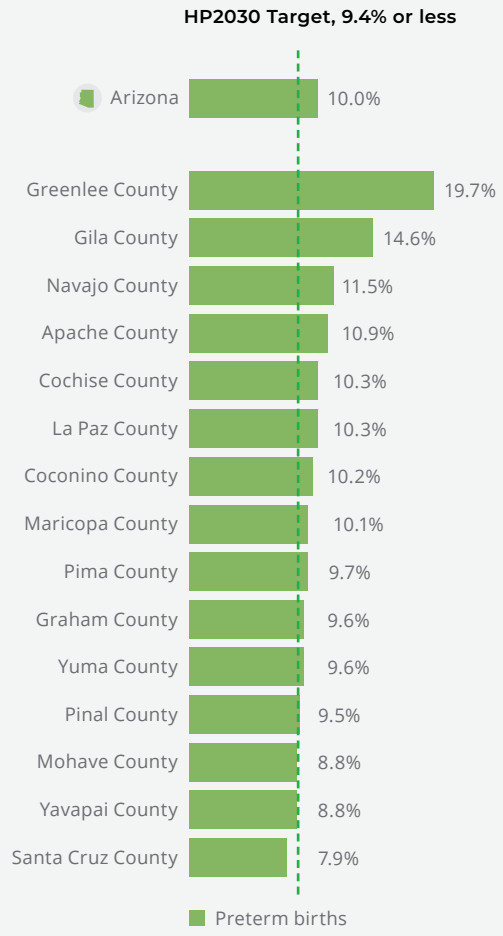
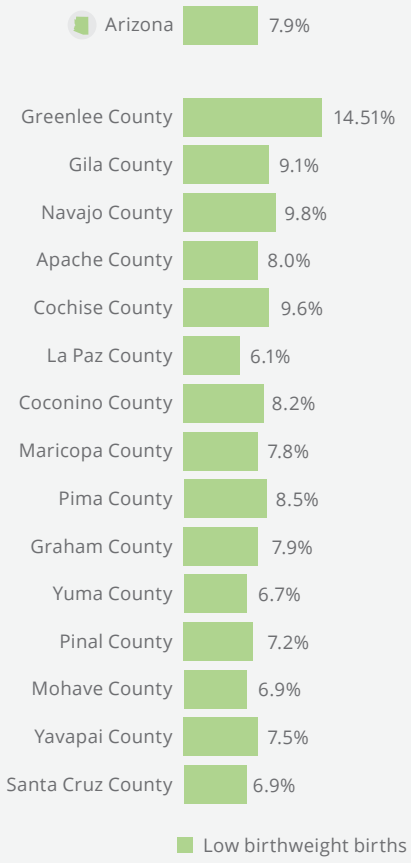


Figure 76. Births that were low birthweight (less than 2,500 grams), 2016 to 2021

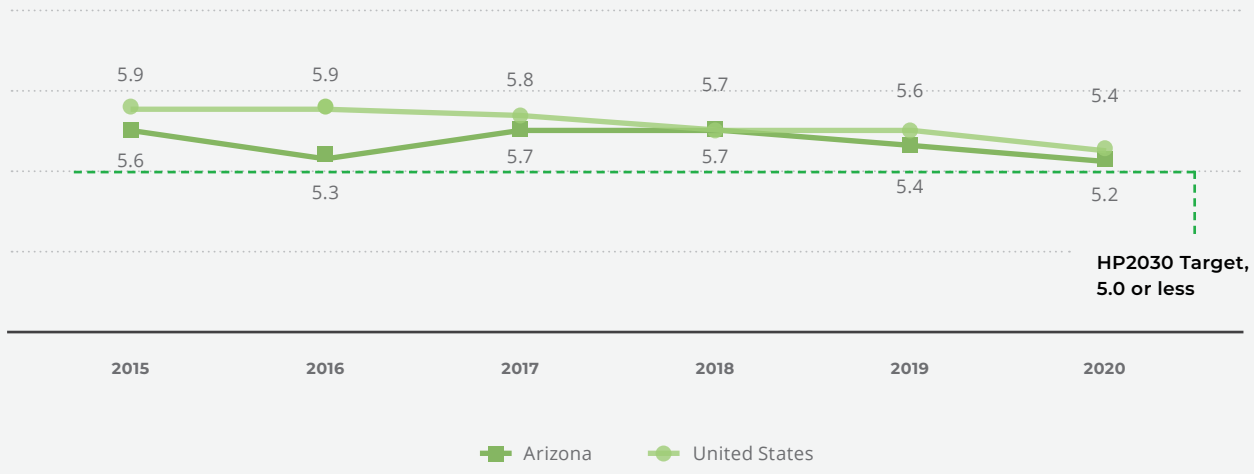


ADHS (2023). [Vital Statistics dataset]. Unpublished data received by request. Office of Disease Prevention and Health Promotion (2022). Healthy People 2030: Pregnancy & childbirth objectives, Indicator MICH-07.

Infant and Child Mortality

Infant mortality refers to the death of infants under 1 year of age. Some of the most prevalent causes of infant mortality in Arizona and the U.S. include congenital abnormalities, low birth weight, preterm birth, pregnancy complications, sudden infant death syndrome (SIDS) and unintentional injuries.[372,373,374] Arizona had the 20th lowest infant mortality rate in the U.S. in 2020 and was consistently the same as, or lower than, the U.S. from 2016 to 2020 (Figure 77).[375] The mortality rate steadily decreased from 5.7 per 1,000 live births for both Arizona and the U.S. in 2018 to 5.2 per 1,000 in Arizona and 5.4 per 1,000 in the U.S. in 2020. However, neither Arizona nor the U.S. met the new Healthy People 2030 target of 5.0 or fewer infant deaths per 1,000 live births.[376] Increasing access to timely prenatal care, newborn screening and home visiting programs may help decrease infant mortality rates and reach the Healthy People 2030 target.[377]

Figure 77. Infant mortality rate (per 1,000 live births), 2015 to 2020



Centers for Disease Control and Prevention, National Center for Health Statistics (2021). [Linked Birth / Infant Death Records, 2007-2020 on CDC WONDER Online Database, released in 2023]. Accessed at https://wonder.cdc.gov/lbd-current.html on July 17, 2023

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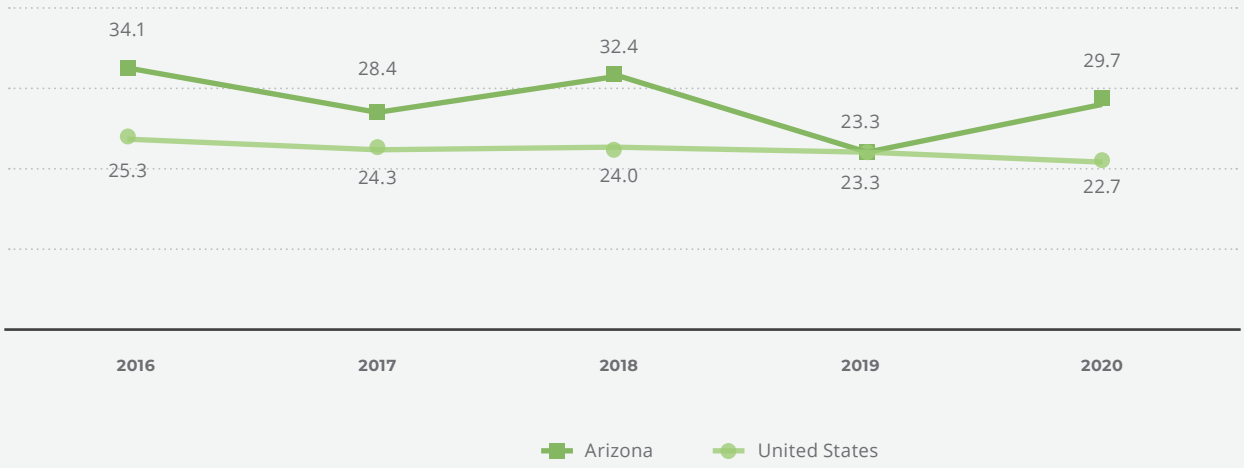
The mortality rate of young children ages 1 to 4 was higher in Arizona than the U.S. between 2016 and 2020, peaking at 32.4 deaths per 100,000 children in 2018 (Figure 78). Arizona and the U.S. had the same mortality rate in 2019 at 23.3 per 100,000, which was the lowest rate for Arizona from 2018 to 2020. This rose to 29.7 deaths per 100,000 in 2020. Accidents are the most common cause of death for this age group.[378]

Figure 78. Crude mortality rates (deaths per 100,000 population) for children (ages 1-4), 2016 to 2020

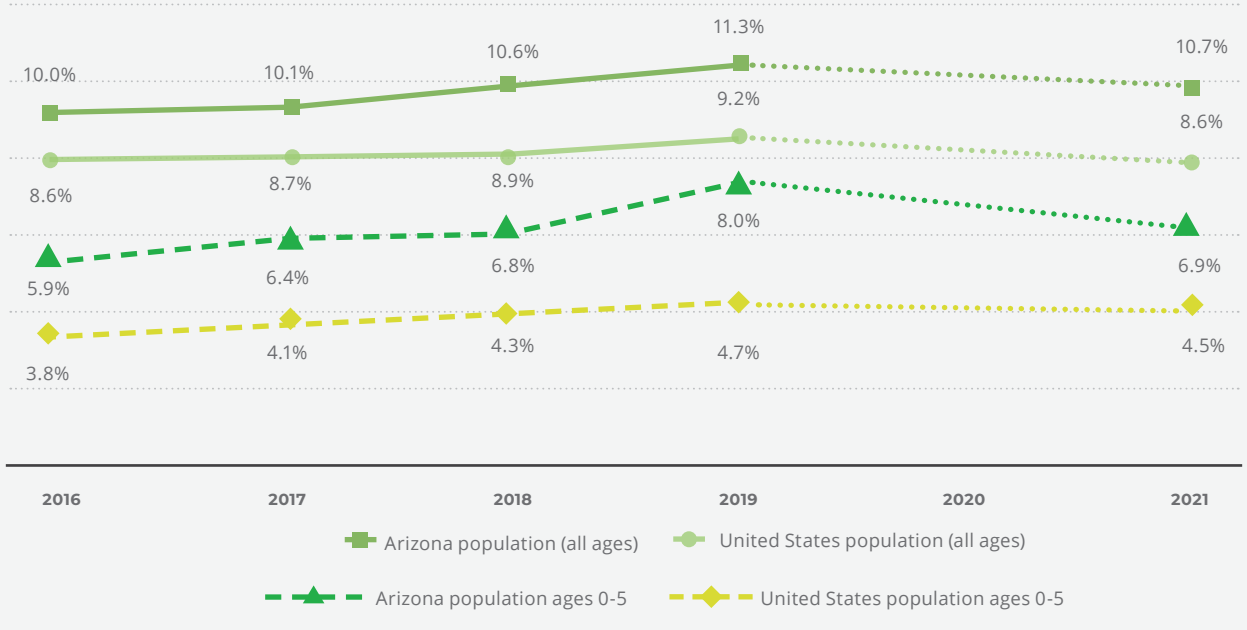


Source: Centers for Disease Control and Prevention, National Center for Health Statistics (2021). [Underlying Cause of Death 1999-2020 on CDC WONDER Online Database, released in 2021]. Accessed at http://wonder.cdc.gov/ucd-icd10.html on July 17, 2023

Health Insurance Coverage and Well-Child Visits

Health insurance coverage is an important indicator of whether families can access, afford and utilize medical care. In Arizona, children up to 19 years of age can enroll in health insurance through AHCCCS, Arizona's Medicaid program, or KidsCare, Arizona's Children's Health Insurance Program. KidsCare is available for children whose families earn too much for AHCCCS but do not earn enough to afford private health insurance.[xxxvii] From 2016 to 2019, the percentage of the overall population and young children that were uninsured in Arizona was steadily increasing, peaking at 11.3% for all ages and 8% for young children in 2019 (Figure 79). The U.S. showed a similar trend in increasing uninsured rates, though these rates were consistently lower than Arizona. Uninsured rates in 2021 showed declines across all groups, a trend that was likely linked to pandemic-related federal policies that prohibited states from disenrolling people from Medicaid during the public health emergency and provided enhanced subsidies to improve affordability of Marketplace coverage.[379] Despite these efforts and others, uninsured rates in the overall population are still high and do not meet the Healthy People 2030 target (92.4% of people with health insurance).[380] One primary reason for this is perceived cost, with more than two-thirds (69.6%) of uninsured U.S. adults citing their inability to pay for health insurance as the primary reason they were uninsured.[381] It is also likely that families who qualify for low- or no-cost health insurance aren't aware that they qualify or face administrative barriers to enrolling. Low-income children in Arizona have the highest uninsured rates and only about 87% of children who are eligible for AHCCCS or KidsCare in Arizona were enrolled in 2019.[382]

Figure 79. Trends in percent of population without health insurance coverage (all ages and children ages 0-5), 2016 to 2021 ACS



Source: U.S. Census Bureau. (2022). 2016 to 2021 American Community Survey single-year estimate, Table B27001

Note: The American Community Survey considers persons who access health care through the Indian Health Service (IHS) uninsured. Due to the effects of the COVID-19 pandemic on data collection for the 2020 ACS, the 2020 single-year ACS estimate had particularly poor data quality, such that the U.S. Census Bureau deemed the data 'experimental.' Due to these data quality concerns, 2020 data are not presented here.

[xxxvii] For more information on AHCCCS and KidsCare see: https://www.azahcccs.gov/Members/GetCovered/Categories/KidsCare.html

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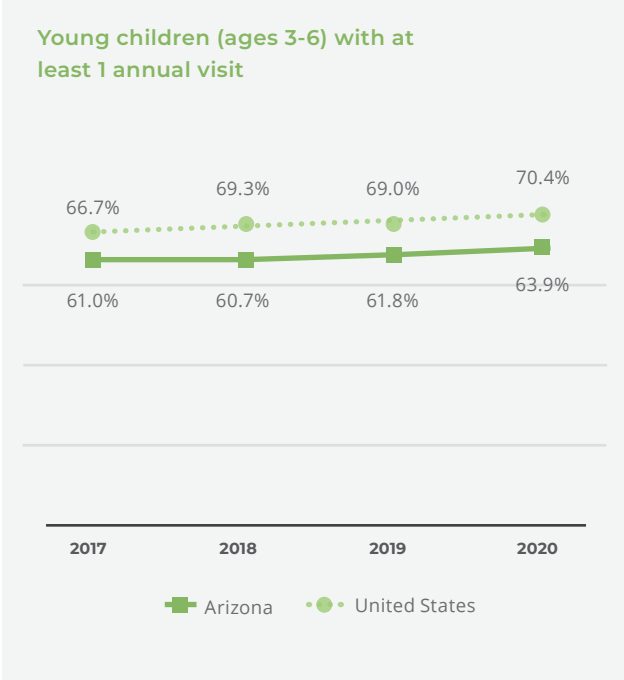
In the early years of a child's life, well-child visits provide important preventative care, including scheduled immunizations, health screenings and tracking of developmental milestones.[383] The proportion of AHCCCS-enrolled toddlers in Arizona who had at least 6 well-child visits in their first 15 months of life has been steadily increasing since 2017, though it was still less than two-thirds of toddlers in 2020 (63.6%) (Figure 80). A similar proportion of AHCCCS-enrolled young children (ages 3-6) in Arizona had at least 1 well-child visit in 2020 (63.9%). Particularly for young children, the proportion with at least one well-child visit in the last four years fell below trends seen nationally (70.4% in 2020).

Figure 80. Trends in percent of toddlers and young children enrolled in AHCCCS/Medicaid meeting standards for well-child visits, 2017 to 2021

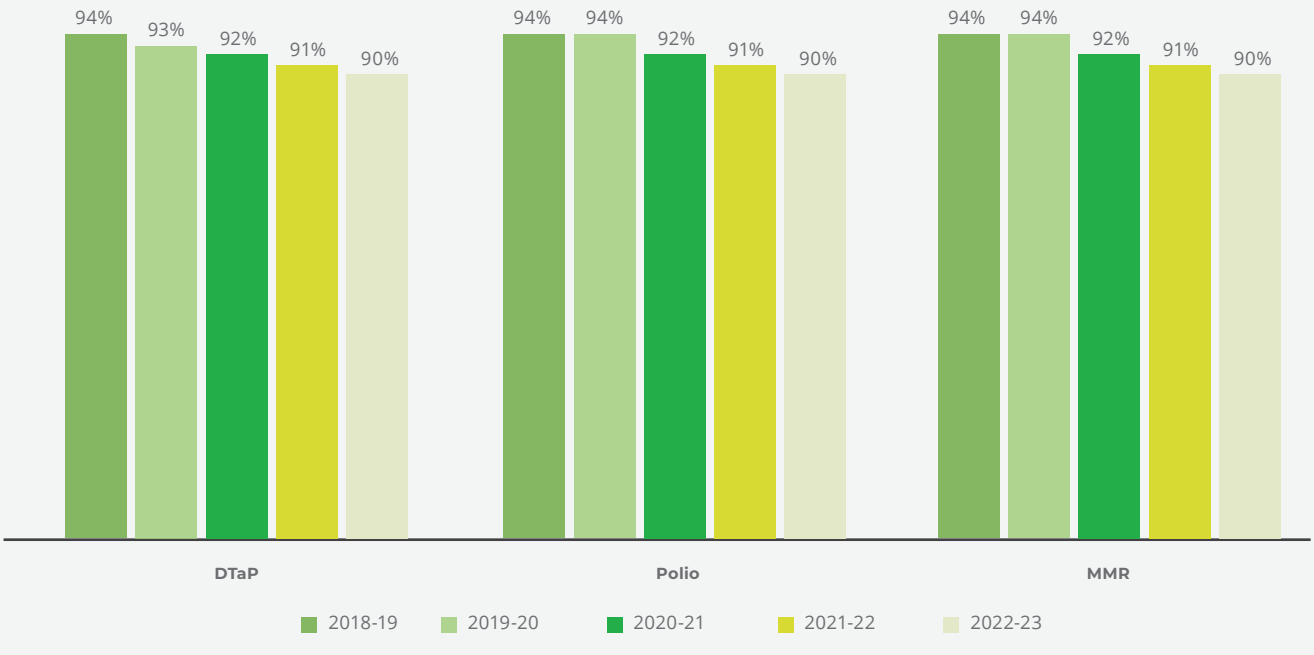


Source: Centers for Medicare & Medicaid Services (2021). [Children's Health Care Quality Measures 2017 to 2021]. Retrieved September 27, 2021 from https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/childrens-health-care-quality-measures/index.html

Immunizations & Infectious Disease

Immunization against preventable diseases protects children and the surrounding community from illness and potentially death, protecting not only the vaccinated person but also providing protection to individuals unable to be vaccinated through community immunity.[384] 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 for medical, personal or religious reasons.[385] Since the 2018-19 school year, kindergarteners in Arizona showed steadily declining rates of immunization for the three major required vaccines series (DTaP, polio and MMR) (Figure 81). MMR immunization dropped to 90% in 2022-23, well below 95% - the Healthy People 2030 target and the recommended level of immunization needed to prevent community spread of measles, specifically.[386] Some of this decline in immunization can be explained by disparities in health care access that were exacerbated by the COVID-19 pandemic, including barriers to health care access that specifically impacted children who are Black, Hispanic, low-income, live in rural areas or lack health insurance.[387] National survey data from the Pew Research Center also show that declining childhood immunization rates, particularly for MMR, can be linked to parents' shifting attitudes towards vaccines. While the majority of parents continue to express confidence in the value of childhood vaccination for MMR, a sizeable proportion expressed concerns about the necessity of vaccines, potential side effects and the trustworthiness of available medical information.[388]

Figure 81. Trends in percent of Arizona kindergarteners with select required immunizations by series, 2018-19 to 2022-23



Source: Arizona Department of Health Services (2021). Kindergarten Immunization Coverage by County, 2018-19 to 2022-23 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 remains 95%.

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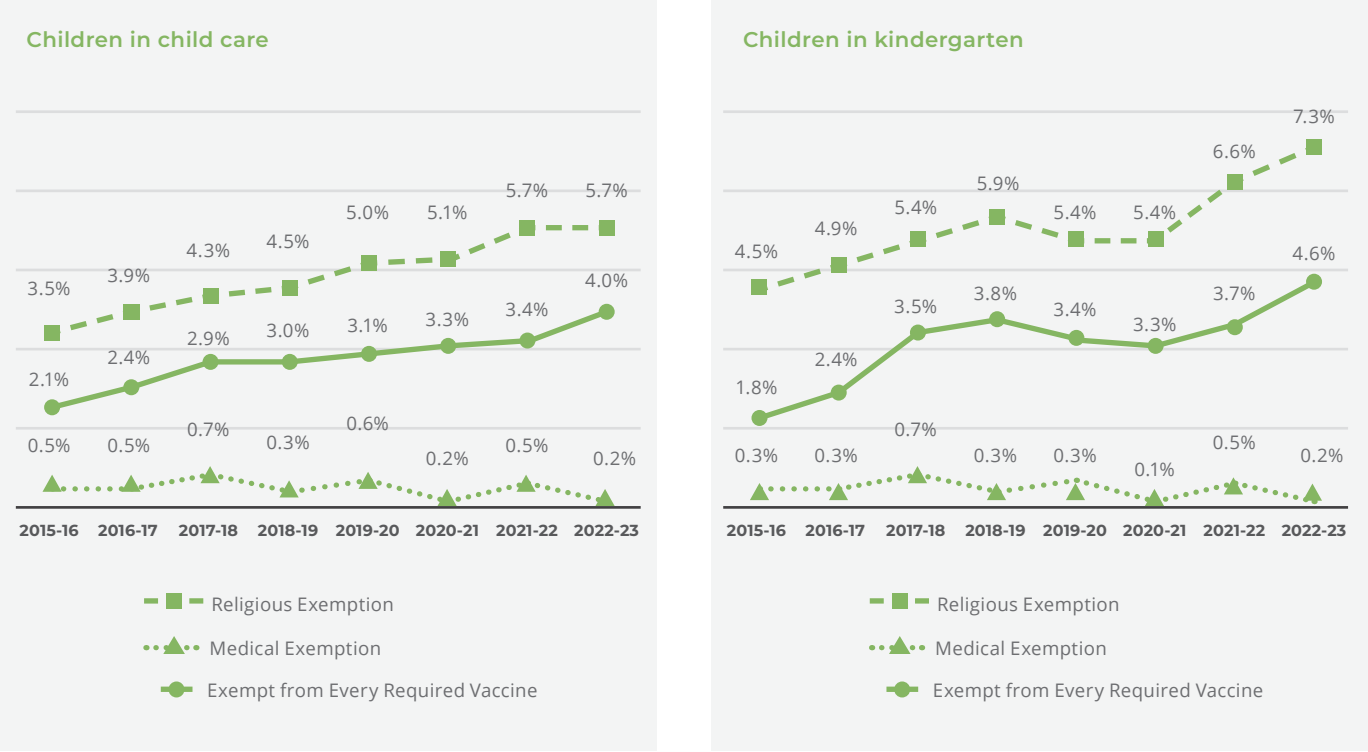
In recent years, there has been a rise in the percentage of Arizona families requesting exemptions from required vaccinations for their young children, which can be linked to these shifting attitudes toward vaccinations among parents, including declining support for vaccine requirements for children to attend public schools.[389] For children in child care settings, the rates of exemption from all required vaccines steadily increased each year from 2015-16 to 2022-23, with 4% of children enrolled in child care exempt from all vaccines during the 2022-23 school year (Figure 82). For children in kindergarten, rates of exemptions from all required vaccines initially showed a similar increasing trend between 2015-16 and 2018-19. In contrast, exemptions from all required vaccines for kindergarteners dropped slightly in 2019-20 and 2020-21 but rebounded and reached 4.6% in the 2022-23 school year.

Figure 82. Trends in exemption rates for required vaccines for children in child care and kindergarten settings, 2015-16 to 2022-23



Source: Arizona Department of Health Services (2023). Child care Immunization Coverage by County, 2015-16 through 2022-23 School Years; Kindergarten Immunization Coverage by County, 2015-16 through 2022-23 School Years. Retrieved from: https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage

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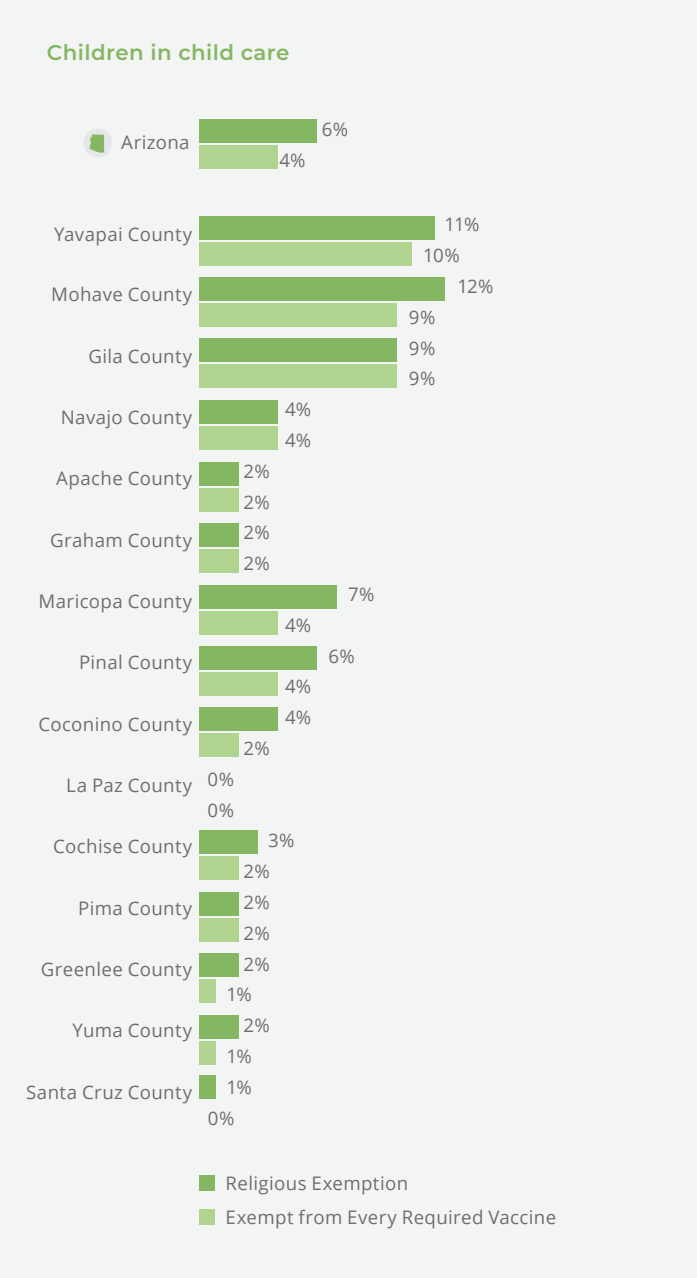
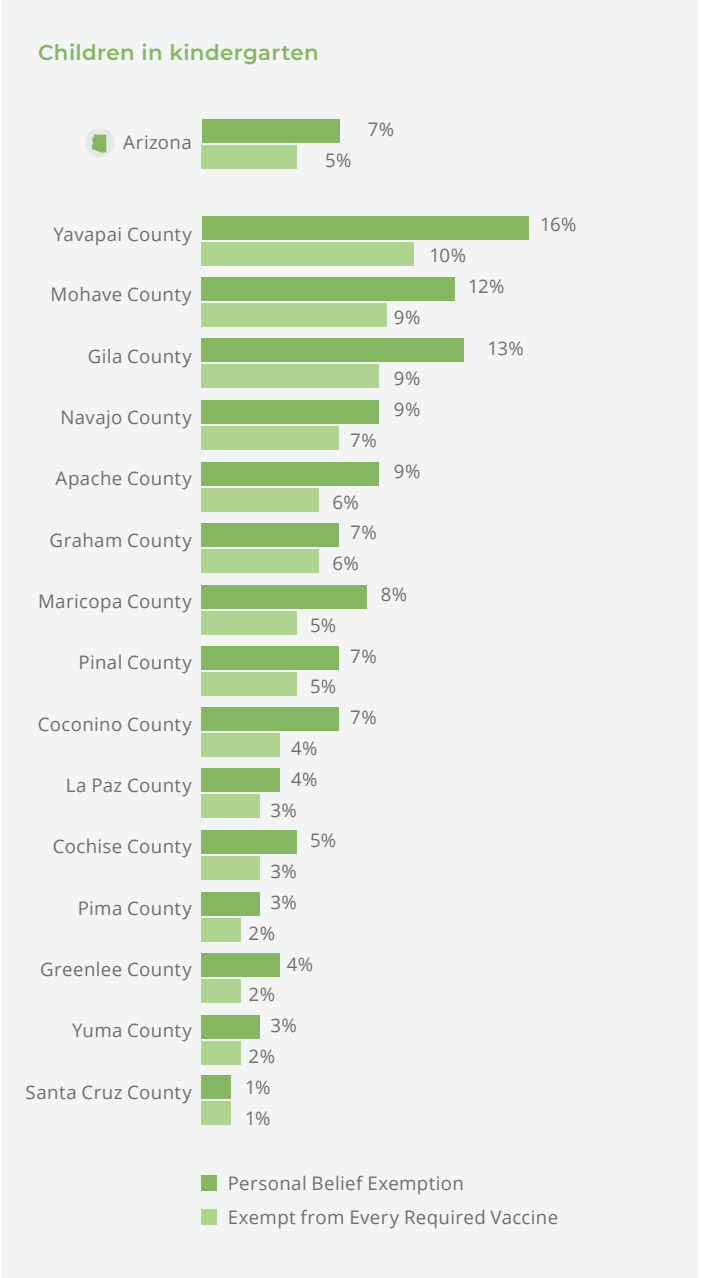
When viewed by county, vaccine exemption rates in 2022-23 varied widely. In Santa Cruz, Yuma and Greenlee counties, very few children in child care and kindergarteners had exemptions from all required vaccines (Figure 83). In contrast, six counties (Yavapai, Mohave, Gila, Navajo, Apache and Graham) had rates of exemptions for all required vaccines for kindergarteners that were over 5%, meaning they did not meet the 95% target for community immunity for measles referenced previously. Notably, 1 in every 10 kindergarteners (10%) in Yavapai County was exempt from all required vaccines in 2022-23.

Figure 83. Exemption rates for required vaccines for children in child care and kindergarten settings by county, 2022-23





Source: Arizona Department of Health Services (2021). Kindergarten Immunization Coverage by County, 2022-23 School Year; Child care Immunization Coverage by County, 2022-23 School Year. Retrieved from https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage

Adverse Childhood Experiences

Adverse childhood experiences (ACEs) include traumatic or stressful life events experienced before age 18. ACEs are associated with an increased risk of numerous poor health outcomes, as well as negative effects on educational achievement and future employment, with risk increasing as an individual's ACE score increases.[390] According to the 2020-2021 National Survey of Children's Health (NSCH), 14.2% of young children (ages birth to 5) in Arizona experienced two or more ACEs, as reported by their parents, compared to 9.1% of young children nationwide (Figure 84). Previous NSCH data (2018-19) showed that ACEs were more prevalent among Arizona children with special health care needs, children living in poverty and American Indian, multiracial and Black children.[391]

The NSCH also includes items intended to capture flourishing among children, characterized by healthy social and emotional development and an open and engaged approach to learning.[392] The survey includes four items that ask about children's attachment with their parent, resilience, contentment with life and interest and curiosity about new things. The majority (80.5%) of young children surveyed in Arizona met all 4 flourishing items, a comparable proportion to young children across the U.S. (80.8%). Despite higher ACE scores, young children in Arizona were significantly less likely to have two or fewer flourishing items (1.2%) compared to young children across the U.S. (4.5%) (Figure 85). These higher flourishing scores coupled with higher ACE scores among Arizona children point to the reality that childhood flourishing can, and does, exist amid adverse experiences and can potentially help mitigate their negative health effects.[393] Across different levels of exposure to ACEs, children in families with high levels of resilience and connection, including working together to solve problems, staying hopeful in difficult times and talking together about things that matter, show higher rates of flourishing.[394]

Figure 84. Children ages 0-5 with two or more adverse childhood experiences (parent reported), 2020-2021 NSCH

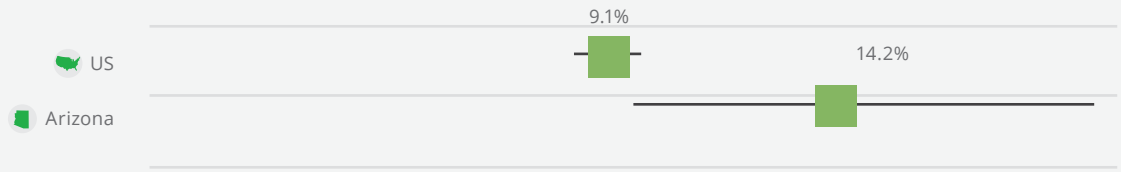
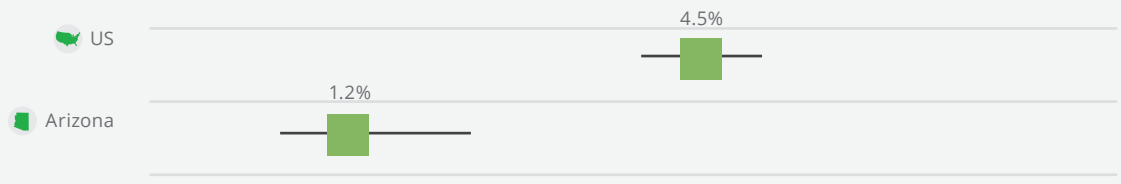


Figure 85. Children ages 6 months to 5 meeting two or fewer flourishing items (parent reported), 2020-2021 NSCH



Source: Child and Adolescent Health Measurement Initiative (2022). National Survey of Children's Health 2020-2021. Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). Retrieved on 08 Jan 2023 from www.childhealthdata.org

Note: Error bars represent 95% confidence intervals. The National Survey of Child Health (NSCH) uses an adapted version of the ACE survey that can be validly reported by parents and caregivers. For this reason, questions about abuse and neglect are excluded.

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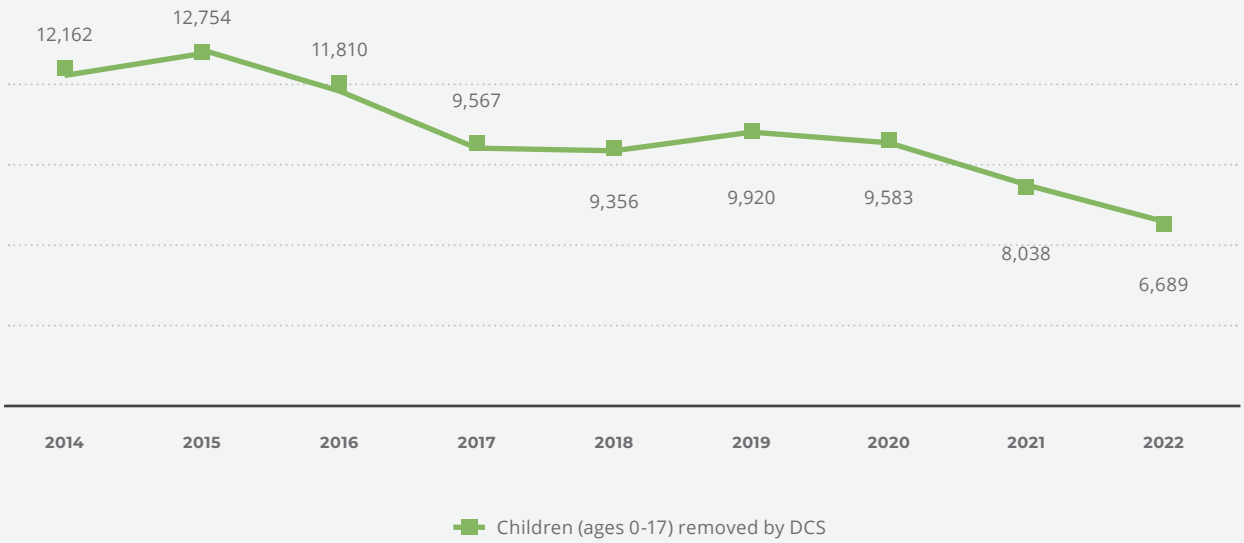
In situations where the harm in remaining with their family is determined to be too great to a child, they may be removed from their home, either temporarily or permanently. Since 2014, the number of children removed from their home by the Department of Child Safety (DCS) was nearly cut in half, from 12,162 children (ages birth to 17) in 2014 to 6,689 in 2022 (Figure 86).

This major reduction in removals is tied to multiple intentional efforts by DCS over the past decade to improve Arizona's child welfare system and safely reduce the number of children in foster care.[395,396,397] One notable effort was the work to better define instances of neglect and reduce unnecessary investigations of families. After a 2015 review found that DCS hotline staff had significant discretion and little clarity in determining cases of neglect, DCS provided coaching for hotline staff and developed an improved decision-making protocol with clearer guidance. This resulted in screened-in cases declining from 70% to 55%.[398] In March 2022, Arizona also passed legislation (SB 1050) which redefined neglect to have a stricter definition, reducing the likelihood that children are separated from their families simply for living in poverty.[399,400]

Figure 86. Children (ages 0-17) removed by DCS, 2014 to 2022



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

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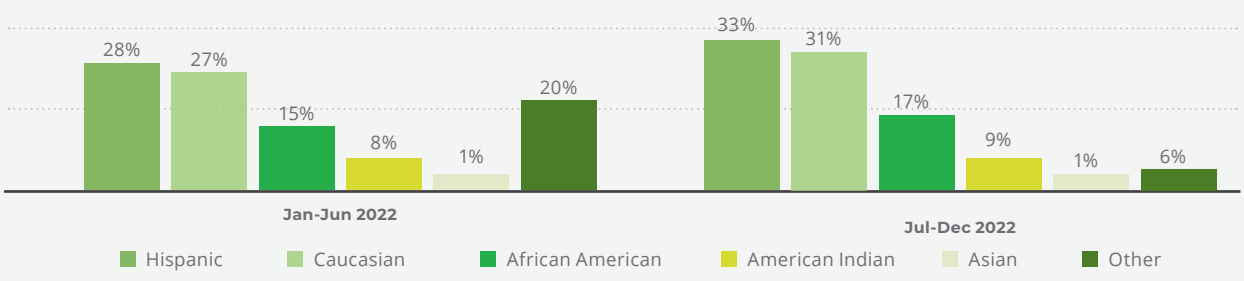
While the number of children in out-of-home care remained relatively stable between January 2018 and December 2020, that number dropped notably in the past few years (Figure 87). From January 2021 to December 2022, the number of children (ages birth to 17) in out-of-home care dropped from 14,767 to 11,969. Young children (ages birth to 5) followed the same trend seen across all children, consistently making up around 40% of children in out-of-home care.

Despite removals and children in out-of-home care declining, African American and American Indian children continue to be overrepresented in the DCS system. Between July and December 2022, African American children made up 17% and American Indian children made up 9% of children in out-of-home care (Figure 88), while African American and American Indian individuals each make up 6% of the Arizona population (see Figure 5). Addressing this disproportionality of African American and American Indian children in the DCS system is another area of targeted effort by the agency. In June 2023, Mathematica published the Arizona Department of Child Safety Next Event Study, which aimed to identify disparities in DCS engagement and provide recommendations to further reduce unnecessary investigations and removals.[401] DCS has developed several strategic initiatives to reduce these disparities, including implementing standardized training for staff and increasing involvement of family and community members in decision-making processes.[402]

Figure 87. Children in out-of-home care by age group, Jan 2018 to Dec 2022

Figure 88. Children in out-of-home care by primary race/ethnicity, Jan 2018 to Dec 2022



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

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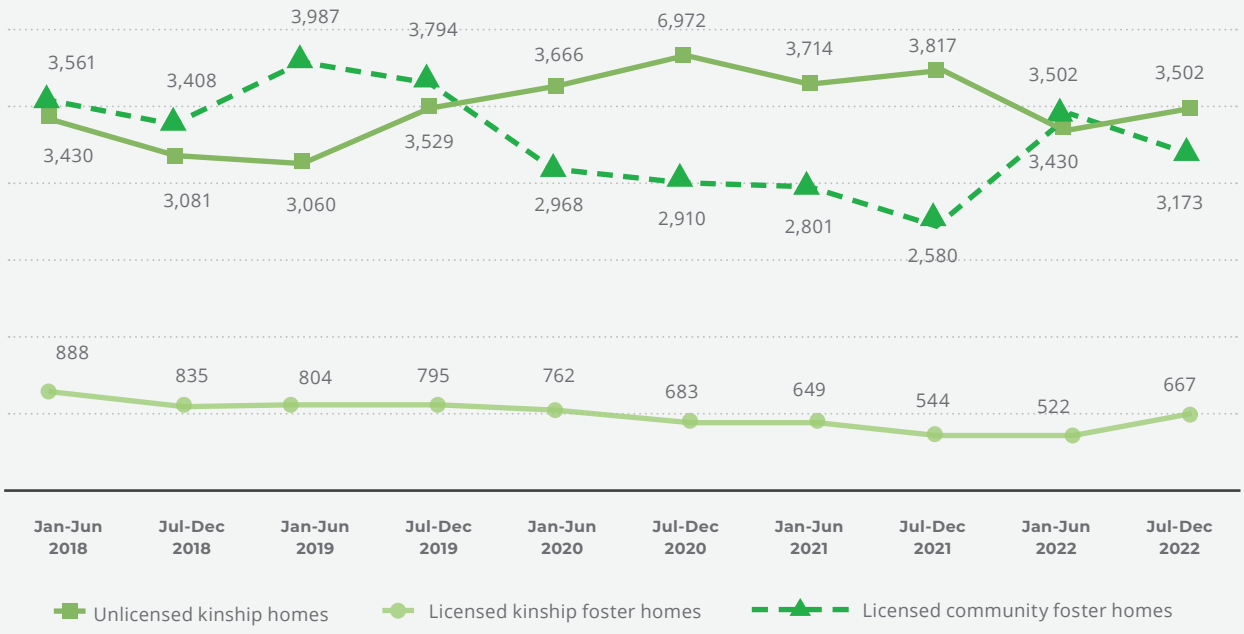
The Family First Prevention Services Act, signed into federal law on February 9, 2018, aims to ensure children are placed in the least restrictive, most family-like setting appropriate to their unique circumstances when foster care is needed. One effect of the Family First Prevention Services Act has been an increased focus on kinship placements, which are placements of children with relatives or close family friends.[403] In recent years, the number of unlicensed kinship homes has even exceeded the number of foster homes[xxxviii] in the state. While the number of licensed kinship homes has been notably smaller and was steadily decreasing, it increased by more than 100 in 2022, from 522 to 667 (Figure 89). This increase is likely related to several changes at DCS, including efforts to reduce barriers to licensure (e.g., waiving some fingerprint clearance card requirements) and funds to assist kinship caregivers with meeting licensing requirements (e.g., purchasing car seats). Additionally, an increase in the monthly kinship stipend (from $75/month to $300/month) for unlicensed kinship homes can help support relatives, such as grandparents, who are caring for children even if they are not currently able to pursue becoming a licensed foster home.[404]

Taken together, child welfare data shows that while many children in Arizona face significant challenges such as adverse childhood experiences, work is being done to promote family preservation, pursue more equitable outcomes for Black and Indigenous children and support the relatives and caregivers who step in when children need them.

Figure 89. Number of licensed foster homes and unlicensed kinship homes in Arizona, Jan 2018 to Dec 2022



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

[xxxviii] Licensed foster homes are homes where a caregiver has gone through the licensing process and has been granted a foster care license through the DCS Office of Licensing and Regulation (OLR). In kinship foster homes, the caregiver is related to or already known to the foster child, such as a grandparent or family friend. Community foster homes have caregivers who are not related to or known to the child (non-kinship). Licensed foster homes (both kinship and community) are monitored by a foster care licensing agency that can provide additional supports to foster families and help them maintain their licensing.
[Source: https://dcs.az.gov/resources/faq/question-what-are-different-types-kinshipfoster-care]

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