

2021

Building Bright Futures

Arizona's Early Childhood Opportunities Report

FIRST THINGS FIRST

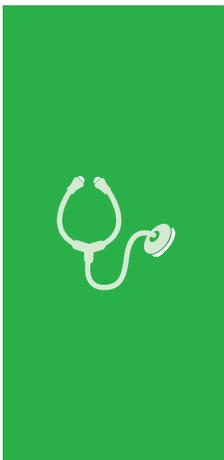
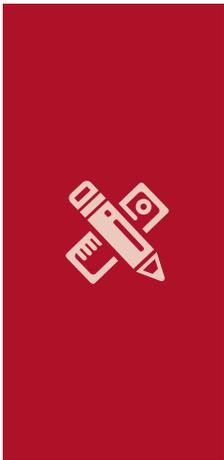
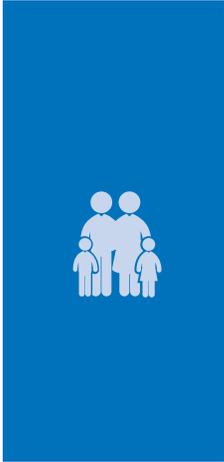


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INTRODUCTION

First Things First was created by Arizonans to help ensure that Arizona children have the opportunity to arrive at kindergarten prepared to be successful. Each year, the statewide First Things First Board and its affiliated regional partnership councils make decisions about which early childhood strategies to fund that will impact the health 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 *Big Picture of Arizona’s Little Kids* section (pages 6 to 10) provides state-national comparisons in three key areas: strong families, healthy children and educated young students. The document also describes ways in which First Things First, as an early childhood system partner, is working to expand opportunities for children to develop the tools they need to be ready for school and set for life.
- Our *Issue Essay*, “Arizona Must Not Rebuild on a Cracked Foundation,” offers a glimpse into how COVID-19 may have exacerbated the challenges babies, toddlers and preschoolers faced in several key areas prior to the pandemic. It also encourages community leaders and policymakers to center young children and their families in efforts to help Arizona emerge from the pandemic stronger than ever.
- Lastly, 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. These summaries provide information on how Arizona’s children were faring prior to COVID-19; offers highlights on any major variances among Arizona counties; and, where possible, provides initial information on the potential impacts of the pandemic.

Because the data needs of early childhood stakeholders vary, First Things First also has included additional statewide and county data in its Data Center: www.datacenter.azftf.gov/. 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.



THE BIG PICTURE

of Arizona's Little Kids

The number of young children in Arizona is expected to grow by 20% by the year 2050. A child's early years hold the key to their success – and our state's success. Children who are healthy and prepared when they enter kindergarten do better in school and are more likely to graduate and enroll in college. Well-educated adults are more prepared for the job opportunities of a global marketplace and to contribute to the strength of their communities.

About 90% of a child's brain growth happens before kindergarten, and those early experiences affect whether their brain will develop in ways that promote optimal learning. Poverty, exposure to family violence and lack of access to quality early learning experiences are all factors that can negatively impact a child's early development, and subsequently, their long-term success. In advance of the 2020 Census, there were concerted efforts to ensure young children were counted to ensure robust data existed on the state of babies, toddlers and preschoolers throughout the nation. Those efforts were hampered by the onset of COVID-19 and experts have raised concerns about whether there will again be a significant undercount of young children (as has been the case since 1950). Although the 2020 Census data on young children will not be available until late 2022 or early 2023, a review of some key data points taken before COVID-19 struck reveals that – even before the pandemic – many of Arizona's babies, toddlers and preschoolers faced significant challenges when it comes to stable, nurturing environments and high-quality early learning experiences that will put them on a trajectory for success in kindergarten and beyond.

This document provides state-national comparisons in three key areas: strong families, healthy children and prepared students. In the following pages, additional data points – and trends at the county level – also are identified. Where available, information about the initial or potential impacts of COVID-19 also are provided. Taken together, these data points reveal opportunities across several areas to help more Arizona families provide the stable, nurturing environments children need in order to thrive. This brief also describes ways in which First Things First and its partners in Arizona's early childhood system are working to expand opportunities for children to develop the tools they need to be ready for school and set for life.

THE BIG PICTURE

Strong Families

Young children comprise almost 1 in 5 of our state's residents. They number more than half a million and come from diverse geographic, ethnic and socio-economic backgrounds.

The number of young children in Arizona grew much faster between 2000 and 2010 than in the nation as a whole: ¹



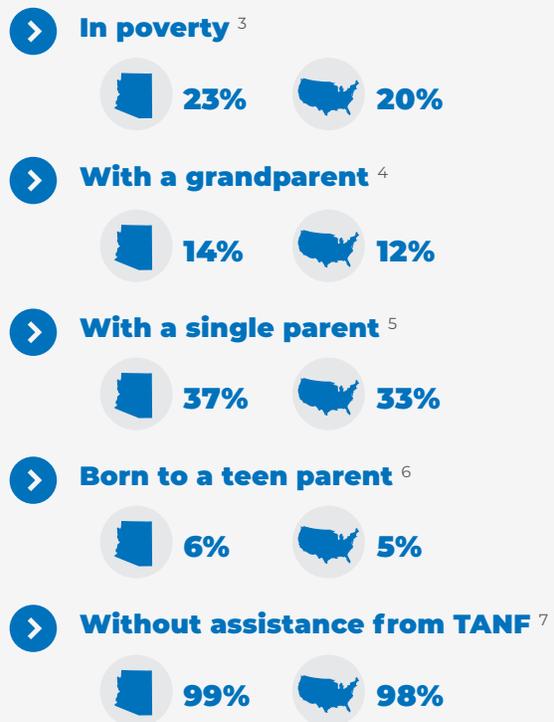
The percentage of households with young children in Arizona is about the same as in the US ²



Family stability can affect the resources a child has that either support or restrict their optimal development. Poverty and its effects – including unreliable access to food, housing and child care – can impact a child's physical and emotional development. Arizona's young children are more likely than their peers nationally to be born into challenging situations like poverty and being raised by single parents, teenage parents or grandparents. They also are less likely to receive the supports that can help mitigate the effects of poverty on their overall well-being.



Compared to the U.S. as a whole more young children in AZ live:



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

THE BIG PICTURE

Healthy Kids

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

Arizona's babies are born as healthy as their peers nationally, which is encouraging.

At birth, AZ babies are no more likely than their national peers to be born:



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



More Young Children In AZ



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

Educated Young Students

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

Compared to the US as a whole:

Far fewer of Arizona's 3- and 4-year-olds attend preschool ¹³



Fewer of Arizona's young children received developmental screenings ¹⁴



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



First Things First promotes early learning by: completing screening for almost 17,500 children to detect developmental or sensory issues that can become learning problems later on; working with more than 1,000 child care and preschool providers statewide to enhance the quality of early learning programs for more than 46,000 young children statewide; funding scholarships for more than 5,900 children to access quality early learning settings in the past year alone; working with relatives and friends who provide child care to increase their knowledge of brain development and young children's learning; and helping early educators expand their skills working with infants, toddlers and preschoolers.

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ISSUE ESSAY:

ARIZONA MUST NOT REBUILD ON A CRACKED FOUNDATION

“Early experiences affect the quality of brain architecture by establishing either a sturdy or a fragile foundation for all of the health and behavior that follow.”

– Center for the Developing Child, Harvard University

A child’s first five years of life lay the foundation for a lifetime. The quality of a child’s early experiences – their family and community environments, interactions with adult caregivers and other children, access to health care and early education opportunities – have a profound impact on whether their brains will develop in ways that promote learning. A review of data demonstrates that Arizona’s babies, toddlers and preschoolers have historically faced a myriad of barriers to success – including lack of access to preventive health or early education programs and increased exposure to adversity in early childhood. These challenges have only been exacerbated by COVID-19.

Americans – and Arizonans – have always prided themselves on resilience. As the state has begun to emerge from the pandemic, a great deal of emphasis has been placed on ensuring Arizona recovers from the pandemic stronger than ever. Bolstered by three separate federal relief packages - the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA), and the American Rescue Plan Act (ARPA) – community leaders and policymakers have looked at the pandemic recovery as an opportunity to re-imagine what Arizona and its diverse communities could look like. As those visions turn to actions, it is imperative that decision-makers be continually reminded of the substantial returns that can be realized from investments in early childhood.

This brief examines the state of Arizona’s youngest children across just a few of the major issues impacting their health, education and well-being – before and through the pandemic. It is hoped this information raises awareness of the needs – and the incredible possibilities – of an often overlooked population in our state. By applying new resources to old problems, and by committing to use temporary funds as a down payment on long-term commitments to our youngest children, leaders and decision-makers at all levels can ensure that Arizona rebuilds on a strong foundation – one that will ensure success for generations to come.

Poverty

Children from higher income homes tend to fare better on a variety of health and socioeconomic outcomes across the life course, from lower rates of conditions like depression and diabetes, to higher school completion rates and future earnings.^{1,2,3,4}

Poverty can negatively affect the way children grow and develop, including fundamental changes to the architecture of the brain.⁵ As such, children in impoverished homes are at a greater risk of a host of negative outcomes that include being born at a low birth weight, lower school achievement, and poor health.^{6,7,8,9,10} They are also more likely to remain poor later in life, passing along these challenges to future generations.^{11,12}

Nationwide, unemployment rates had been on a steady decline since January-March 2010, shortly after the end of the Great Recession.¹³ As the nation recovered from the Recession, Arizona's unemployment rate remained consistently higher than the national rate; in 2019, the percentage of Arizonans who were unemployed was just under 5%, compared to slightly under 4% nationally.¹⁴

Following the national trend, child poverty rates in Arizona have been steadily declining since 2012. In 2019, the proportion of Arizona's young children living in poverty decreased to 21%, the lowest it has been since the American Community Survey began collecting these data (2008). However, compared to the U.S. as a whole, Arizona consistently has a higher proportion of young children who live in poverty (21% versus 18% nationally) and a higher proportion of children (0-17) living in concentrated poverty, defined as Census tracts with overall poverty rates of 30% or more (20% versus 12% nationally).¹⁵

It is important to note that the number of families and young children who live in poverty by official definitions (i.e., the federal poverty level) far underestimates the number of children in families who struggle to make ends meet. This is due to the fact that the federal poverty guideline definition of poverty was developed in the 1950s and is widely considered to be well below what a family actually needs to earn for financial stability.

The “self-sufficiency standard” attempts to estimate how much families need to earn to fully support themselves, accounting for local variation in costs of housing, transportation, child care, and other budget items.¹⁶ The 2021 self-sufficiency standards in Arizona for a married couple with one infant and one preschooler range from a high of \$72,544 in Maricopa County to \$53,954 in Santa Cruz County. For a single parent with one preschooler, the standard ranges from \$52,007 in Coconino County to \$34,415 in Santa Cruz County. Notably, all Arizona counties have self-sufficiency standards that are more than twice the federally-defined poverty level.¹⁷

When comparing the median income for families with children – \$88,352 for married couples, \$42,884 for single-male-headed families; and \$30,416 for single-female-headed families – it is evident that even before the pandemic, a large proportion of Arizona families required some level of support to meet their families' basic needs.

ISSUE ESSAY

The COVID-19 pandemic had an immediate and dramatic impact on income for many families. In Arizona, the unemployment rate jumped from 5% in March 2020 to 14% in April 2020.¹⁸

Every week during the pandemic, the U.S. Census Bureau surveyed adults across the country about their experiences with work and how their incomes were affected. In Arizona, typically at least half of surveyed adults reported that someone in their household had lost employment income; one week, this spiked to two-thirds of respondents.

Not surprisingly, social service programs saw a dramatic shift in Arizonans seeking assistance to meet basic needs. For example:

- Prior to the pandemic, Arizona only saw about 4,000 new unemployment insurance claims a week; claims peaked at 262,523 the week of May 16, 2020.^{19,20}
- Between February and July 2020, the number of families using Temporary Assistance to Needy Families (TANF) rose 35%;
- Between February 2020 and February 2021, usage of the Supplemental Nutrition Assistance Program (SNAP or food stamps) rose 16% overall and 21% among children in Arizona (double the national increase);²¹
- Participation in the Women, Infants and Children (WIC) programs increased by 6% in Arizona during that same time (three times the national percentage increase of 2%).²²

These increases were driven not only by heightened need, but also policy changes aimed at making it easier for relief to get to individuals and families. For example:

- In addition to expanded eligibility, federal provisions granted unemployed workers nationwide supplemental funds during the pandemic - \$600 additional per week through July 31, 2020, and \$300 additional per week through July 10, 2021.²³
- During the state of emergency order, Arizona suspended the TANF work requirement and lifetime eligibility limit of 12 months, which had been the shortest in the nation, thereby allowing more families to tap into these emergency funds.²⁴
- Changes were made to SNAP program administration to better meet the needs of families in a time of crisis. Interviews were waived, certification periods were extended, and online shopping was approved, making it easier for families to access benefits.^{25,26}
- WIC also adjusted administrative guidelines, and participants were allotted extra monthly funds to use on fruits and vegetables.^{27,28}
- The Pandemic Electronic Benefit Transfer Program (P-EBT), a collaboration among the Arizona Department of Education, the Arizona Department of Economic Security, and the USDA Food and Nutrition Service, was established to offset the loss of meals normally received for free at schools or child care settings. Eligible families included those participating in SNAP with a child under age 6 and those with a child who received free or reduced-price school lunch.²⁹



In addition, the federal government issued three Economic Impact Payments to eligible individuals in 2020 and 2021. Eligible families received: \$1,200 per adult and \$500 per child in April 2020, \$600 per family member in December 2020/January 2021, and \$1,400 per person in March 2021.^{30,31} While these payments were a financial boon for many families, some families – particularly those involving immigrant parents – received delayed payments or no payments at all, due to policies making them ineligible outright, or changing policies regarding eligibility of legal immigrants.^{32,33}

The American Rescue Plan Act (signed in March 2021) included an expansion of the child tax credit. Previously, families earning sufficient income were given a \$2,000 credit for children under 17 on

their tax return. In the new plan, eligible families receive a credit of \$3,600 for each child under age 6 and \$3,000 for each child age 6-17. Under this plan, these funds are available to more low-income families and began being disbursed through monthly payments beginning in July 2021.³⁴

It is estimated that this funding will enhance the economic resources for 1.5 million Arizona children overall³⁵, but it is uncertain how long this support will continue. In order to ensure that the most vulnerable families are able to meet their children's basic needs, temporary policy changes that have reduced or eliminated barriers, as well as those that provided more regular support for families, should be explored as permanent strategies.

Well-Child Visits, Immunizations and Developmental Screenings

The American Academy of Pediatrics (AAP) recommends infants, toddlers and preschoolers have a total of 15 regular well-child visits with a medical provider from the time they are born until they turn 5 years old.³⁶ There are multiple purposes for the well-child visits, including:

- Preventive care, including immunizations.
- Tracking growth and developmental milestones, including conversations between the physician and parents regarding the child's social behaviors and learning.
- Opportunities for parents to speak with the doctor about any concerns they may have about their child's health and learning, including sleep, nutrition, relationships with family members, etc.
- Building the relationship among the pediatrician, the parent and the child.³⁷

Data reported to the federal Centers for Medicaid & Medicare Services indicate that, although rates had been improving prior to the pandemic, only 64% of Arizona children had six or more visits with their medical provider by age 15 months, compared to almost 66% nationally. Arizona fared worse when it came to toddlers and preschoolers; only 64% had been to a well-child visit between 3 and 6 years old, compared to more than 70% nationally.³⁸

Both national data and anecdotal information from local providers suggest these trends have worsened during the pandemic. In a nationally-representative survey, it was found that more than one in four (28%) families with young children missed a well-baby/well-child visit during the pandemic, including more than one in three (36%) families with young children with special needs.^{39,40} Families with young children (18 months to 5 years old), low-income

families, and Black and Latino families experienced the greatest barriers to attending well-child visits and scheduled vaccinations.⁴¹ Closer to home, the Chiricahua Community Health Center – a Federally Qualified Health Center in southeastern Arizona where more than half of the 31,000 patients are children – experienced a 80% drop in visits in the months following the pandemic.⁴²

These dramatic decreases are concerning because well-child visits are where young children receive two critical supports for their health and well-being: immunizations and developmental screenings.

Infants are particularly vulnerable to disease because their immune systems have not yet fully developed the ability to fight diseases fast enough if they become infected. Vaccines expose young children to just enough of certain germs (antigens) to teach their developing immune systems how to produce antibodies that fight the diseases without actually developing the illness.⁴³

The AAP recommends children receive vaccinations for 14 preventable illnesses by the time they are 18 months old. The most recent data reveal that too many young children in Arizona enter school without this crucial protection, placing them and their fellow students at risk, as well as others in the community such as newborns, the elderly, and those whose immune systems are compromised. In order to attend licensed child care programs and schools, children must obtain all required vaccinations or obtain an official exemption, which can be requested based on specific medical conditions or for religious or personal beliefs.⁴⁴

Even before the pandemic, Arizona was among the top 10 states for 5-year-olds with exemptions at kindergarten (5.7%),⁴⁵ and Phoenix was the number one hotspot in the nation for school exemptions and the number of at-risk kids.⁴⁶ In addition, Arizona ranked second to last among U.S. states for the number of 3-year-olds who had received the combined 7-Vaccine series based on data gathered just before the pandemic.⁴⁷

Due to the pandemic, young children may have even less protection from diseases that had once been almost eradicated. Among children under 2 years of age enrolled in Medicaid/CHIP nationally, vaccination rates dropped 34% between January 2020 and May 2020.⁴⁸ In addition, a separate national study of eight U.S. health systems in six states found that a lower proportion of children under 2 years of age were up to date with all age-specific recommended vaccines compared to prior to the pandemic. Specifically, just 74% of young children (age 7 months) were considered up-to-date in September 2020 compared to 81% in September 2019.⁴⁹

While vaccines protect children from diseases, periodic developmental screenings help to determine if children are developing in typical ways. From birth to age 5, children should reach certain milestones in how they play, learn, speak, behave, and move. Skills such as taking first steps, speaking words or phrases, and emotional self-regulation are considered developmental milestones. While each child is unique and will develop at his or her own pace, developmental milestones give a general idea of what typical development looks like and what is reasonable to expect as a child grows. A child who consistently does not meet the guideposts of healthy development may have a developmental delay.

Surveillance of a child's healthy development – including regular, quality developmental screening and referral for further assessment and follow-up services, as warranted – ensures that any potential learning and development issues are identified early enough for the child to get the maximum benefit of intervention services and supports. Early intervention treatments and therapies have the highest success rates when they are provided to children as early as possible in their development. And, children at risk for delays who are screened

are more likely to receive early intervention services than unscreened peers.⁵⁰ Without routine screenings, only an estimated 30% of children with developmental issues are identified before they reach kindergarten.⁵¹

The AAP recommends that developmental surveillance be part of every well child visit – which typically occur every 2-6 months between a child's birth and 3 years old.⁵² Developmental surveillance includes asking parents about any concerns they have regarding their child's development, taking a developmental history, observing the child, noting any factors that place the child at risk for a developmental delay and documenting their observations. If a primary care provider does have a concern, the visit would include doing a timely developmental screening.

The AAP recommends routine standardized screenings at well-child visits at 9, 18 and 30 (or 24) months of age.⁵³ In addition, children who have health care coverage through publicly-funded programs are supposed to have their development monitored regularly as part of their Early Periodic Screening Diagnostic Treatment (EPSDT) benefit.⁵⁴

Data collected prior to the pandemic showed modest improvements in developmental screening rates; however, two-thirds of infants and toddlers had not been screened for developmental delays. Although there is not sufficient data regarding the impact of COVID-19 on screening rates, the decline in well-child visits, coupled with a decrease in children with special needs accessing early intervention and education services (see next section) suggest that – for many babies, toddlers and preschoolers statewide – Arizona may be missing opportunities to identify issues that left unaddressed could become learning challenges later on.



Early Education

In 2016, Expect More Arizona and the Center for the Future of Arizona – with support from business leaders, educational organizations and community supporters, including the First Things First Board – worked to develop a unified vision of what a “world class education” looks like for Arizona’s children. They also worked to develop a set of common measures that could be used to monitor Arizona’s progress in moving our students toward an ultimate goal: ensuring that 60% of Arizonans have a certificate or college degree by 2030.

This consistent framework for gauging our children’s educational success is called the Arizona Progress Meter and can be used by elected leaders when making policy and funding decisions; by businesses and philanthropic organizations in targeting their investments; and

by communities when developing partnerships and building educational systems that support student success. The Progress Meter consists of a variety of measures, including third grade reading, eighth-grade math proficiency and high school graduation.

But its foundational measure – the one upon which all the others are built – is access to high-quality early education. Decades of research confirms that children with access to high-quality early learning are more prepared for kindergarten and do better in school. They are less likely to need special education or be held back a grade, and are more likely to graduate high school and enroll in college. As adults, they are less likely to be involved with the criminal justice or social welfare systems. They also tend to be healthier and earn more.

ISSUE ESSAY

Since the creation of the Progress Meter, two major efforts helped Arizona begin to make strides toward meeting its goal that 45% of 3- and 4-year-olds are enrolled in quality preschool:

- First Things First's signature program, Quality First, partners with child care providers to improve the quality of their early learning programs. Through coaching, assessment, financial supports and technical assistance on topics like health, Quality First has significantly improved early learning throughout the state. In 2013, only 25% of Quality First providers met or exceeded rigorous standards. In 2020, that number had increased to 79%.
- The federal Preschool Development Grant (PDG) program provided \$20 million to Arizona each year from 2014 to 2018 to expand early learning in high needs areas throughout the state. PDG programs participated in Quality First to ensure children attending we receiving a quality early education.

Arizona began to make strides in its quality early learning goals; by 2017, 24% of Arizona preschoolers were in quality programs, compared to the baseline of 21% just a year before.⁵⁵

Then the first major challenge hit: the federal PDG program ended when Arizona was unsuccessful in its application for the second round of funding. As a result, the percentage of preschoolers in quality settings fell to 19% in 2019.⁵⁶ Even as policymakers and early childhood champions worked furtively in the 2020 legislative session to secure funding to revive the PDG program, the session was abruptly cut short by COVID-19.

Many child care centers and homes closed in the early days of the pandemic due to concerns about safety of children, staff and families.^{57,58} This presented a major setback for a state where child care already was scarce. In fact, a 2018 Center for American Progress report estimated 48% of

Arizonans lived in a child care desert, defined as any Census tract with more than 50 children under age 5 that contains either no child care providers or so few options that there are more than three times as many children as licensed child care slots.⁵⁹

In the weeks and months following the rise of the COVID-19 pandemic, an estimated one-third to half of child care providers closed. For those that remained open, operating costs skyrocketed. Nationally, monthly costs increased 47% due to COVID-19 related health and safety guidelines. In Arizona, they soared further, increasing by about 84% in center-based care (\$685 to \$1,257) and 75% (\$732 to \$1281) for family care.⁶⁰

Immediate actions by state partners allowed many providers to remain open or re-open.

- The Arizona Department of Economic Security continued to pay child care providers state subsidies for children they were caring for when the pandemic began, even if the children were absent. First Things First did the same with scholarships paid to Quality First providers to give access to quality care to children from low-income families, regardless of attendance. Both of these steps ensured that providers had access to some stable funding that could be used to pay operational expenses – like rent, utilities and staffing – so that they could continue to serve some children and/or would be able to open or expand as the economy re-opens.
- FTF has leveraged existing programs, as well as relationships with partners in the private and public sectors. Dozens of phone calls were made and emails sent to track down and access available supplies. FTF was able to secure paper products, cleaning supplies, sanitizers, gloves and masks. Coaches working with Quality First providers identified child care settings' immediate needs, and FTF regional staff and system partners helped collect, distribute and deliver the supplies.

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- Coaches and child care health consultants working in Quality First reached out to providers on a regular basis to offer information and support. Coaches were crucial as the programs' main supports, helping to identify specific needs and link providers to available resources. They also worked with programs on how to ensure their program continued a focus on quality despite the challenges. Health consultants helped programs implement guidance from the state and the national Centers for Disease Control and Prevention regarding everything from drop off/pick-up procedures, to safe classroom group sizes and regular schedules for cleaning and disinfecting learning materials. Their experience benefitted not only Quality First providers; it was condensed into a guidance document that was posted online so that it would be available to all providers throughout the state. Virtual workshops also were implemented to review the guidance and answer questions from providers as they remained open or began to reopen.
- In addition, FTF secured a grant from the PNC Foundation to extend support from Child Care Health Consultants via telephone to any child care provider in the state who needs help in understanding and implementing the CDC guidance. This program is slated to end in December 2021.

As the federal government approved various aid packages, additional supports were available to providers.

The CARES Act – passed in March 2020 – provided \$88 million to Arizona for emergency child care assistance. Those funds were primarily used for 3 major initiatives:

- Established Enrichment Centers through existing child care providers to provide child care to the children of essential workers, as well as scholarships to children whose parents could not afford care.

- Three-month grants between October and December 2020 to assist eligible providers in meeting operational expenses ranging from rent and utilities to staffing and personal protective equipment.
- And, three month grants in Summer 2021 to assist providers in meeting workforce challenges. The grants could be used to do recruitment and hiring, as well as augment staff salaries including hiring or retention bonuses.

The next two measures – CRRSAA, which passed in December 2020, and ARPA, which passed in March 2021 – provided a combined \$1.2 billion to Arizona for child care assistance.

Those monies were appropriated to the Department of Economic Security (DES) in the 2021 legislative session and will be used to fund 20 support strategies across four major areas. Highlights from those areas include:

- **In access to care:**
 - Reimbursement rates for federal child care subsidies were increased to the 50th percentile of the 2018 market survey (previously at the 25th percentile).
 - Reimbursement rates for infants/toddlers and children in the care of the Department of Child Safety were increased to the 75th percentile of the 2018 market survey (previously at the 25th percentile)
 - Reimbursement rates were increased for all DES non-certified relative providers.
 - Short-term assistance was provided for those returning to the workforce.

- **In quality expansion:**

- Expands Quality First by 800 providers (almost doubling the size of the program) and provides support for providers to get national accreditation (prioritizing programs for school age children and those who cannot access Quality First).
- Increases quality tiered reimbursement to 35%.
- Expands early childhood mental health consultation to all subsidy providers serving children in the care of DCS by more than 700 providers, including the expansion programs.

- **In stabilizing the child care workforce:**

- Extended the Essential Workers Child Care Relief Scholarship Program through Sept. 30, 2021.
- Child Care Workforce Retention and Recruitment Program – 3-month grants child care providers were required to use on workforce salaries and benefits.
- Child Care Stabilization Grants – monthly grants of \$5,000 to \$10,000 paid to any provider who is in good standing with regulators and is serving children in person. The grants are available through June 2023.

- **In accelerating educational supports and early childhood literacy:**

- Child care for college students studying early education, K-12 education or nursing;
- Expanding child care for full-time students in higher education or vocational programs;
- And improving and expanding preschool curriculum.

The majority of the investments previously noted began to be implemented in summer 2021, even as providers continued to face significant challenges. A summer 2021 survey by the National Association for the Education of Young Children found that among 223 accredited programs in Arizona surveyed:

- Though enrollment rates were at 73% of licensed capacity, only 39% of enrolled children were attending on an average day.
- 67% of early childhood educators working in centers and family child care homes were worried about being cut off from public benefits (like SNAP or housing subsidies) if their compensation is increased;
- 84% of child care centers were experiencing a staffing shortage.
 - 49% of programs impacted by staffing shortages were serving fewer children
 - 31% had a longer waitlist
 - 20% were unable to open classrooms
 - 20% had reduced their operating hours.
- 45% of respondents said it is more difficult to recruit and retain qualified educators compared to before the pandemic.
- 61% of respondents, inclusive of all settings, said they were considering leaving their program or closing their family child care within the next year, with another 10% saying maybe they would close.⁶¹

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The investments made possible through federal relief funds will facilitate significant improvements to the child care system, many of which practitioners and advocates had long been called for by. However, these improvements are time-limited; the vast majority of the federal support ends in Federal Fiscal Year 2024. Identifying resources to ensure these temporary investments can continue – as well as focusing on some strategies that will have more permanent impact – is critical to maintaining a crucial piece of Arizona's infrastructure – one that provides an important educational foundation for Arizona's children and helps their families succeed in the workplace.

Accessing educational support is especially critical for children with developmental delays or disabilities. In Arizona, children birth to 3 years old with the most severe developmental delays access support through the Arizona Early Intervention Program (AzEIP). Although the proportion of infants and toddlers (birth through age 2) in the state being served has increased since 2009, Arizona was one of the bottom five states in terms of young children receiving early intervention services in 2018, with only 2.3% receiving services, compared to 3.5% nationally.⁶² Babies and toddlers with developmental concerns are referred to AzEIP through a variety of sources, including community-based screening programs and medical providers. In the early months of the pandemic (March to May 2020), AzEIP saw a 50% decrease in the number of referrals for evaluation.⁶³ This is perhaps not surprising, given the decrease in well-child visits noted earlier.

Preschoolers (3-to 5-year-olds) with special needs access educational support through school-based programs. In many cases, the preschoolers are referred to their schools by AzEIP. Many young children, however, also are identified through ChildFind activities. These are efforts required of schools statewide to attempt to identify children

with special needs and enroll them in preschool. Although schools continued to be required to implement ChildFind activities during the pandemic, there was a 20% drop in children with special needs enrolled in preschool between the 2019-2020 and 2020-2021 school years.⁶⁴ This means 2,000 fewer preschoolers with special needs had access to educational support.

The Arizona Department of Education (ADE) has been working with school districts and community partners to encourage parents to re-enroll children in their pre-pandemic school settings. As a result, Arizona schools saw a 3.5% increase in enrollment between the 2021 and 2022 school years, including an 8.4% increase in special education enrollment. There will need to be continued emphasis on ensuring young children access timely screening and are connected to the support/education programs to help address any concerns in order to reduce the likelihood that early childhood issues will become significant learning challenges in kindergarten and beyond.



Adverse Childhood Experiences

Landmark research conducted by Kaiser Permanente from 1995 to 1997 demonstrated the extent to which negative experiences in early childhood impacted later outcomes in health, education and well-being. According to a summary produced by the federal Centers for Disease Control and Prevention, the study showed that Adverse Childhood Experiences (ACEs) occurred in three major categories: abuse, neglect and household challenges. Almost two-thirds of study participants reported at least one ACE, and more than one in five reported three or more ACEs. Researchers found that, as the number of ACEs increased, so did the risk of negative outcomes in adulthood, such as poor health outcomes, depression, drug use, domestic violence, unintended or teen pregnancy and poor academic achievement (See Figure 1).⁶⁵

Why do ACEs lead to negative outcomes later in life? An individual experiences a combination of adverse experiences in childhood, which increases their level of toxic stress and can lead to disrupted brain development. This may result in social, emotional and cognitive impairment, which then increases the likelihood the individual will adopt risky behaviors as well as developing diseases, disabilities or social problems.⁶⁶

A review of data from the 2018-2019 National Survey on Children’s Health demonstrates that young children in Arizona are more likely to experience multiple ACEs. Out of all 50 states and the District of Columbia, Arizona was among the top 10 states with the highest proportion of children birth to age 5 who have experienced at least one ACE (see Figure 1).

In addition, Arizona young children are almost twice as likely to have two or more ACEs (15.5%) than children in the U.S. (8.6%).⁶⁷

The same survey also indicated that before the COVID-19 pandemic, about 1 in 6 Arizona families had trouble coping with difficulties. Families were asked how often they dealt with difficulties in the following ways: (a) Talk together about what to do, (b) Work together to solve our problems, (c) Know we have strengths to draw on, and (d) Stay hopeful even in difficult times. Families were considered resilient if they answered either “most” or “all of the time” to the survey questions. Arizona families reported consistently resilient approaches during difficult times at rates similar to families nationwide (84% and 84.9%, respectively).⁶⁸ This number may have decreased significantly, given the stressors brought on by the pandemic.

FIGURE 1

STATE	ONE OR MORE ACE
Arkansas	37.80
Oklahoma	37.30
Michigan	34.70
Louisiana	33.60
Mississippi	33.60
Indiana	33.50
Nevada	33.50
Georgia	33.40
New Mexico	32.30
Arizona	31.80

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Data collected during the pandemic reveal that families are facing increasing levels of stress. The Stress in America™ survey is conducted annually by the American Psychological Association (APA). In the survey, respondents rate stress on a 10-point scale where 1 means “little or no stress” and 10 means “a great deal of stress”. In 2020, the average stress level reported by U.S. adults was 5.4, significantly higher than the average stress level reported in the 2019 survey (4.9) and the first significant increase since the first year of the survey in 2007.

- Average reported stress level (over the past month) related to the pandemic for parents of children under 18 was 6.7, compared with 5.5 for adults without children.
- Almost half of parents (46%) said their stress level is high (between 8 and 10), compared with 28% of adults without children.
- 70% of parents reported that basic needs were a source of parental stress (e.g. availability of and access to food, housing, etc.).
- 66% of parents reported stress related to access to health services.⁶⁹

The pandemic also has caused heightened anxiety and depression in both children and caregivers. The stress and uncertainty of the pandemic led to

an increase in overall conflict, spousal conflict, and parent-child conflict during the pandemic. Low-income households and households with children with special needs, in particular, reported higher levels of children’s emotional difficulties alongside greater anxiety, depression, loneliness, and stress among caregivers.

In cases where family difficulties result in abuse or neglect of children, Arizonans are asked to report those concerns to the statewide child abuse hotline. However, data reveal this may not be occurring during the pandemic.

In Arizona, removals remained at a consistent level, between 4,500 and 5,000 children ages 0-17 removed per six-month period over the past three years. However, reports to DCS dropped by more than 10% during the first half of 2020. National studies suggest that the transition to distance learning and remote work also resulted in fewer opportunities for educators, health care professionals and other key social service providers to identify and report child maltreatment during the pandemic. Families also experienced limited access to key social programs, including family support services and school nutrition programs, which can promote physical and mental health and help decrease and prevent instances of child maltreatment.

Census

Policymakers, businesses and philanthropic organizations identify challenges and make decisions about where to focus efforts and investments based on data, and one of the most commonly used sources of data – nationally, statewide and in local communities – is the U.S. Census. When it comes to young children, this can be problematic. The Census Bureau estimates 5% of children 5 and younger were not counted in the 2010 Census. That’s the highest of any age group and represents 1 million babies, toddlers and preschoolers.⁷⁰

There are a variety of reasons why young children may be missed in this national count of residents throughout the U.S. In some cases, the child may be a newborn. The child may split their time between the residences of several caregivers, including parents and grandparents. Or the child may live in a geographic area where the residents are typically undercounted, such as a low-income neighborhood.⁷¹

To avoid this undercount in the 2020 Census, the Bureau had initiated work with government, non-profit, advocacy and community groups throughout the nation. The goal was to implement strategies aimed specifically on ensuring that children birth to age 5 were counted. Complete count committees were established in many areas, and awareness efforts already were underway in anticipation of the April 1 date when homes were expected to receive their Census forms. Then, the COVID-19 pandemic struck.

Complete count efforts continued with some delays and modifications, but initial Census results have many concerned that the undercount of young children may be even greater in the 2020 Census than the 2010 report. According to the Population Resource Bureau, the self-response rate in most U.S.

Census tracts was about 67%; in Census tracts with a very high risk of underreporting young children, it was 62%. In fact, in about 1 in 7 tracts with a very high risk of underreporting young children, the self-response rate in the 2020 Census was 10% lower than the 2010 Census.⁷²

Detailed data on young children from the 2020 Census are not expected until late 2022 or early 2023. However, Census officials and advocates are working now to find ways to ensure more reliable Census data can be extracted, including how to perhaps use the American Community Survey – a smaller sample of representative households taken periodically by the Census – to provide more useful information to Census stakeholders.

In the meantime, there are a variety of other data sources that communities can and should use in order to continue identifying and meeting the needs of young children. These can include birth records, data from local health departments and schools districts, as well as community surveys.

Although up-to-date information is useful, the lack of detailed data should not preclude robust dialogue at all levels on the needs of young children nor diminish community efforts to address those needs. As this document points out, young children throughout Arizona faced significant challenges before COVID-19 ravaged the state. Given the significant health, financial and social impacts of the pandemic, it would be disingenuous to assume that any of those challenges had improved in any way during the pandemic; quite the opposite. Given the fact that early experiences lay the foundation for a lifetime of success, it is critical that our state focus on ensuring that babies, toddlers and preschoolers have the support they need to grow in ways that support optimal learning and health. To do otherwise is to risk re-building our state on a cracked foundation, a mistake that could have implications for generations to come.

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FAMILY CHARACTERISTICS



Why It Matters

Families with young children often utilize community resources such as early education, health care facilities and social services to help their children thrive.^{1,2,3,4,5} Accurate and up-to-date information about the characteristics of families is critical for ensuring policymakers and program providers can determine what resources are needed in their communities, including where these services should be located and how to tailor offerings to the specific needs of those who are likely to use them. For example, as Arizona communities become increasingly diverse, providers need access to relevant demographic data to ensure they engage with families in culturally responsive ways.^{6,7,8}

In addition to growing racial, ethnic and social diversity, U.S. and Arizona families are becoming more diverse in terms of family structure.⁹ Many children live in single-parent households, and it is increasingly common for children to live in kinship care (care of children by someone other than their parents, such as relatives or close friends).^{10,11} Multi-generational households, particularly where

grandparents live in the home with children and parents, are common in some communities and cultures and can provide financial and social benefits.¹² As family structure changes, so can family strengths and challenges that impact child development, such as poverty, access to health and education resources and the quality of a child's interactions with adult caregivers.^{13,14,15,16} Regardless of their family structure, all young children benefit from nurturing relationships with adults. Research has identified that these early relationships are a primary influence on brain development.¹⁷ Ensuring that children have adult caregivers who consistently engage in high quality interactions beginning in infancy can help protect young children from negative effects of stress and adversity and builds a foundation in the brain for all of the learning, behavior and health that follow.^{18,19}

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

FAMILY CHARACTERISTICS

How Arizona's Young Children Are Faring

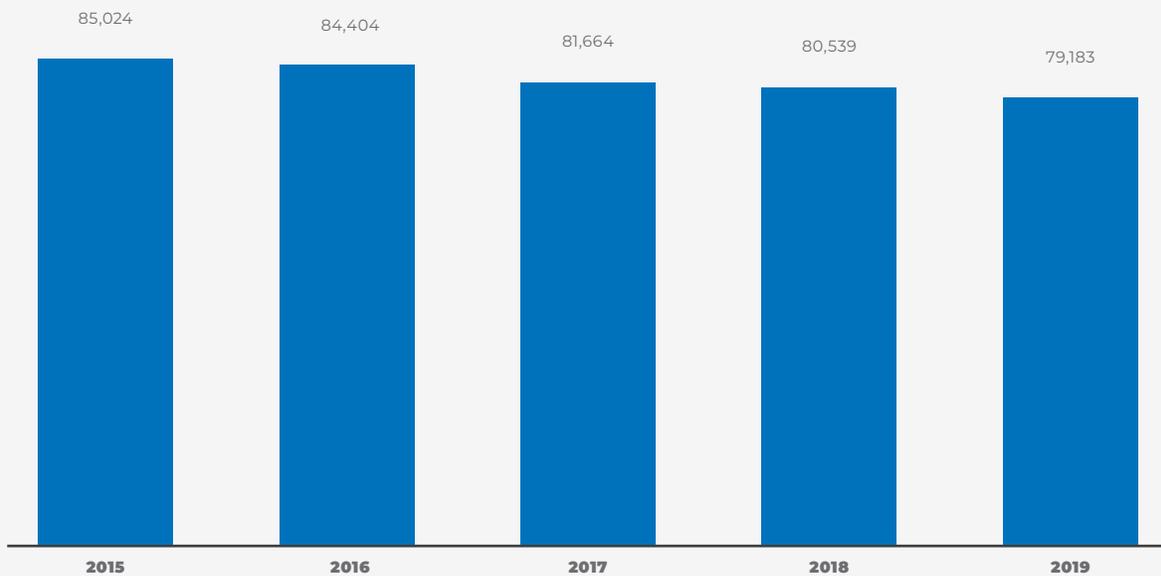
Population Change

Young children make up a small portion of the overall population, but their well-being has wide-reaching impacts on families, social service systems and the health of the state's future population. Nearly every year from 1970 until 2007, there were more babies born in Arizona than the previous year. Beginning in 2008, however, the annual number of births in the state has decreased almost every year. This trend has been linked to the Great Recession which began in December 2007, with the economic hardship having a strong

impact on the birth rate.²⁰ In Arizona, the ongoing decrease in the number of births has been largely driven by a drop in the Hispanic birth rate.²¹ In addition to the economic impact of the recession on Hispanic families, some economists theorize that state changes in public policy have made Arizona less attractive to immigrant families, who may have moved to other states.²²

Over the past six years, about 2% fewer babies were born in the state each year compared to the previous year (Figure 1). This decrease in natality in Arizona mirrors a trend in the U.S., where between 1 and 2% fewer babies were born each year in the same time period.²³

Figure 1. Number of births per calendar year to Arizona-resident mothers, 2015 to 2020



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

FAMILY CHARACTERISTICS

Recently released Census 2020 data reflect this declining trend in births. 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%) (Table 1). However, there was a reduction of 1% in the number of children (ages birth to 17) in both the nation and the state. Note that these numbers represent all children (0-17) because the Census 2020 data for young children (ages birth to 5) were not yet available at the time this report was produced. In 2020, children 0-17 constituted similar proportions of the population in Arizona (23%) and the U.S. (22%). This represents a reduction from

2010 numbers, where minors represented 26% of the population in the state and 24% in the country. With the exception of Maricopa, Graham and Greenlee, all other Arizona counties have shown a decrease in their youth populations (Table 1). Although Census data provide crucial insights to the population makeup of the state, initial analyses suggest that Census 2020 may have had a higher undercount of children (2.1%) than Census 2010 (1.7%), particularly for Hispanic children (4.4% in 2020 vs. 2.1% in 2010).²⁴ Historically, the undercount is primarily among young children (birth to 4), and is likely to be again.²⁵

Table 1. Total population and population of children (0-17), 2010 and 2020

	Total 2010 Population	Total 2020 Population	Change From 2010 To 2020 In Total Population	2010 Children 0-17	2020 Children 0-17	Change From 2010 To 2020 In Children
Arizona	6,392,017	7,151,502	12%	1,629,014	1,609,526	-1%
Apache County	71,518	66,021	-8%	22,660	16,916	-25%
Cochise County	131,346	125,447	-4%	30,250	26,117	-14%
Coconino County	134,421	145,101	8%	31,788	29,109	-8%
Gila County	53,597	53,272	-1%	11,471	10,266	-11%
Graham County	37,220	38,533	4%	10,575	10,818	2%
Greenlee County	8,437	9,563	13%	2,463	2,720	10%
La Paz County	20,489	16,557	-19%	3,678	3,052	-17%
Maricopa County	3,817,117	4,420,568	16%	1,007,861	1,038,182	3%
Mohave County	200,186	213,267	7%	41,265	35,806	-13%
Navajo County	107,449	106,717	-1%	31,973	27,509	-14%
Pima County	980,263	1,043,433	6%	225,316	209,168	-7%
Pinal County	375,770	425,264	13%	99,700	99,624	0%
Santa Cruz County	47,420	47,669	1%	14,560	12,454	-14%
Yavapai County	211,033	236,209	12%	40,269	37,073	-8%
Yuma County	195,751	203,881	4%	55,185	50,712	-8%

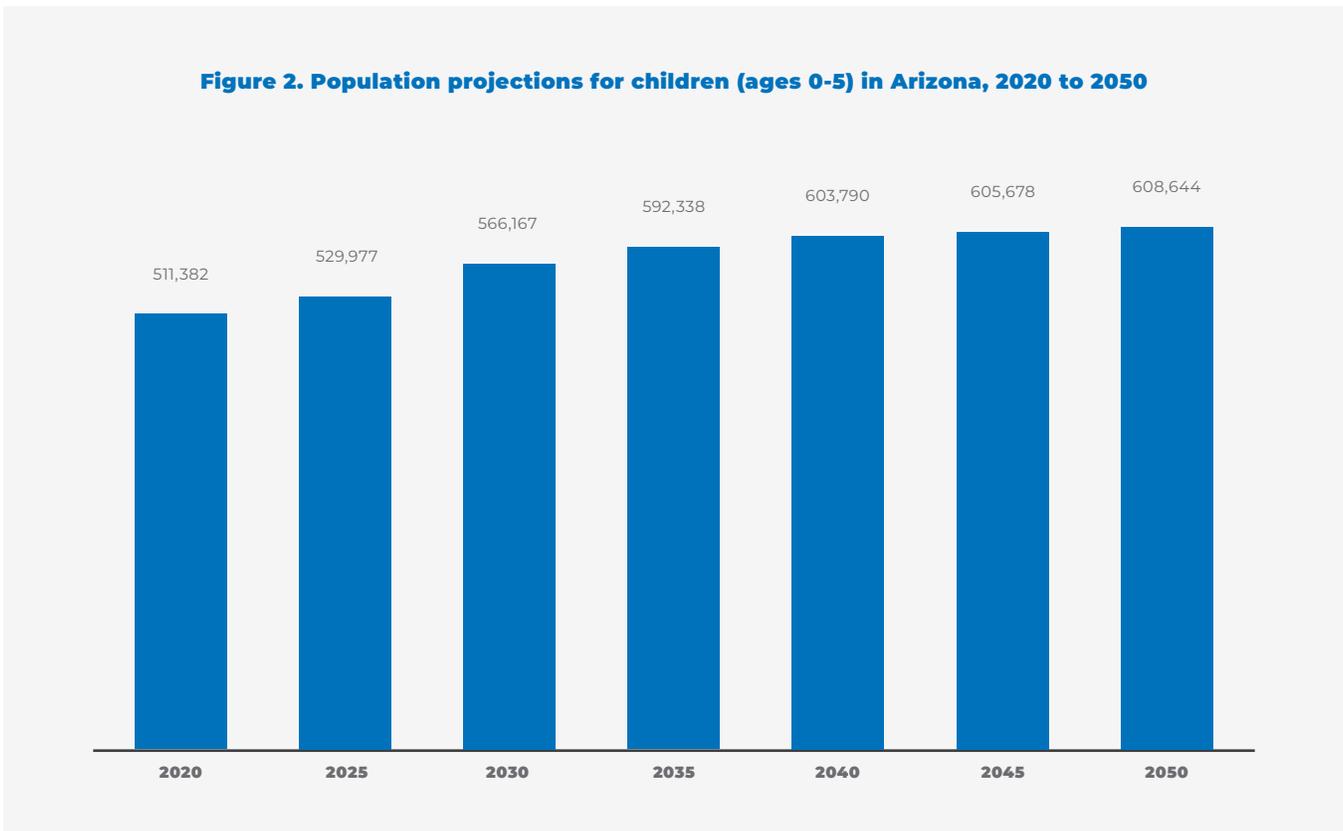
FAMILY CHARACTERISTICS

The Arizona Department of Administration uses Census data to produce population projections that also consider patterns of births, deaths and migration. The current population projections for children under age 6, produced in 2018 based on Census 2010 data, estimate that their number will steadily increase in Arizona over the next 30 years – growing by almost 20% from an estimated 511,382 in 2020 to 608,644 in 2050 (Figure 2).

While the full set of Census 2020 data have not yet been released as of this writing, the early report of the state’s total population (7,151,502) is about 2% lower than the Arizona Department of Administration population projection of

7,286,148 for 2020. Thus, the projected number of children under age 6 may also be somewhat of an overestimate. New population projections will be announced at the end of 2022, based on the new Census findings.

Although there may be challenges in articulating their precise numbers, we do know that Arizona’s young children represent the state’s future. Continued investment in their well-being and the well-being of their families was identified by the National Academy of Sciences as “the most efficient strategy” for strengthening the future workforce and supporting a thriving community.²⁶

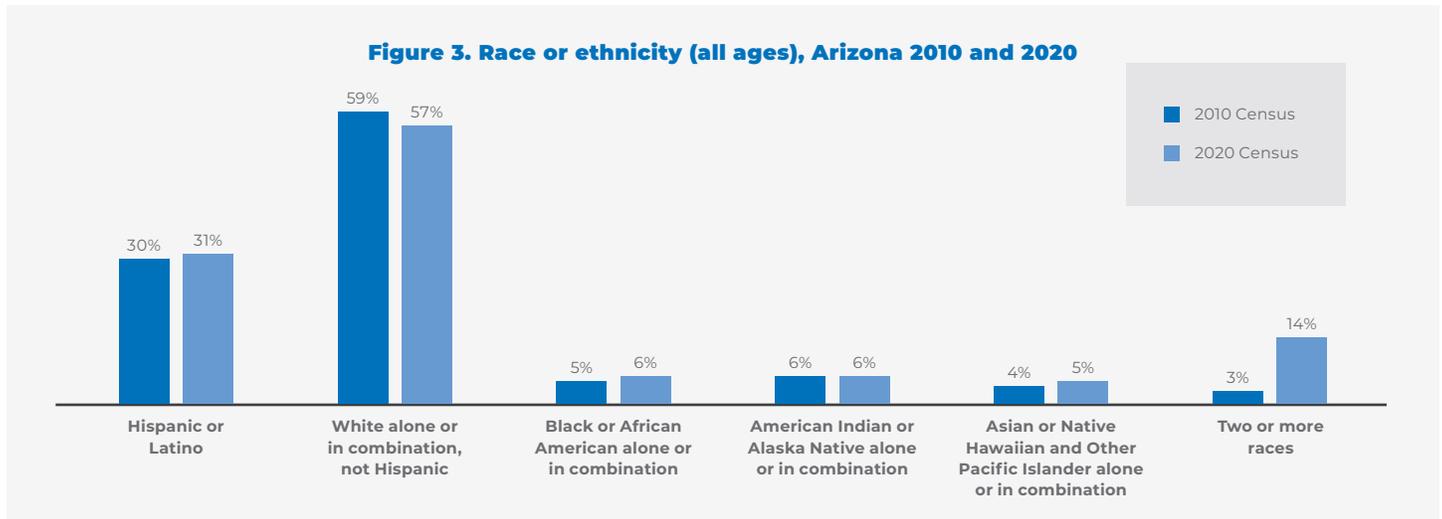


Source: Arizona Department of Administration, *Employment and Population Statistics (2018)*.
State and county population projections (medium series)

FAMILY CHARACTERISTICS

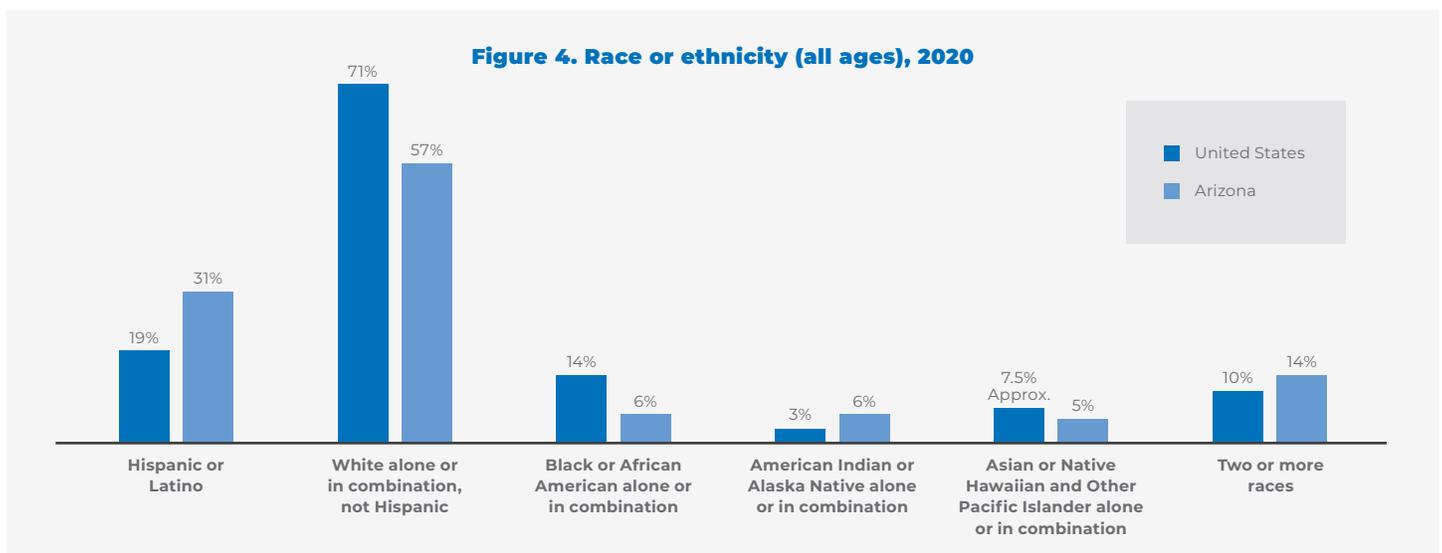
Race and Ethnic Composition

Recent data from the 2020 Census show that both Arizona and the U.S. as a whole have become more ethnically and racially diverse. Compared to 2010 Census numbers, in 2020 a higher proportion of the population in the country identified as multiracial (3% vs 10%).²⁷ In Arizona, there was also a substantial increase in the percentage of residents who identified as multiracial (from 3% in 2010 to 14% in 2020), and a slight decrease in those who identified as White, non-Hispanic (from 59% in 2010 to 57% in 2020) (Figure 3).



Source: U.S. Census Bureau. (2021). 2010 and 2020 Census Redistricting Data (P.L. 94-171) Summary Files. Tables P1, P2, P3, & P4.

There continue to be notable differences between the ethnic makeup of Arizona's population and that of the nation as a whole. In 2020, across all ages, the share of residents who are Hispanic or Latino is substantially higher in Arizona (31%) than in the U.S. overall (19%). Similarly, the percentage of American Indian/Alaska Native residents in the state is twice that of the nation (6% vs. 3%). Conversely, there are relatively fewer African American Arizona residents compared to the U.S. as a whole (6% vs. 14%) (Figure 4).

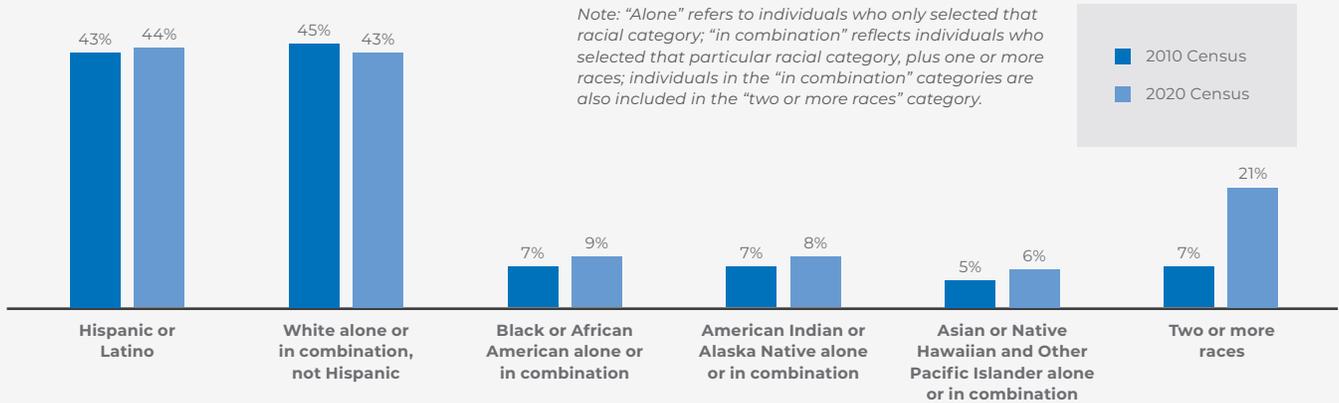


Source: U.S. Census Bureau. (2021). 2020 Census Redistricting Data (P.L. 94-171) Summary File. Tables P1, P2, P3, & P4.

FAMILY CHARACTERISTICS

Among all Arizona children (0-17), the proportion of children who are Hispanic or Latino remained relatively stable between 2010 and 2020 (43% vs. 44%, respectively). With a decrease in the percentage of children who are White non-Hispanic over the past 10 years (45% vs. 43%) in 2020, Hispanic or Latino minors now make up the largest ethnic group for the population under 18 years old. There are also relatively more children in all other ethnic or racial categories, and 21 % of all Arizona children identified as multiracial in 2020, compared to 7% in 2010 (Figure 5).

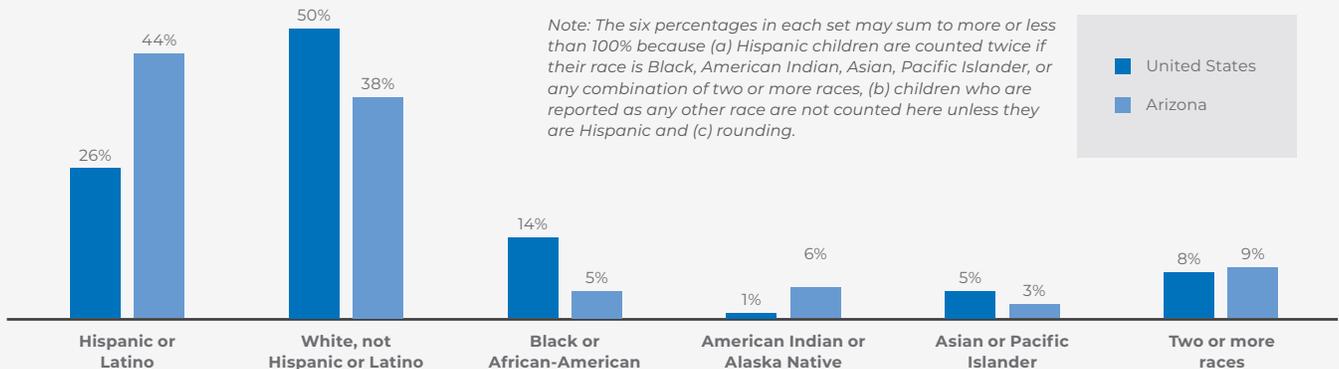
Figure 5. Race or ethnicity (children ages 0-17), Arizona 2010 and 2020



Source: U.S. Census Bureau. (2021). 2010 and 2020 Census Redistricting Data (P.L. 94-171) Summary Files. Tables P1, P2, P3, & P4.

Census 2020 data for children ages birth to age 5 had not been released by the time this report was produced. Consistent with Census 2020 data for all children (0-17), the most recent data from the American Community Survey (2015-2019) show that Hispanic or Latino children are the largest group of children ages birth to four in the state (45%). Consistent with the adult population, Arizona has a higher percentage of young American Indian children than the nation (6% vs. 1%, respectively). African American young children comprise a smaller proportion of the young child population in Arizona than the U.S. as a whole (5% vs. 14%) (Figure 6).

Figure 6. Race or ethnicity (children ages 0-4), 2015-2019



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

FAMILY CHARACTERISTICS

Reflecting the diversity of cultural heritage in Arizona, there are some notable differences in the ethnic composition of young children across Arizona counties. In Santa Cruz and Yuma counties, the majority of children are Hispanic or

Latino, whereas in Navajo and Apache counties most young children are American Indian. In Yavapai and Mohave counties nearly two-thirds of young children are White, non-Hispanic (Table 2).

Table 2. Race or ethnicity by county (children ages birth to 4), 2015-19

	Hispanic or Latino	White, Not Hispanic or Latino	Black or African-American	American Indian or Alaska Native	Asian or Pacific Islander	Two or More Races
Arizona	45%	38%	5%	6%	3%	9%
United States	26%	50%	14%	1%	5%	8%
Apache County	13%	12%	0%	75%	0%	5%
Cochise County	49%	42%	3%	1%	1%	8%
Coconino County	20%	38%	1%	41%	0%	6%
Gila County	28%	38%	0%	31%	1%	7%
Graham County	34%	43%	0%	19%	2%	4%
Greenlee County	48%	42%	3%	6%	0%	2%
La Paz County	50%	27%	1%	32%	0%	6%
Maricopa County	44%	39%	7%	2%	4%	9%
Mohave County	28%	63%	1%	4%	1%	6%
Navajo County	17%	27%	1%	55%	1%	6%
Pima County	53%	34%	4%	5%	2%	11%
Pinal County	42%	43%	3%	7%	1%	11%
Santa Cruz County	90%	6%	1%	0%	3%	2%
Yavapai County	28%	64%	0%	3%	0%	7%
Yuma County	79%	17%	1%	1%	1%	5%

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

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

FAMILY CHARACTERISTICS

Language of Children and Families

The American Community Survey estimates that 19% of Arizonans speak a language other than English at home and speak English “very well,”ⁱ meaning they are proficiently bi- or multi-lingual (Figure 8). Young children can benefit from this exposure to multiple languages; mastery of more than one language is an asset in school readiness and academic achievement, and offers cognitive and social-emotional benefits in early school and throughout their lifetime.^{28,29,30,31} The proportion of the population who is bi- or multi-lingual in Arizona varies by county, ranging from a high of 52% in Santa Cruz County to a low of 7% in Mohave County (Figure 7).

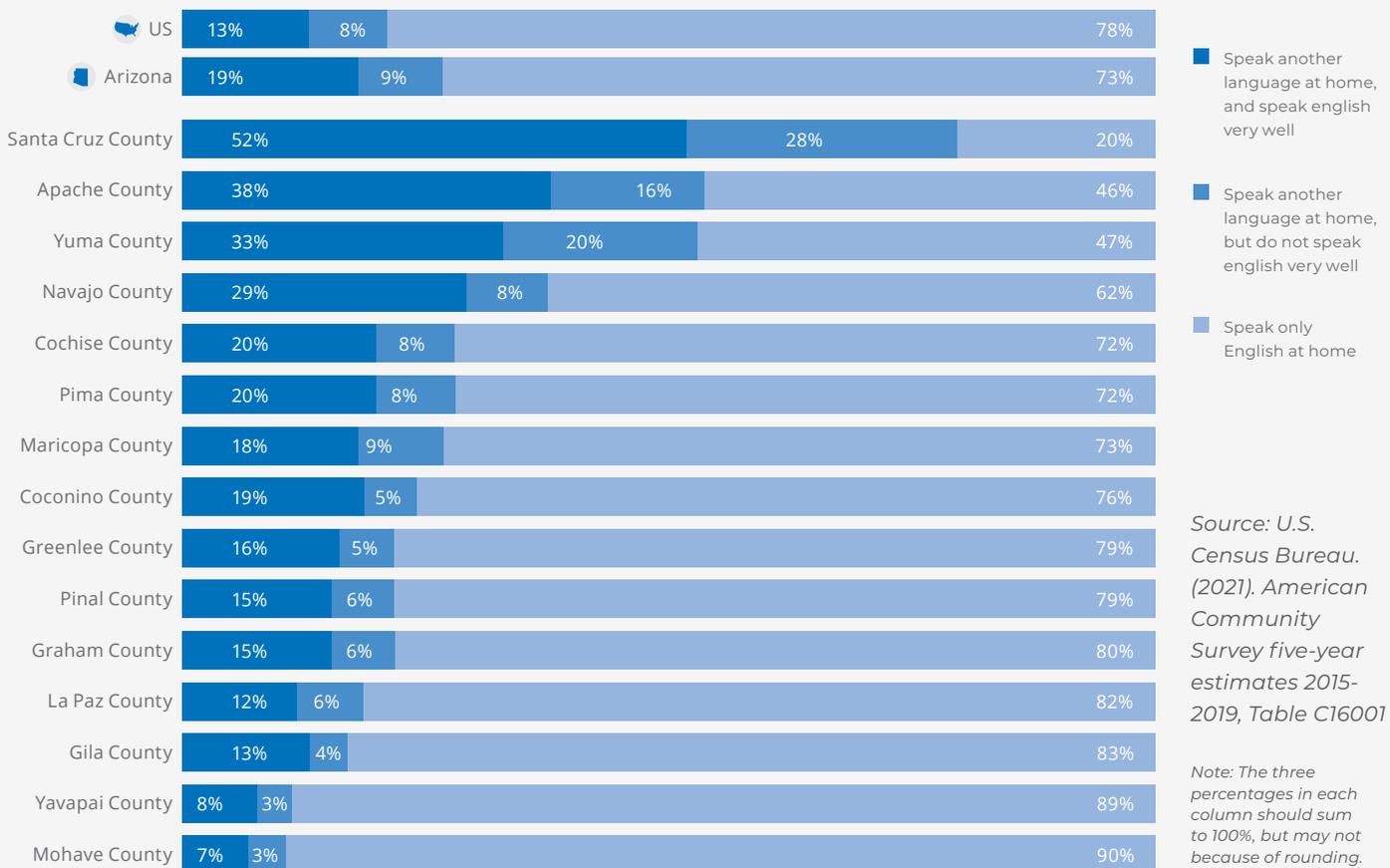
In addition to those who are multi-lingual, about 9% of Arizona residents speak a language other than English at home and do not consider

themselves as speaking English “very well.” Parents and caregivers with limited English proficiency may experience barriers to accessing health care and social services, as well as barriers to engaging in important interactions at their children’s schools; these barriers can affect a family’s ability to promote positive child development. The availability of bi- or multi-lingual staff and resources can help support these families.^{32,33}

The share of the population represented by individuals who do not speak English “very well” varies widely across the state, from more than 1 in 5 people in Yuma and Santa Cruz counties, to only 3% in Mohave and Yavapai counties (Figure 7).

ⁱ “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>

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

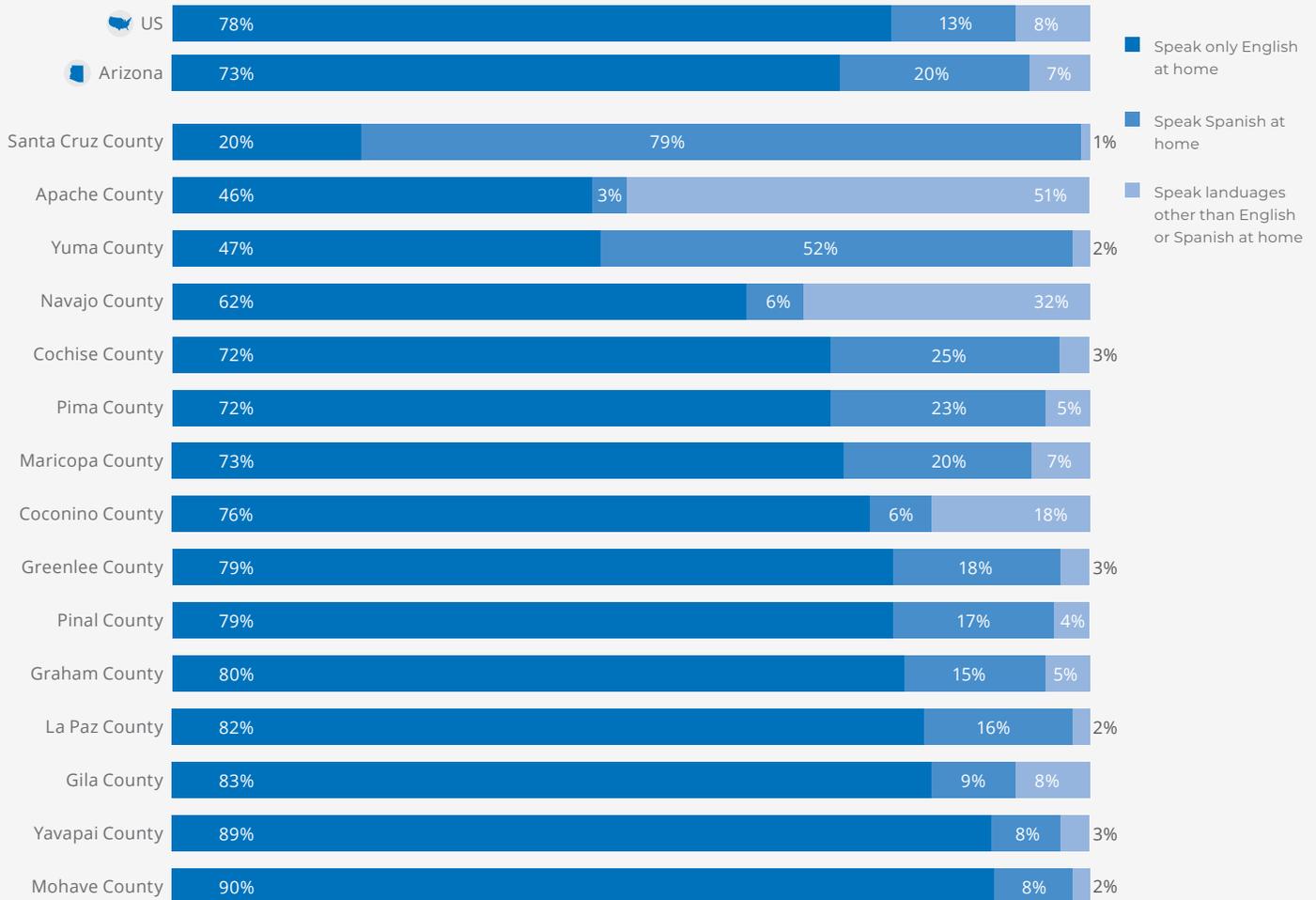


FAMILY CHARACTERISTICS

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) (2%). Consistent with the diversity of cultural heritage in the state, in some counties there are substantial proportions of bi- or multi-lingual residents. Some of these counties are home to a large population of native Spanish speakers (e.g., Santa Cruz and Yuma) and others have substantial numbers of residents who

speak a Native American language (e.g., Apache, Navajo and Coconino) (Figure 8). Households with multiple languages spoken pose a unique balance of benefits for child learning and barriers to caregiver engagement (e.g. when interacting with schools or health care providers³⁴). Acknowledging and valuing linguistic heritage and recognizing the need for resources and services in languages other than English remain important considerations for organizations and agencies across Arizona.

Figure 8. Language spoken at home (ages 5 and older), 2015-2019



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

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

FAMILY CHARACTERISTICS

Family Structure

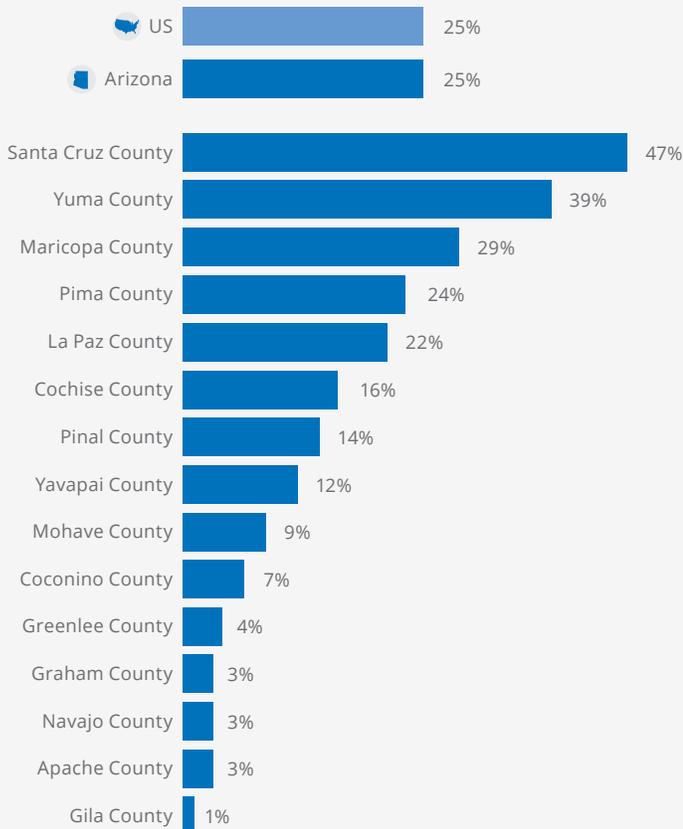
Foreign-Born Parents

A growing number of children nationwide live in a family where one or both of their parents is foreign-born.³⁵ In both Arizona and the U.S., 1 in 4 children under age 6 have one or both parents who were born in a different country (Figure 9). Despite the fact that the vast majority of these young children are citizens,³⁶ changes in national immigration policy have led some immigrant families to avoid using social services for which they and their children are legally qualified due

to fear of deportation or risking their legal status in the country.^{37,38,39} 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.^{40,41,42,43}

There is a wide range in the proportion of families with foreign-born parents across Arizona counties, from a high of 47% in Santa Cruz County to a low of 1% in Gila County (Figure 9).

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



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

Note: The term "parent" here includes step-parents.

COVID-19 Pandemic Effects

Despite the increasing diversity in the ethnic and racial composition of the state and the country, disparities continue to prevail among various ethnic groups. The pandemic has disproportionately impacted Hispanic, Black and American Indian communities, resulting in higher rates of infection, hospitalization and death.^{44,45}

During the COVID-19 pandemic, immigrants have been more likely to work in frontline positions and experience job loss, increasing their risk of COVID-19 exposure and creating additional barriers to testing and treatment with the loss of employer-sponsored health insurance.⁴⁶ Families with foreign-born parents may need additional support to ensure they are able to access the resources they are legally entitled to.

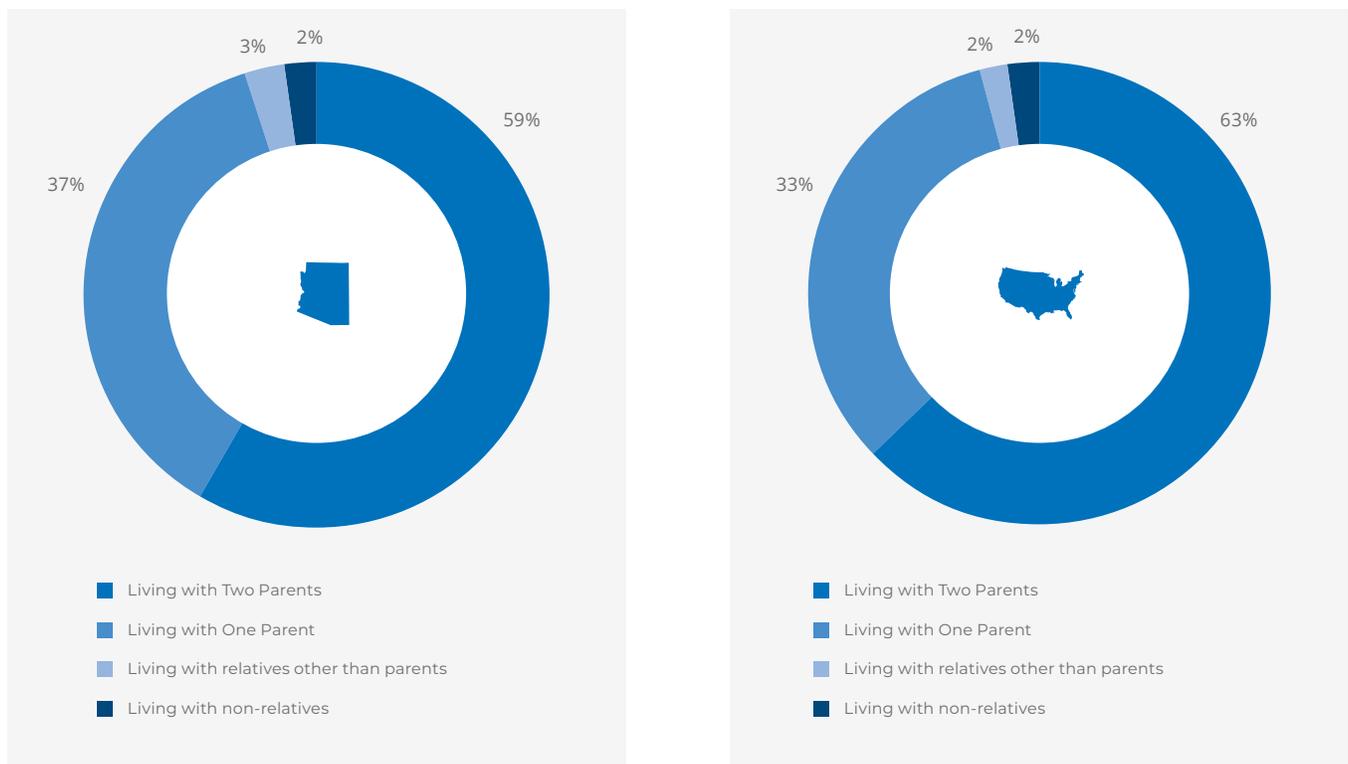
FAMILY CHARACTERISTICS

Living Arrangements

Compared to children nationwide, a smaller proportion of young children in Arizona live with two parents or stepparentsⁱⁱ (63% vs 59%) and relatively more children live with one parent or stepparent (33% 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, that is, living with a close friend or relative who is not a parent, can arrive in those situations for a variety of reasons, including a parent's absence for work or military service, chronic illness, drug abuse, or incarceration, or due to abuse,

neglect or homelessness. Though the proportion of children living in kinship care arrangements in the 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. 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.⁴⁷

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



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

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

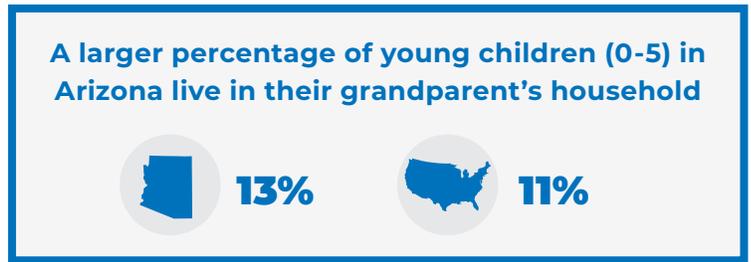
ⁱⁱ The American Community Survey does not distinguish between biological, adopted and stepchildren when reporting data on 'own' children. A child is defined as including a son or daughter by birth, a stepchild, or adopted child of the householder

FAMILY CHARACTERISTICS

Multigenerational Homes

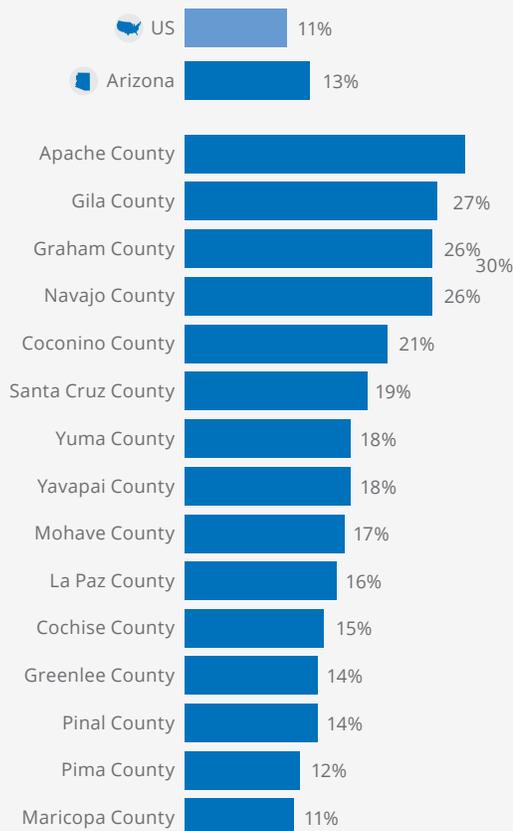
Multigenerational homes are common living arrangements in some communities. Statewide, an estimated 13% of children under age 6 live in a grandparent’s household, a slightly higher proportion than young children nationwide (11%) (Figure 11).ⁱⁱⁱ

Figure 11. Children (ages 0-5) living in grandparent’s household



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

Figure 12. Children (ages 0-5) in a grandparent’s household



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

Note: This graph includes all children (ages 0-5) living in a household headed by a grandparent, regardless of whether the grandparent is responsible for them, or whether the child’s parent lives in the same household.

The proportion of young children who live in a grandparent’s household varies greatly across Arizona counties. More than one-quarter of all young children in Apache (30%), Gila (27%), Graham (26%) and Navajo (27%) counties live in the household headed by their grandparent(s). In counties with larger urban populations like Maricopa and Pima, these proportions are much smaller (11% and 12%, respectively) (Figure 12).

An estimated 65,000 grandparents in Arizona are responsible for one 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 one-third of them are female (62% vs. 63%); under half are 60 years old or older (42% vs. 44%); and about 1 in 5 have incomes below the poverty level (22% vs. 19%). A higher proportion of Arizona grandparents care for their grandchildren in a multigenerational setting, that is, with the parents in the home (69% vs. 64% in the U.S. as a whole).

ⁱⁱⁱ Note that in some of these cases, the child’s parent (or parents) also lives in the household.

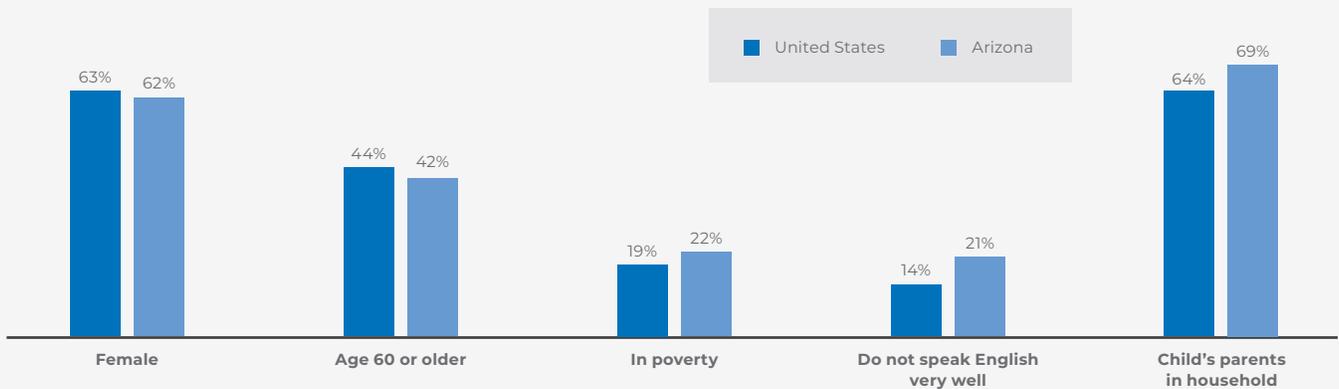
FAMILY CHARACTERISTICS

Arizona grandparents responsible for their grandchildren living with them differ most notably from those across the U.S. in their language use: 21% of them do not speak English very well, compared to 14% of grandparents nationwide (Figure 13). Grandparents with limited English proficiency who are their grandchildren's primary care provider may experience barriers to accessing health care and social services for their grandchildren, as well as barriers to engaging in important interactions at schools.

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, children's risk of living in poverty is higher for those living with grandparents and grandparents often encounter multiple barriers when accessing public assistance as caregivers and face unique psychological and physical stressors.^{48,49,50,51} 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.⁵²

Figure 13. Characteristics of grandparents living with, and responsible for, grandchildren (ages 0-17)



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

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

COVID-19 Pandemic Effects

With the move to remote learning during the pandemic, parents and caregivers took on the challenging role of assisting with children's online learning. The burden was particularly taxing for single-parent households, with more than three-quarters (78%) of single parents surveyed nationally managing children's online learning. Single-parent households were more likely to experience unemployment, food insecurity, difficulty paying for housing and utilities and heightened behavioral difficulties in children during the pandemic.^{53,54,55} Single-parent households were also more likely to rely upon grandparents to take on primary caregiving (37%) and support of children's remote learning (20%) compared to the overall population (26% and 11%, respectively).⁵⁶

Grandparents in multigenerational households are also at heightened risk of COVID-19 infection, especially those living with essential workers.⁵⁷ Given that the risk for severe illness from COVID-19 increases with age,⁵⁸ targeted supports for multigenerational households will be important for preventing continued spread of the disease.

ECONOMIC CIRCUMSTANCES



Why It Matters

Economic stability is an important indicator of child well-being and a key social determinant of health.⁵⁹ Children from higher-income homes tend to fare better on a variety of health and socioeconomic outcomes across the life course, from lower rates of conditions like depression and diabetes, to higher school completion rates and future earnings.^{60,61,62,63} Poverty can negatively affect the way children grow and develop, including fundamental changes to the architecture of the brain.^{64,65} As such, children in impoverished homes are at a greater risk of a host of negative outcomes that include being born at a low birth weight, lower school achievement and poor health.^{66,67,68,69,70,71,72} They are also more likely to remain poor later in life, passing along these challenges to future generations.^{73,74}

Economic resources are important for meeting basic needs, like providing nutrition. Food security, defined by the U.S. Department of Agriculture (USDA) as “access at all times to enough food for an active, healthy life for all household members”⁷⁵ is linked with many aspects of child well-being, and yet households with young children experience food insecurity at nearly twice the rate (15.3%) of households with no children (8.8%).⁷⁶

Safety-net programs such as the federally-funded Supplemental Nutrition Assistance Program (SNAP; also referred to as “nutrition assistance” and “food stamps”),⁷⁷ the Special Supplemental Nutrition Program for Women, Infants and Children (WIC),⁷⁸ and Temporary Assistance for Needy Families (TANF),⁷⁹ along with programs such as KidsCare (the state children’s health insurance program),⁸⁰ the National School Lunch Program, child care subsidies and housing support, aim to minimize the impacts of poverty on child and family well-being.^{81,82,83} Though these are important programs for families, not all key costs are covered. For families of young children in particular, the fact that SNAP and WIC funds cannot be used to purchase diapers can present a major financial burden.⁸⁴ Additionally, in 2019 the Department of Homeland Security broadened the types of public benefits that would deem green card or visa applications ineligible on “public charge grounds.”⁸⁵ The 2019 expanded definition of “public charge” included utilization of Medicaid, public housing and SNAP benefits as part of public charge determination. Though the 2019 Public Charge Final Rule is no longer in effect as of March 2021,^{iv} its chilling effect may have lasting impacts on immigrant families accessing supports they are legally entitled to.

^{iv} For a description of what is and is not currently considered during public charge determinations, see <https://www.uscis.gov/green-card/green-card-processes-and-procedures/public-charge/public-charge-resources>

ECONOMIC CIRCUMSTANCES

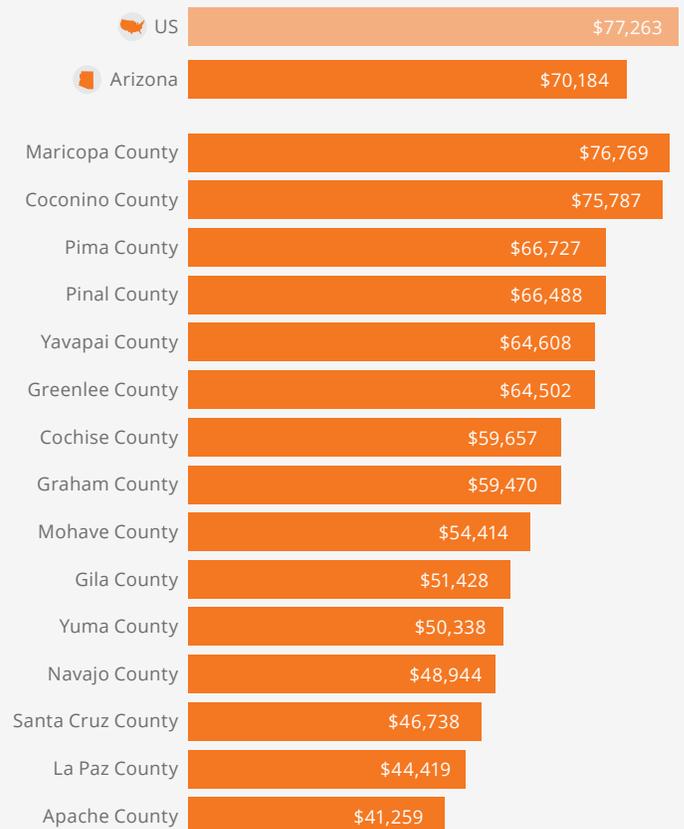
Other factors related to economic stability include employment and housing.⁸⁶ Unemployment (and underemployment^v) can limit access to resources like health insurance – typically provided by employers – that support children's health and well-being. Unemployment can also contribute to family stress, conflict, homelessness and child abuse.^{87,88} Similarly, housing instability can have

harmful effects on the physical, social-emotional and cognitive development of young children.⁸⁹ High housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health and homelessness.^{90,91} This high relative cost leaves inadequate funds for other necessities, such as food and utilities.⁹²

How Arizona's Young Children Are Faring Income and Poverty

The median family^{vi} income in Arizona is \$70,184, about \$7,000 lower than the U.S. median family income of \$77,263. Incomes in all Arizona counties fall below the national benchmark, though Maricopa County residents most closely approach it, with a median family income of \$76,769. Median incomes elsewhere are substantially lower, dropping to \$41,259 in Apache County (Figure 14).

Figure 14. Median annual family income



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

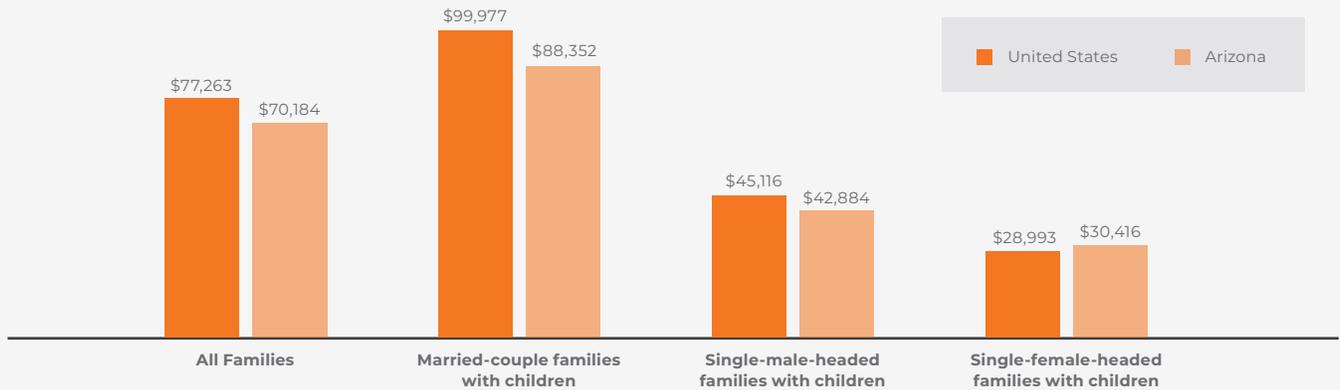
^v Underemployment means that someone works fewer hours than they would like or is in a job that does not require the skills or training that they have.
^{vi} According to the American Community Survey Subject Definitions, a family consists of two or more people living together who are related to each other by birth, marriage, or adoption.

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Median income varies substantially by family type. Married parents with children (ages 0-17) in Arizona earn a median income of \$88,352. Single-

male-headed families earn less than half that – \$42,884, and single-female-headed families earn about one-third of that – \$30,416 (Figure 15).

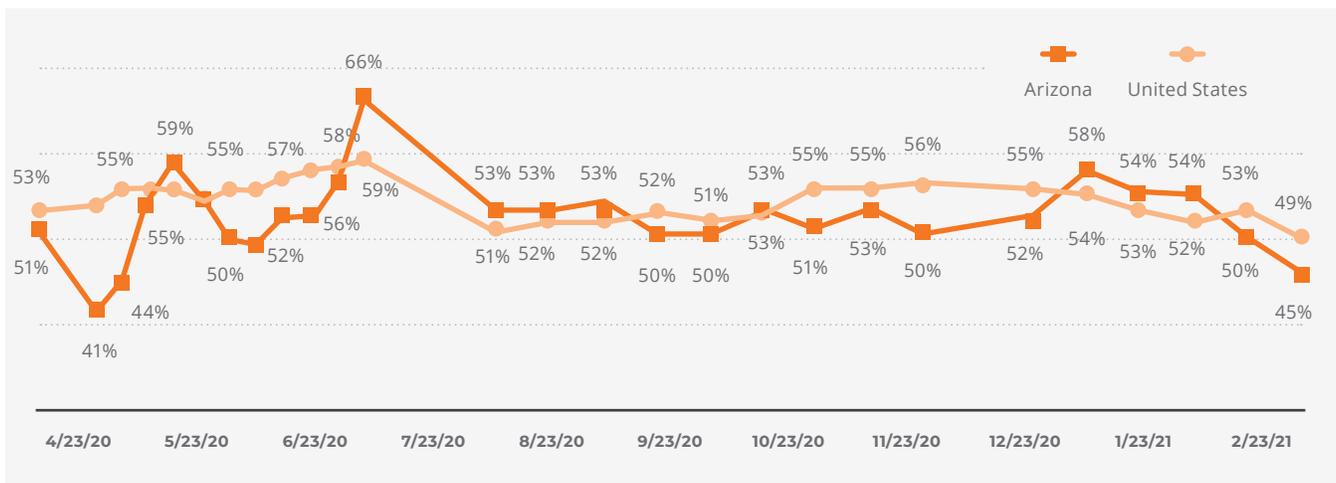
Figure 15. Median family income by household type for families with children ages 0-17, 2015-2019



COVID-19 Pandemic Effects

The COVID-19 pandemic had a sudden and dramatic impact on income for many families nationwide. The U.S. Census Bureau’s Household Pulse Survey asked adults across the country week by week about their experiences with work and how their incomes were affected during the pandemic. In Arizona, typically at least half of surveyed adults reported that someone in their household had lost employment income, with one week spiking up to two-thirds of respondents. Arizona generally mirrors the trends seen nationwide (Figure 16).

Figure 16. Adults in households with children ages 0-17 who reported that someone in their household lost employment income, April 2020 to March 2021



U.S. Census Bureau (2021). Household Pulse Survey Data, Phases 1, 2 & 3. Retrieved from <https://www.census.gov/programs-surveys/household-pulse-survey.html>

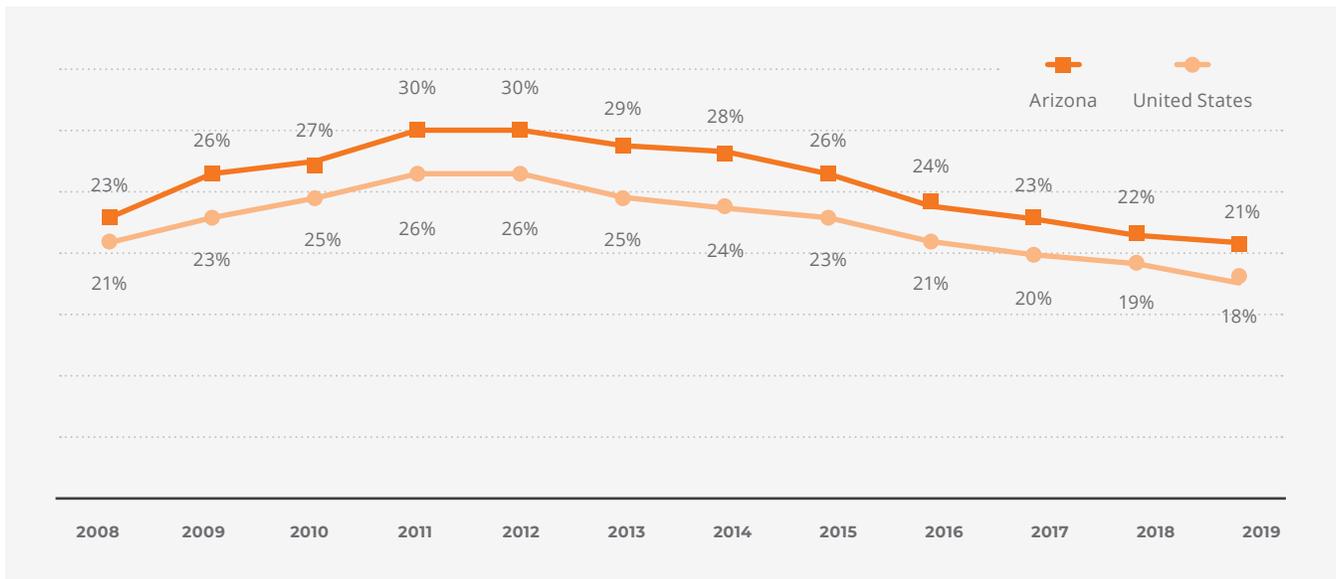
ECONOMIC CIRCUMSTANCES

The adequacy of income depends on family size, among other factors. Accordingly, the definition of poverty in the United States depends on family size and composition. In 2020, a family of two adults and two children earning an income lower than \$26,246 was considered to be in poverty according to U.S. Census definitions.⁹³ Compared to the U.S. as a whole, Arizona consistently has a higher proportion of young children who live in poverty (Figure 17). Arizona also has a higher proportion of children (0-17) living in concentrated poverty (20%), defined as census tracts with overall poverty rates of 30% or more, than the nation as a whole (12%).⁹⁴ Only two states, New Mexico (24%)

and Mississippi (24%) have higher concentrated poverty rates than Arizona.

Following the national trend, child poverty rates in Arizona have been steadily declining since 2012. In 2019, the proportion of Arizona's young children living in poverty decreased to 21%, the lowest it has been since the American Community Survey began collecting these data (Figure 17). Even with this substantial improvement, more than 1 out of every 5 young children in Arizona still lives in poverty, a fact that has significant implications for the future of the state, both in terms of the health and well-being of its residents and its economy.

Figure 17. Children (ages 0-5) living in poverty in Arizona and the United States, 2008 to 2019



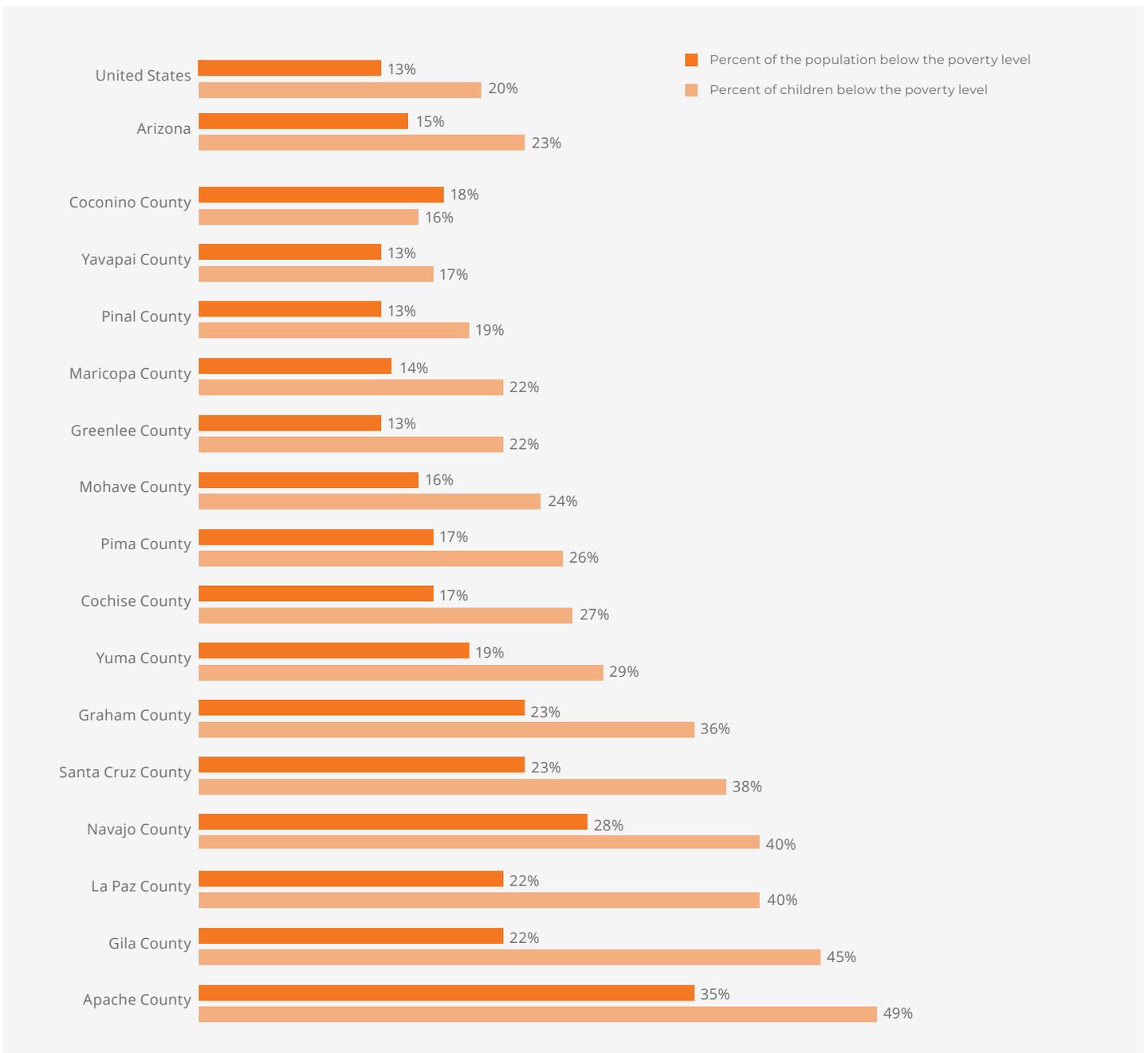
Source: U.S. Census Bureau (2019). 2005 to 2019 American Community Survey Single Year Estimates, Table B17001. Retrieved from <http://factfinder.census.gov>

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Though people across Arizona struggle with high rates of poverty, certain counties have especially high rates. Over one-quarter of the entire population in Apache (35%) and Navajo (28%) counties live in poverty. Families with young children are in particularly dire economic circumstances. Over one-third of young children in

Graham (36%), Santa Cruz (38%), La Paz (40%) and Navajo (40%) counties live in poverty. In Gila (45%) and Apache (49%) counties, nearly half of young children live in poverty, suggesting that programs that support low-income families are especially important to the futures of young children in many parts of the state (Figure 18).

Figure 18: Poverty rates, all ages and children (ages 0-5)

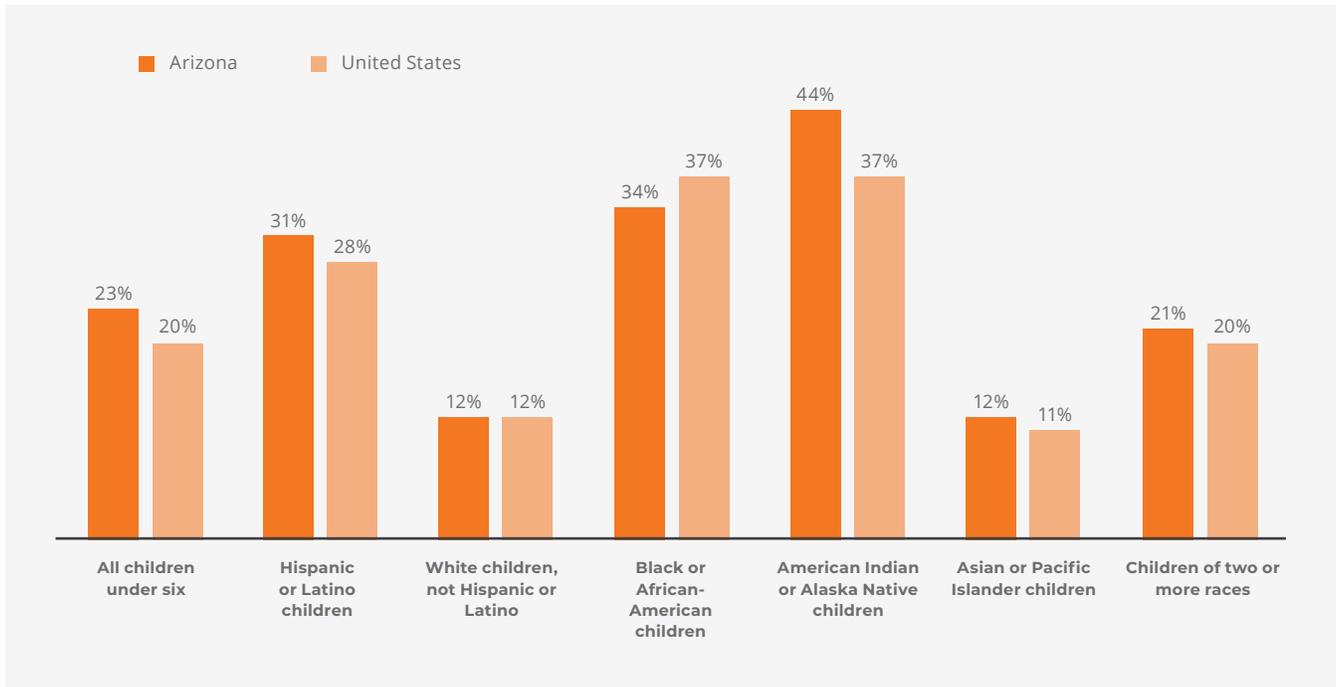


Source: United States Census Bureau (2021). 2015-2019 American Community Survey 5-Year Estimates, Table B17020

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Poverty varies substantially by race and ethnicity. Among children under age 5 in Arizona, poverty rates are highest among American Indian (44%), Black (34%) and Hispanic (31%) youth, as they are in the U.S. as a whole (American Indian 37%; Black 37%; Hispanic 28%) (Figure 19).

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



Source: United States Census Bureau (2021). 2015-2019 American Community Survey 5-Year Estimates, Tables B17020, B17020-B, B17020-C, B17020-D, B17020-E, B17020-H, & B17020-I

It is important to note that the number of families and young children who live in poverty by official definitions (i.e., the federal poverty level) far underestimates the number of children in families who struggle to make ends meet. As a benchmark, the Federal Poverty Guideline – the criterion used for establishing eligibility for some safety net programs – for a family of four was \$25,750 in 2019 and \$26,200 in 2020.^{95,96} However, the Federal Poverty Guideline definition of poverty

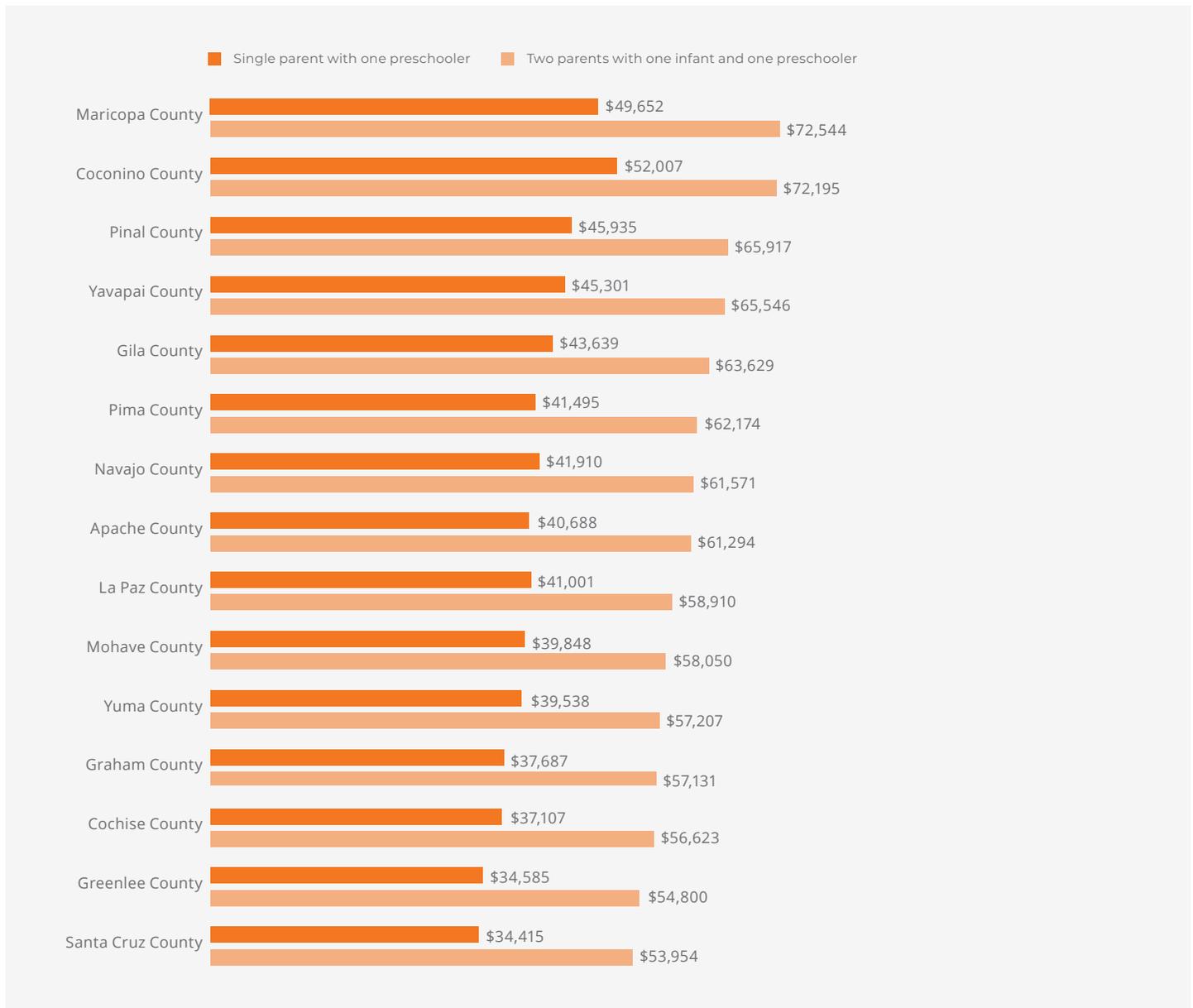
was developed in the 1950s and is based on the assumption that basic nutrition accounts for one-third of family spending; it is widely considered to be well below what a family actually needs to earn for financial stability. The “self-sufficiency standard” attempts to estimate how much families need to earn to fully support themselves, accounting for local variation in costs of housing, transportation, child care and other budget items.⁹⁷

ECONOMIC CIRCUMSTANCES

The 2021 self-sufficiency standards for a family comprised of two parents, one infant and one preschooler are highest in Maricopa (\$72,544) and Coconino (\$72,195) and lowest in Santa Cruz (\$53,954) and Mohave (\$58,050) counties, but all Arizona counties have self-sufficiency standards that are more than twice the federally-defined

poverty level (Figure 20).⁹⁸ Note that the self-sufficiency standard approaches or exceeds the median income in each county (see Figure 15), suggesting that over half of the families in Arizona are likely to be struggling to fully support themselves.

Figure 20. 2018 Self-Sufficiency Standard



Source: Pearce, D.M. (2021) *The Self-Sufficiency Standard for Arizona 2021*

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The gap between the thresholds of low income needed to qualify for public supports and the substantial income needed to actually support a family can also lead to a “benefits cliff”⁹⁹ for low-income families. This problematic phenomenon occurs when a low-income earner gets a boost in earnings – either through a raise, working additional hours or other means – that makes

them ineligible for programs, like SNAP, WIC or subsidized health insurance that they previously qualified for, even if the additional earnings cannot make up the difference in the family budget. Thus, many families who may not technically be living in poverty or be considered low-income may still face substantial economic hardship.

COVID-19 Pandemic Effects

The immediate, widespread economic hardship induced by the COVID-19 pandemic resulted in shifts in existing cash assistance programs and the development of additional economic supports. For example, between February and July 2020, the number of families using TANF rose 35%. During the state of emergency order, Arizona suspended the TANF work requirement¹⁰⁰ and lifetime eligibility limit of 12 months,¹⁰¹ which had been the shortest in the nation,¹⁰² thereby allowing more families to tap into these emergency funds.

Economic Impact Payments To combat widespread economic hardship brought on by the COVID-19 pandemic, the federal government issued three Economic Impact Payments to eligible individuals in 2020 and 2021. These funds were available to U.S. citizens or resident aliens whose adjusted gross incomes were no more than \$75,000 for single adults, \$112,500 for heads of household, and \$150,000 for married couples filing jointly.¹⁰³ Eligible families received: \$1,200 per adult and \$500 per child in April 2020, \$600 per family member in December 2020/January 2021 and \$1,400 per person in March 2021.¹⁰⁴ While these payments were a financial boon for many families, immigrant families were excluded from the first round of payments under the CARES Act. Families in which at least one parent filed using an individual Taxpayer Identification Number (ITIN) (as a resident or nonresident immigrant) instead of a Social Security Number (SSN) were originally excluded from the payments. This includes the families of 104,000 Arizona children who were ineligible for the first round of stimulus payments.¹⁰⁵ Although a subsequent bill allowed for retroactive payments if one parent had an SSN, these had to be claimed through 2020 tax returns.^{106,107} For the second round of payments, filers using ITINs were ineligible, but their spouses and children were eligible if the spouse used an SSN. Children who only have parents with ITINs received none of the emergency support, regardless of economic need.

Child Tax Credit Payments In March 2021, the American Rescue Plan Act was passed, including an expansion of the child tax credit. Previously, families earning sufficient income were given a \$2,000 credit for children under age 17. In the new plan, eligible families will receive a credit of \$3,600 for each child under age 6 and \$3,000 for each child age 6-17. Under this plan, these funds are available to more low-income families and began being disbursed through monthly payments in July 2021.¹⁰⁸ It is estimated that this funding will enhance the economic resources for 1.5 million Arizonan children overall.¹⁰⁹ Although many family advocates champion making the expansion permanent, at the time of this report, the expansion was only enacted for 2021.¹¹⁰

ECONOMIC CIRCUMSTANCES

Food Security

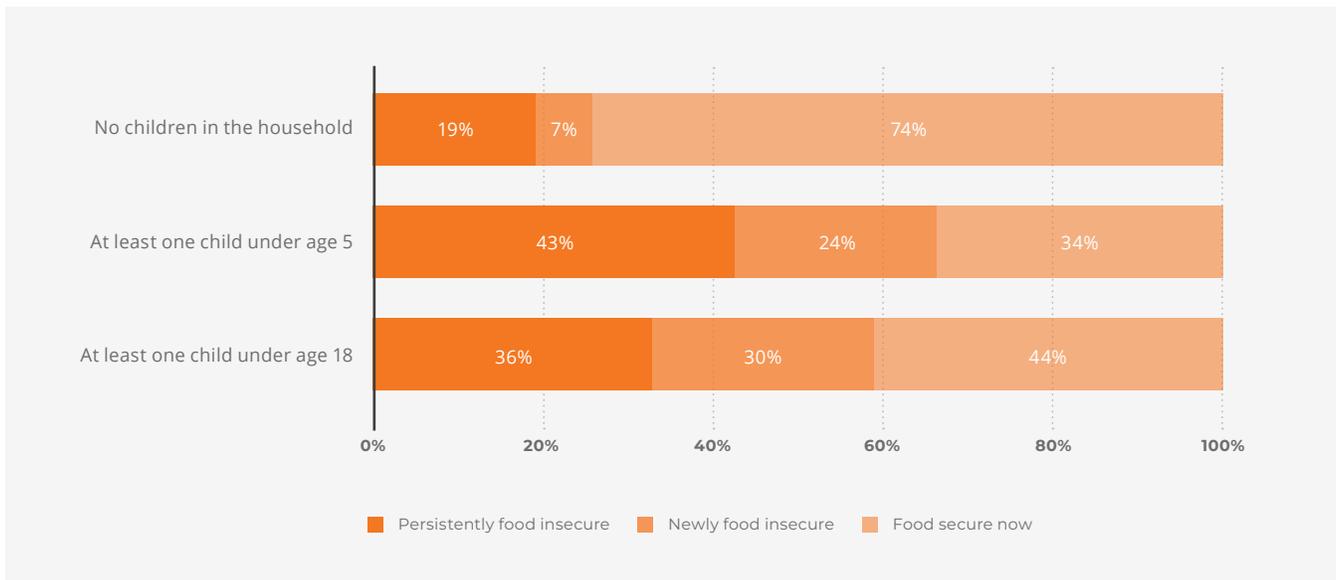
Arizona is tied for ninth among states with high projected levels of food insecurity among children in 2021 (20.4%, up from 17.6% in 2019).¹¹¹ Arizona is also ranked ninth among states for the proportion of children projected to experience “very low food security,” in which household members reduce their food intake.¹¹² Maricopa County has recently

ranked and is projected to continue ranking among the top five counties in the nation in terms of number of people experiencing food insecurity and very low food security, fourth in number of children experiencing food insecurity, and third in number of children experiencing very low food security.¹¹³ This has implications not only for the physical well-being of families, but also mental health.

COVID-19 Pandemic Effects

A nationally representative survey found that for caregivers in low-income families, food insecurity during the pandemic, exacerbated by the loss of free meals (e.g., school lunch), was the lone consistent predictor of anxiety, depression and stress.¹¹⁴ Arizona families with young children are particularly vulnerable to being persistently food insecure and becoming food insecure during the COVID-19 pandemic (Figure 21). Furthermore, food insecurity tends to be worse for people of color. Nationally, Hispanic individuals are almost twice as likely (15.8%) as non-Hispanic White individuals (8.1%) to be food insecure, and Native Americans are three times as likely (23.5%) to be food insecure.¹¹⁵

Figure 21. Food security status during the COVID-19 pandemic by presence of children in households

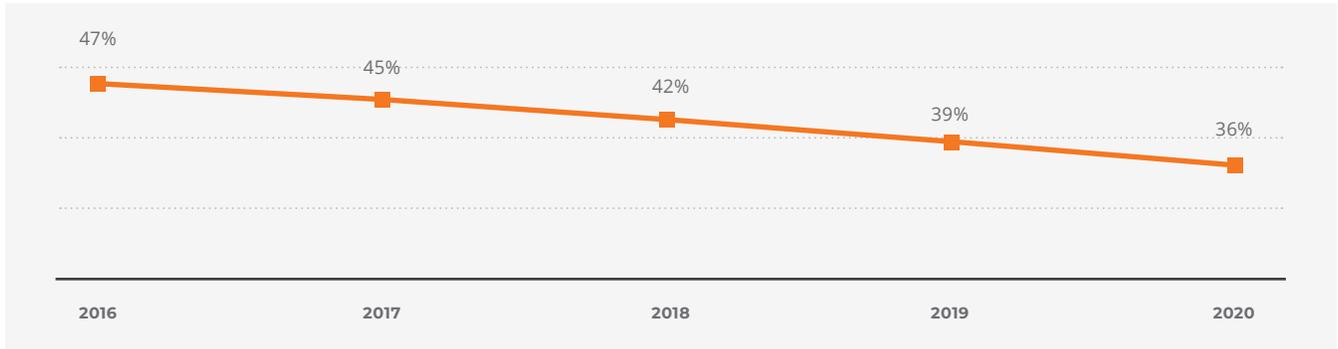


Source: Figure replicated from Martinelli, S., Acciai, F., Yellow Horse, A.J., Josephson, A., and Ohri-Vachaspati P. (2020, November 1). Food assistance program participation among Arizona households during the COVID-19 pandemic. ASU Library. <https://keep.lib.asu.edu/items/243>

ECONOMIC CIRCUMSTANCES

SNAP is designed to combat food insecurity. In the years prior to the pandemic, the proportion of families with young children who participate in SNAP has steadily declined across the nation, likely reflecting the continuing economic recovery from the Great Recession.¹¹⁶ Between 2015 and 2020, the number of Arizona families with young children receiving SNAP also steadily declined (Figure 22).

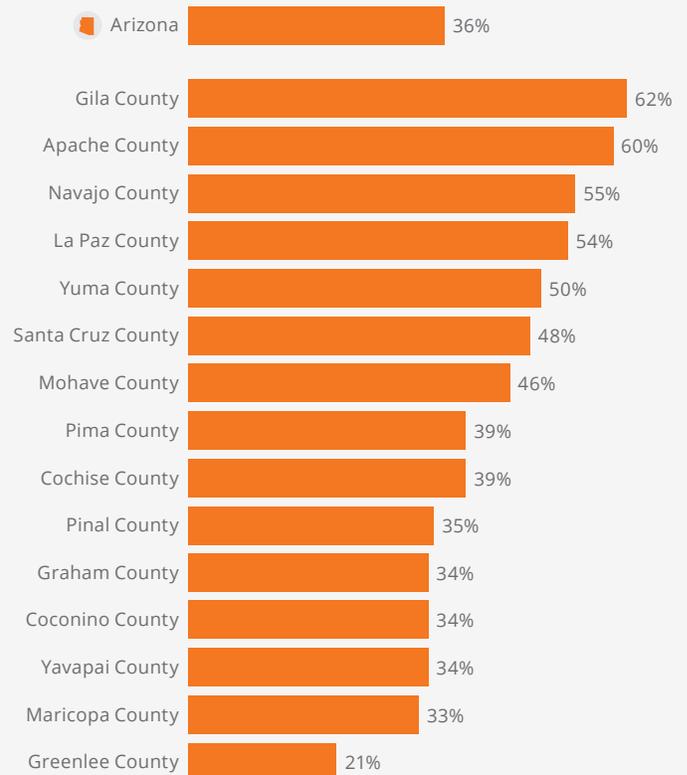
Figure 22. Food security status during the COVID-19 pandemic by presence of children in households



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

Despite the proportion of young children who receive SNAP benefits declining in all counties between 2016 and 2020, in five of Arizona’s counties, at least half of all children birth to age 5 receive SNAP benefits, underscoring how important this support is for childhood food security (Figure 23).

Figure 23. Percent of children (ages 0-5) participating in SNAP, SFY2020



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

ECONOMIC CIRCUMSTANCES

COVID-19 Pandemic Effects

Given the threats posed to food security by the COVID-19 pandemic, between February 2020 and February 2021, SNAP usage rose 16% among clients of any age and 21% among children in Arizona, which is more than double the 10% increase in SNAP participation by children seen in the United States as a whole.¹¹⁷ WIC participation increased by 6% in Arizona during that same time, compared to 2% nationwide.¹¹⁸

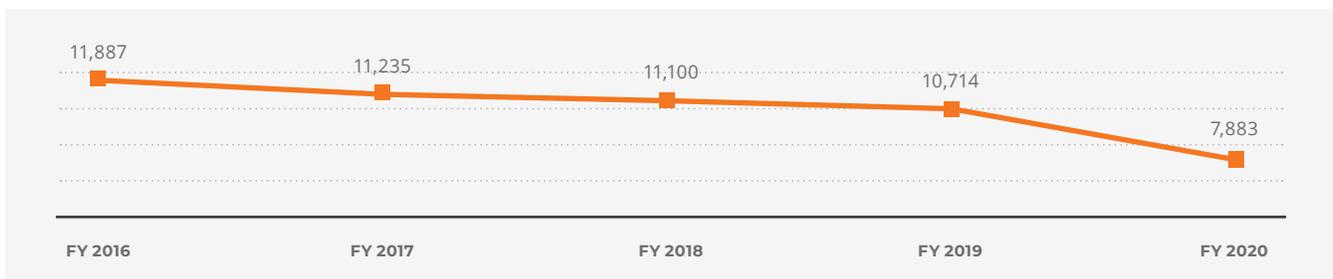
In a survey of SNAP users in Arizona, nearly half (46%) of respondents found their benefits insufficient to meet their family's needs, due to barriers such as issues paying for online groceries and not being able to use a full month's benefit due to COVID-19 related shopping difficulties, such as stores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

During the pandemic, changes were made to SNAP program administration to better meet the needs of families in a time of crisis.¹²¹ Beginning in December 2020, participants received a 15% increase in benefits. Among other administrative changes, interviews were waived, certification periods were extended and online shopping was approved, making it easier for families to access benefits.^{122,123} WIC also adjusted administrative guidelines, and participants were allotted extra monthly funds to use on fruits and vegetables.^{124,124} These waivers and emergency allotments can be extended while the state is under a COVID-19 emergency declaration and were still in effect as of this report being written (October 2021). Beginning October 2021, the USDA also instituted a roughly 27% increase in SNAP benefits, the largest permanent increase in the program's history.¹²⁶

The Pandemic Electronic Benefit Transfer Program (P-EBT), a collaboration among the Arizona Department of Education, the Arizona Department of Economic Security and the USDA Food and Nutrition Service, was established to offset the loss of meals normally received for free at schools or child care settings. Eligible families included those participating in SNAP with a child under age 6 and those with a child who received free or reduced-price school lunch.¹²⁷ Over 520,200 children were eligible for the program in Arizona, which ended on September 24, 2021.¹²⁸

Another support mechanism for Arizona families in Native communities is the Food Distribution Program on Indian Reservations (FDPIR). Like SNAP, the program has shrunk in recent years, with a substantial drop in FY 2020 from about 10,700 participants to about 7,900 participants (Figure 24). This drop in participation may have left families even more vulnerable to food insecurity during the pandemic.

Figure 24. Participation in the Food Distribution Program on Indian Reservations (FDPIR)



Source: USDA-FNS. (2020). Food distribution program tables |FDPIR (Participation) [Dataset].
<https://www.fns.usda.gov/pd/food-distribution-program-tables>

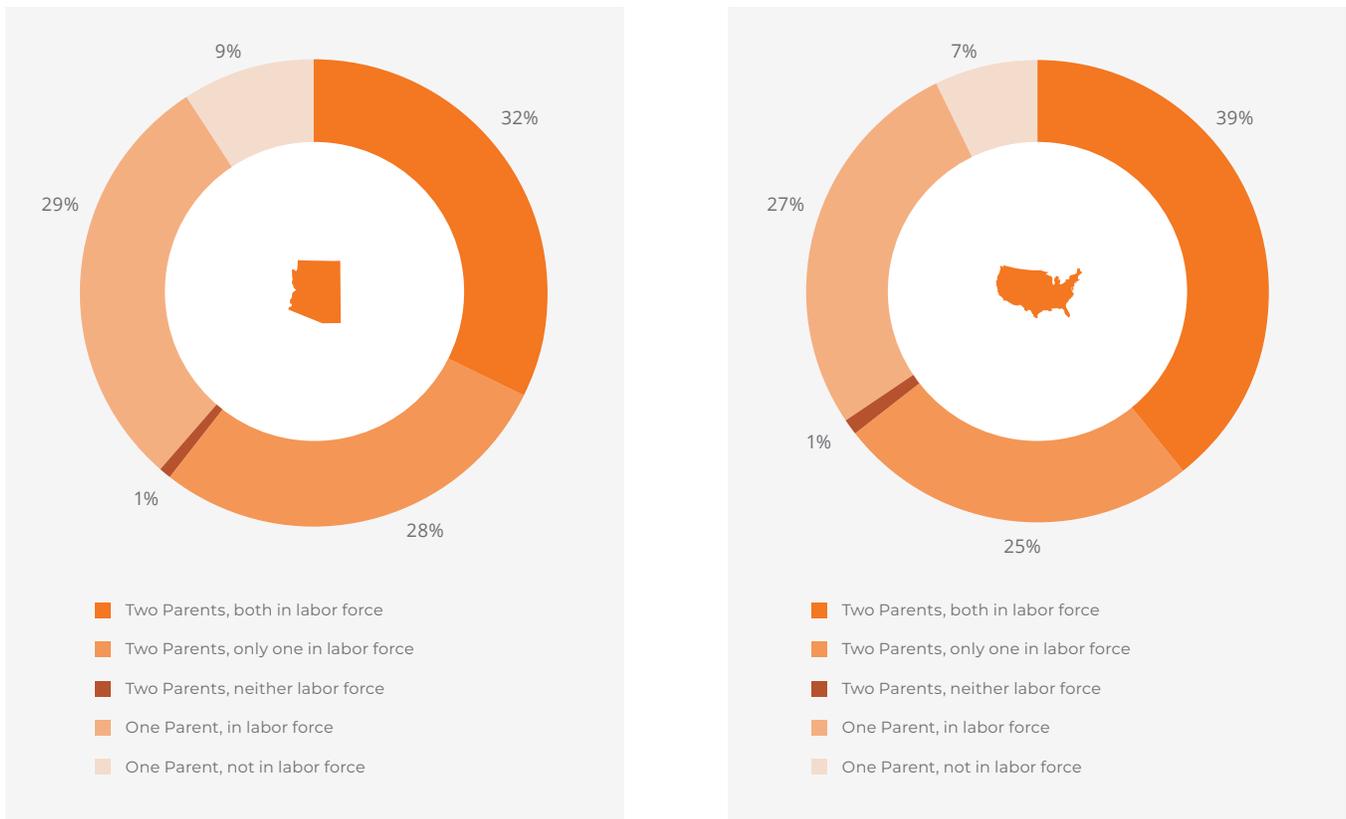
ECONOMIC CIRCUMSTANCES

Employment

Over 60% of young children 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 (29%) and dual-earner households (32%) (Figure 25). In other words, the majority of Arizona households with young children likely require some form of child care. Yet, the Center for American Progress estimates that 48% of Arizonans live in a “child care desert,” defined as

an area where there are at least three times as many children as there are child care slots, meaning that the absence of accessible, affordable child care may be a barrier to employment.¹²⁹ In Arizona, the majority of rural families (67%), low-income families (59%) and Hispanic/Latino families (55%) live in a child care desert, making them disproportionately impacted by barriers to child care and therefore barriers to employment.¹³⁰ This is slightly worse than in the U.S. as a whole, where 60% of rural families and 55% of low-income families live in child care deserts.

Figure 25. Employment status of parents of young children, Arizona, 2013-2017



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B23008

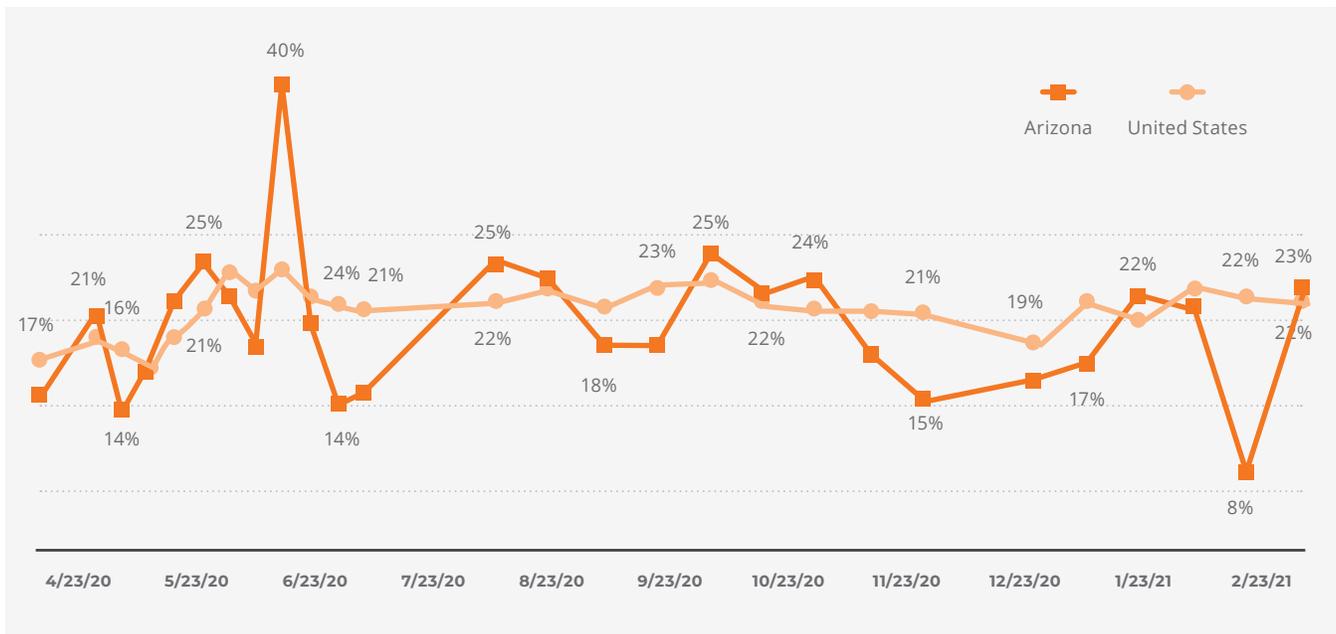
Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The term “parent” here includes step-parents. The five percentages in each row should sum to 100%, but may not because of rounding.

ECONOMIC CIRCUMSTANCES

COVID-19 Pandemic Effects

Given the pre-pandemic need for child care and the already limited availability of child care in the state, the closure of many child care centers and schools due to the COVID-19 pandemic had substantial effects on the ability of parents to work. The U.S. Census Bureau's Household Pulse survey has asked adults week by week through the pandemic about their employment status, and for those who are not working, their primary reason for not working. Across the nation, the share of non-working adults in households with children who reported that their primary reason for not working was caring for children not in school or child care quickly rose to about 1 in 5 and remained there throughout the pandemic. In Arizona, the share of non-working adults with children who reported that lack of care was the primary reason for not working ranged from 8% to 40% depending on the survey week (Figure 26). For the majority (16 of 27) of weeks of the Household Pulse, caring for children not in school or child care was the number one reason given why non-retired adults were not working in Arizona. This suggests that access to child care is essential for parents and other caregivers in Arizona to access employment opportunities. Data on the decrease in availability of child care during the COVID-19 pandemic can be found in Figure 38. During the pandemic (through September 2021), DES offered the Essential Workers' Scholarship Program which offered essential workers child care scholarships that could be used for children through age 12.¹³¹ Arizona's Back To Work Program, announced in May 2021, provided eligible parents returning to work between June and September 2021 with funding assistance for three months of child care.⁵

Figure 26. Non-working adults in households with children (ages 0-17) who identified “caring for children not in school or daycare” as the primary reason they were not working



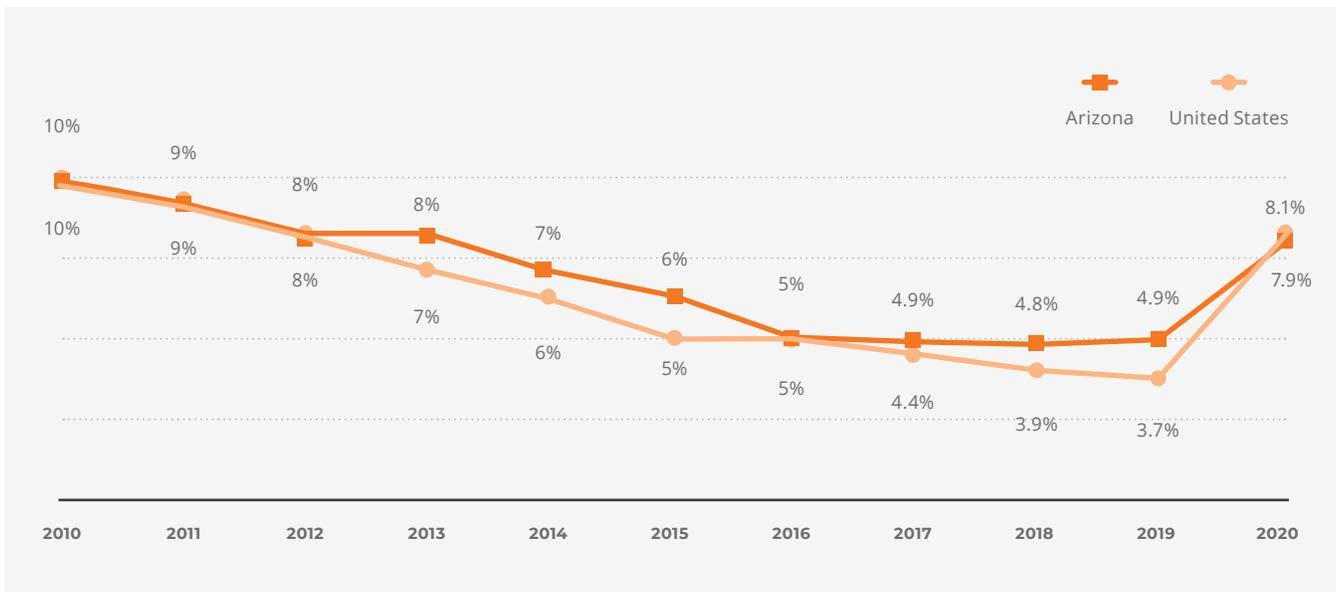
U.S. Census Bureau (2021). Household Pulse Survey Data, Phases 1, 2, & 3.
Retrieved from <https://www.census.gov/programs-surveys/household-pulse-survey.html>

ECONOMIC CIRCUMSTANCES

Nationwide, unemployment rates had been on a steady decline since the end of the Great Recession in 2009. During the recovery, Arizona's unemployment rate has remained consistently higher than the national rate. Pre-pandemic, in 2019, the percentage of Arizonans who were unemployed was 4.9% compared to 3.7% nationally. Nationally, in 2020, the unemployment rate more than doubled (from 3.7% to 8.1%) as a result of the pandemic. Unemployment rates jumped in Arizona as well (7.9%), but landed slightly lower than the US overall (8.1%) (Figure

27). Notably, 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.¹³² The labor force participation rate, which reflects those adults as well, was at 61.7% in Arizona in January 2020 and 60.6% by July 2021.¹³³ Nationally, the labor force participation rate was at 63.4% in January 2020 and 61.7% by July 2021.¹³⁴

Figure 27. Annual unemployment rates, not seasonally adjusted (BLS), 2010 to 2020



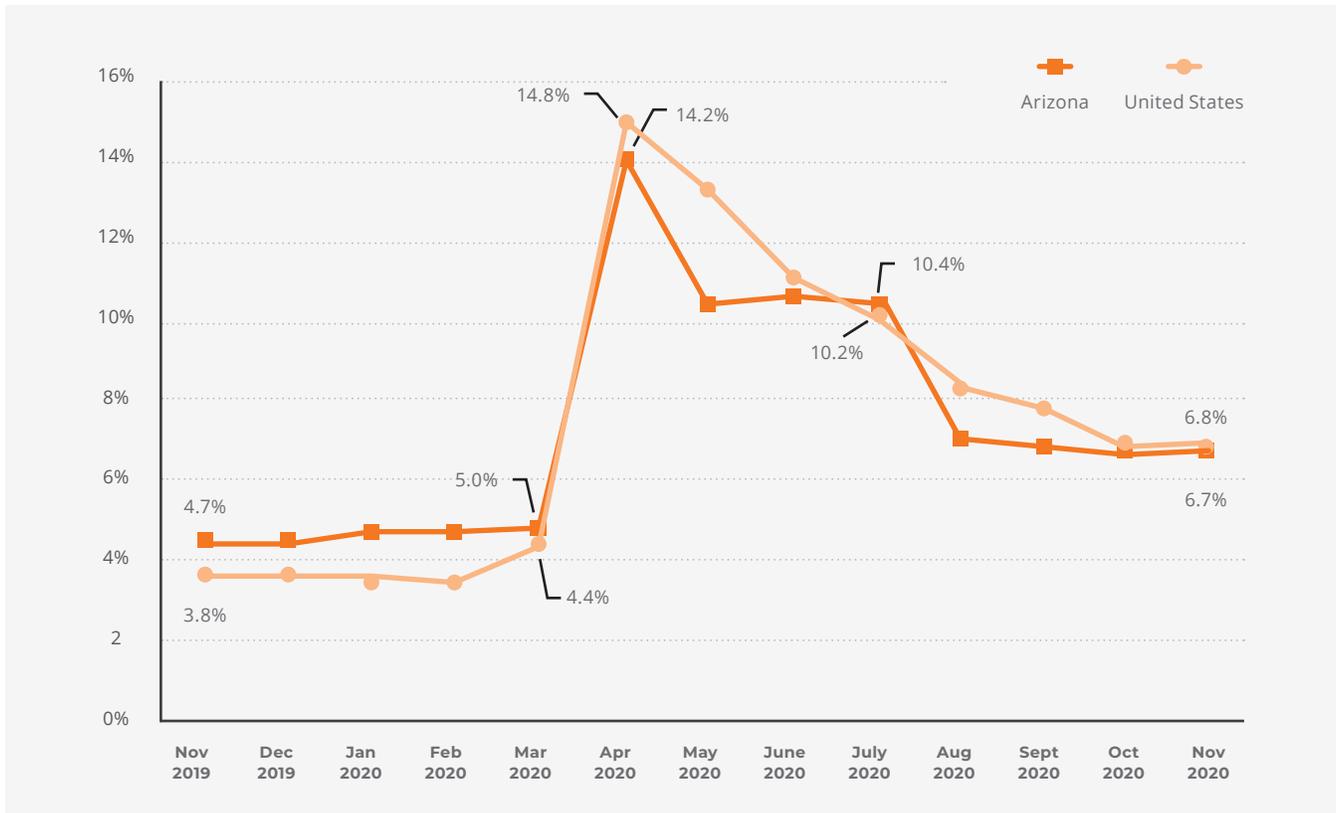
Source: Bureau of Labor Statistics. Labor Force Statistics from the Current Population Survey. Retrieved from <https://www.bls.gov/cps/tables.htm#annual>

ECONOMIC CIRCUMSTANCES

COVID-19 Pandemic Effects

The COVID-19 pandemic shocked the labor market. Unemployment skyrocketed as businesses closed their doors as emergency orders went into effect. By April 2020, the unemployment rate in Arizona had risen to 14.2%. In the months that followed, that rate declined, dropping to 6.7% by November 2020 (Figure 28).

Figure 28. Monthly unemployment rates, November 2019 to November 2020



Source: Bureau of Labor Statistics. Labor Force Statistics from the Current Population Survey.
Retrieved from <https://www.bls.gov/cps/tables.htm#annual>

Unemployment insurance claims peaked at 262,523 the week of May 16, 2020. This is over twice the number of claims at the peak of the Great Recession in 2009.¹³⁵ In March 2020, the Pandemic Unemployment Assistance (PUA) program temporarily expanded unemployment insurance eligibility to categories of workers who were not previously eligible for unemployment, including self-employed workers, freelancers, independent contractors and part-time workers and the Pandemic Emergency Unemployment Assistance (PEUA) program extended benefits for those who had already exhausted the 26 weeks of benefits usually allowed in Arizona.¹³⁶ In addition to expanded eligibility, federal provisions granted unemployed workers nationwide supplemental funds during the pandemic - \$600 additional per week through July 31, 2020, and \$300 additional per week through September 5, 2021.¹³⁷ In May 2021, the governor announced that supplemental unemployment funding would end early in Arizona, on July 10, 2021, and instead launched Arizona's Back To Work Program which offered financial incentives for returning to work (\$2,000 for full-time, \$1,000 for part-time for eligible workers) as well as scholarships for community colleges.^{138,139}

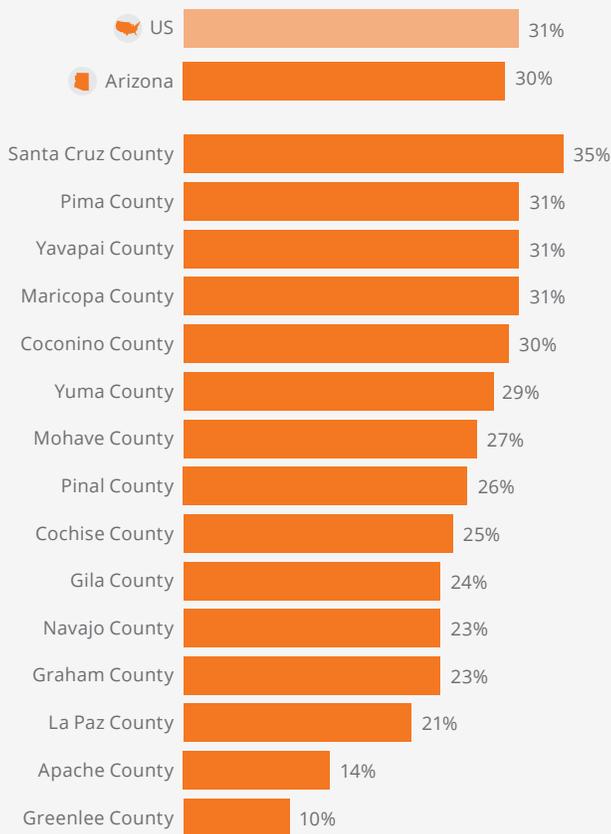
ECONOMIC CIRCUMSTANCES

Housing

Traditionally, housing has been deemed affordable for a family if it costs less than 30% of their annual income.¹⁴⁰ Compared to many areas of the U.S., Arizona is perceived to have a relatively low cost of living. However, in most Arizona counties, more than 1 in 4 households have housing costs that would be considered unaffordable – that is, households spend 30% or more of their income

on housing. For Santa Cruz County, 35% of households have unaffordable housing, higher than the national rate (Figure 29). This amount of income spent on housing leaves less available for food, utilities, early education programs and other supports that help young children thrive. Additionally, high housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health and homelessness.^{141,142}

Figure 29. Percent of households paying 30% or more of income for housing cost



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

COVID-19 Pandemic Effects

Rising housing costs One result of the COVID-19 pandemic and the transition to remote work is a booming real estate market. In Arizona, home prices were up 27.4% in July 2021 compared to July 2020; this is a greater increase than the 19.5% increase seen in the U.S. as a whole.^{143,144} In fact, four of the top 10 metro areas with the fastest growth in home sales price are in Arizona: Surprise (36.7%), Gilbert (30.4%), Glendale (30.4%) and Mesa (29.1%).¹⁴⁵ Over half (55.9%) of Arizona homes on the market sold over list price in July 2021.¹⁴⁶ Rental prices also surged, with the Phoenix metro area making headlines as one of the most quickly rising markets (a 20.9% increase between June 2020 and June 2021, compared to an 8.1% increase in the 50 largest metro areas).¹⁴⁷ Rapidly rising costs in the housing market may make it harder for many families to purchase a home, thereby making associated benefits, including financial gain, residential stability and improved educational outcomes for their children, less attainable.^{148,149}

ECONOMIC CIRCUMSTANCES

COVID-19 Pandemic Effects

Housing security While pre-pandemic housing cost burdens were already high enough to cause concern in some counties in Arizona, the economic disruptions of the COVID-19 pandemic, including losses of household employment income reported by approximately half of adults in the state, led to housing instability for some families as they struggled to make housing payments.

The Household Pulse survey asked adults about the status of their housing payments and their confidence in their ability to pay for housing in the future. Nationwide, between 12 and 16% of adults in households with children reported that they had not paid their last mortgage or rental payment on time, and 19 to 29% had low confidence in their ability to make their next housing payment. Encouragingly, the share of adults with low confidence in making their next housing payment did decline over the course of the pandemic, suggesting that after the initial shock, there has been recovery in households' economic prospects. In Arizona, the rate of adults with children who reported being behind on housing payments started out lower than the rates seen nationwide, but this rate converged with national rates in late 2020. Similarly, proportionally fewer Arizona adults in households with children reported low confidence in their ability to make their next housing payment compared to those nationwide through most of 2020; by early 2021, these rates were similar to national rates, with between 1 in 5 and 1 in 4 adults with children reporting low confidence in their ability to make their next payment (Figure 30 & Figure 31).

Figure 30. Adults in households with children who reported that they had not paid their last mortgage or rent payment on time, April 2020 to March 2021

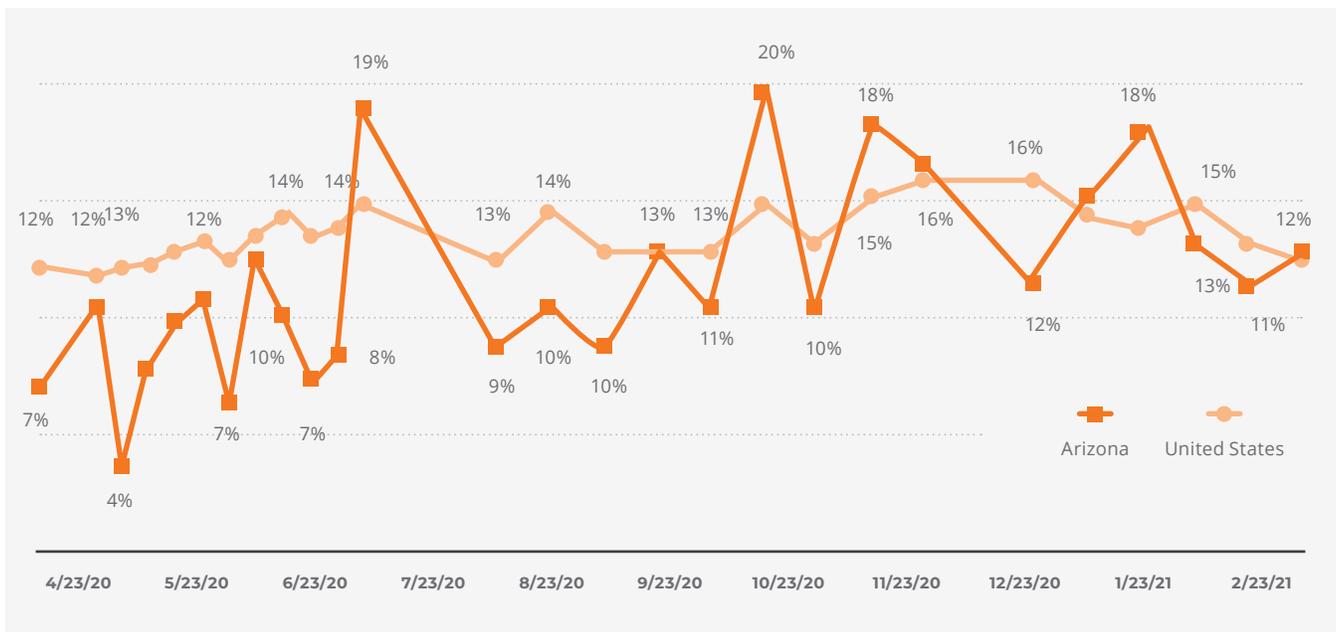
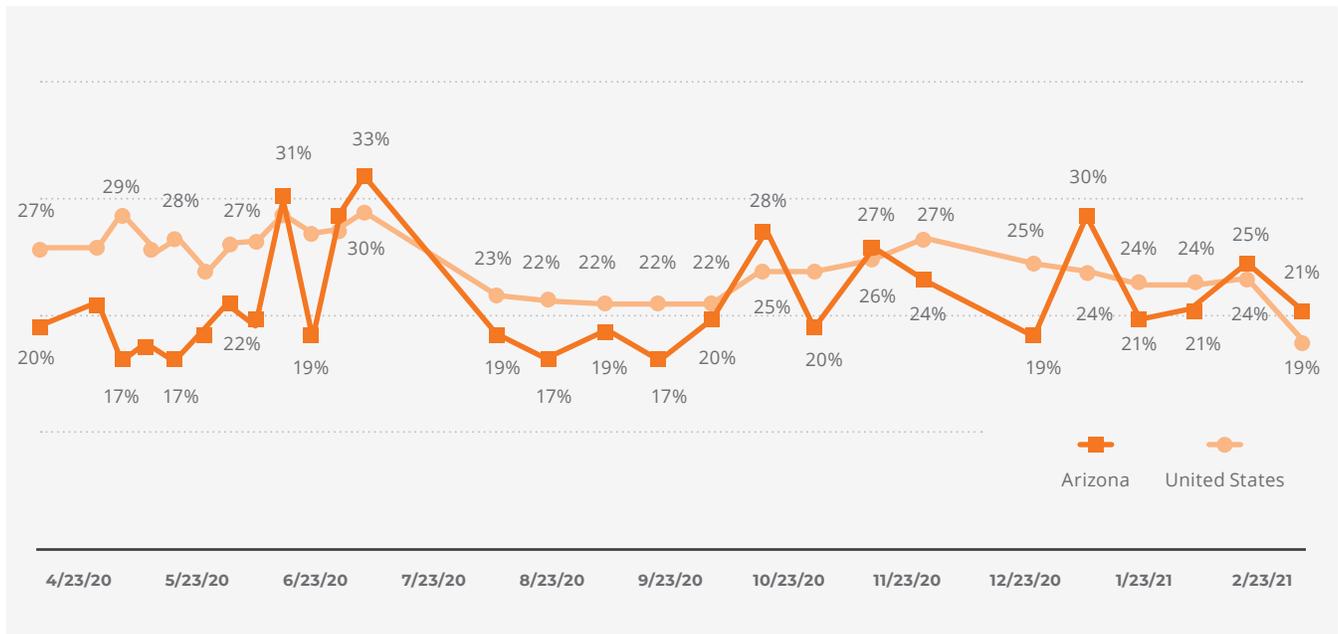


Figure 31. Adults in households with children (ages 0-17) who reported no or slight confidence in their ability to make their next housing payment, April 2020 to March 2021



U.S. Census Bureau (2021). Household Pulse Survey Data, Phases 1, 2, & 3.
Retrieved from <https://www.census.gov/programs-surveys/household-pulse-survey.html>

Evictions There have been multiple federal efforts to prevent eviction or foreclosure and ease housing instability among households in the U.S. throughout the COVID-19 pandemic. Eviction moratoriums and mortgage forbearance programs for federally-backed mortgages aimed to prevent families from losing their homes during the pandemic, and the Emergency Rental Assistance Program aimed to distribute funds for rental and utility payments to households at risk of eviction.¹⁵⁰ The American Rescue Plan provided additional assistance for both homeowners and renters with the aim of preventing eviction and foreclosure.¹⁵¹ However, local housing agencies have struggled to implement many of these programs, and shifting funding requirements or stringent reimbursement policies have hampered efforts to get funds to households who need them.¹⁵² The end of the federal eviction moratorium issued by the Centers for Disease Control and Prevention means that effective administration of housing aid is all the more important for protecting families from eviction and foreclosure.¹⁵³

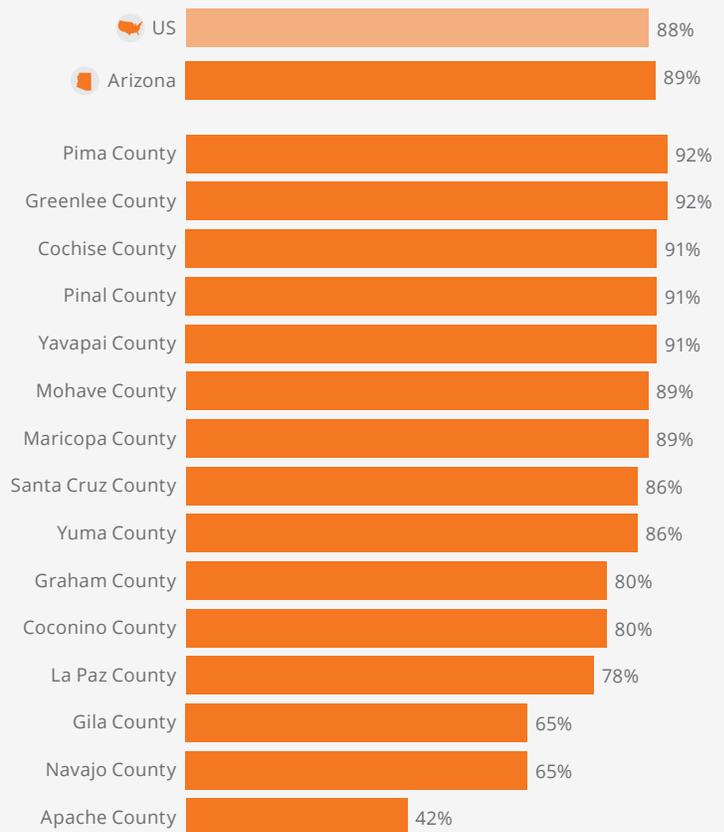
ECONOMIC CIRCUMSTANCES

Information Access Through Computers and Internet

In today's society, access to the internet provides resources, information, social connection, telehealth visits and opportunities critical for education and employment. Disparities in access to computers and the internet is called the digital divide. Lack of sustained access to these types of information and communication technologies in low-income communities is associated with economic and social inequality.¹⁵⁴ During the pandemic, a reliable internet connection was essential for a successful transition to remote work for many. In Arizona, 87% of people of all ages have home access to computers with internet connection; this is similar to the U.S. as a whole (86%). When children enter school, computer and internet access are increasingly important for completing school assignments and projects, particularly during the later years of primary education and beyond.¹⁵⁵ Nationally, 89% of children 0-17 have access to a computer and internet at home; this is true for 88% of children statewide. However, in three counties — Apache, Navajo and Gila — over one-third of children lack access to an internet-connected computer at home (Figure 32). Furthermore, in many rural parts of the state, even those families with internet access and a computer may find connectivity frustratingly slow or inconsistent.¹⁵⁶ Households in rural areas typically experience more limited coverage from mobile networks and slower-speed internet services.¹⁵⁷ Given that families increasingly use communication and information technologies to access information, connect socially, pursue education and apply for employment opportunities, this gap in the ability to connect will likely perpetuate the economic divide unless concerted efforts are made to improve access.

Twelve percent of households in Arizona have a smartphone but no computer; 8% lack both. Thus, despite trends toward online communications and social media announcements, it is important for state and local agencies to recognize that there are disparities in internet access and ensure that families can be reached and can obtain information about services through other means, including telephone or mail.

Figure 32. Children (ages 0-17) living in a household with and without computer and internet connection, 2015-2019



Source: United States Census Bureau (2021). 2015-2019 American Community Survey 5-Year Estimates, Table B28005.

COVID-19 Pandemic Effects

As schools closed and transitioned to remote learning, access to a computing device and the internet became increasingly important for children to engage in educational activities and to connect socially with teachers or peers. The Household Pulse survey asked adults in households with children enrolled in school about the access that children had to devices and internet for educational purposes. In Arizona, rates of reported access to a device and the internet often were below national rates in spring and early summer 2020; this may reflect schools in Arizona concluding their school year in May and having students return borrowed devices. As the COVID-19 pandemic continued, rates of reported access in Arizona began to match or exceed national rates (Figure 33 & Figure 34). Schools and communities applied multiple strategies to close the digital divide, including provision of mobile hotspot devices and laptops by schools and libraries. One silver lining to the pandemic is the allocation of CARES Act and American Rescue Plan Act dollars for expanding rural broadband access, which may help shrink the digital divide.¹⁵⁸ Still, access to internet and computing devices was not evenly distributed across all communities—rural, low-income, and Native, Black and Hispanic students disproportionately faced access issues.¹⁵⁹ Even as schools return to in-person learning, investments in closing the digital divide remain essential to ensuring equity in outcomes for all students.

Figure 33. Adults in households with children (ages 0-17) who reported that a device was always or usually available for educational purposes, April 2020 to March 2021

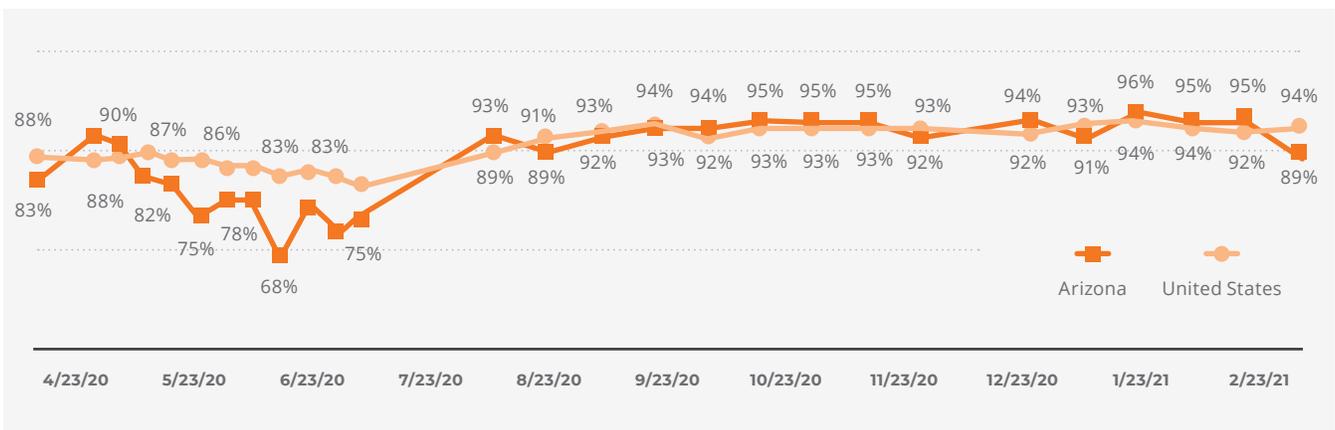
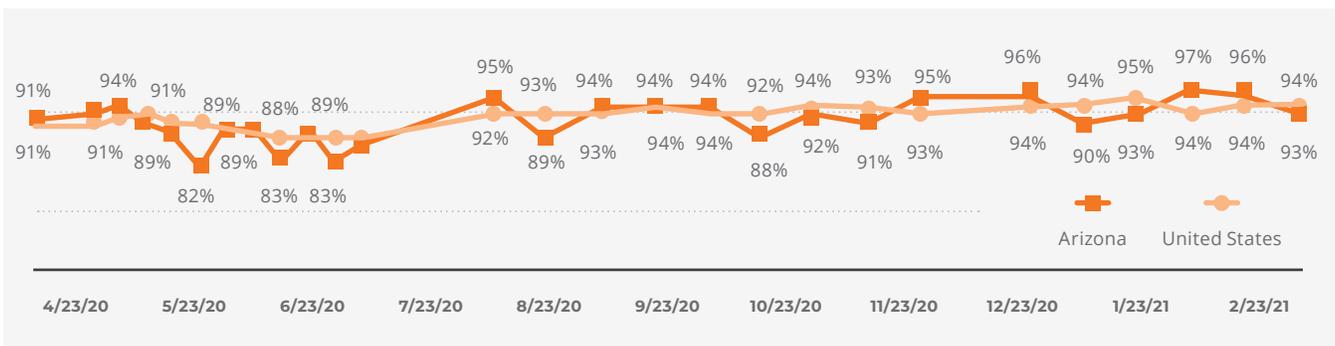


Figure 34. Adults in households with children (ages 0-17) who reported that Internet was always or usually available for educational purposes, April 2020 to March 2021



U.S. Census Bureau (2021). Household Pulse Survey Data, Phases 1, 2, & 3. Retrieved from <https://www.census.gov/programs-surveys/household-pulse-survey.html>



Why Early Care & Education Matter

Early childhood is an exciting time of rapid physical, cognitive and social-emotional development. The experiences young children have during these early years are critical for healthy brain development and set the stage for lifelong learning and well-being.^{160,161} Just as rich, stimulating environments can promote development, early negative experiences can have lasting effects. For example, gaps in language development between children from disadvantaged backgrounds and their more advantaged peers can be seen by two and a half years of age;¹⁶² disparities that persist until kindergarten tend to predict later academic problems.¹⁶³

Quality early care and education can positively influence children's overall development.^{164,165} This is particularly true for children in poverty.¹⁶⁶ Access to quality child care and classroom environments can provide enriching experiences children might not have access to at home, and ensure early identification and targeted interventions for children with special needs that may reduce their risk of developmental delays and prevent preschool expulsion.^{167,168} Children who attend high-quality preschool programs repeat grades less frequently, obtain higher scores on standardized tests, experience fewer behavior problems and are more likely to graduate from high school.¹⁶⁹ Not only does access to affordable, quality child care

make a positive difference for children's health and development, it also allows parents to maintain stable employment and support their families.¹⁷⁰

However, families often face substantial barriers in accessing high-quality early care and education opportunities. The average annual cost of full-time center-based care for a young child in Arizona is nearly equal to the cost of one year at a public university.^{171,172} Child care subsidies provided by government agencies can help to offset families' child care costs, reducing financial barriers to accessing child care and ensuring parents can remain employed and provide for their family's needs.¹⁷³ As an additional barrier, statewide, there is an estimated deficit of 76,740 available slots in licensed early care and education to serve all young children with working parents.¹⁷⁴ These facts highlight the need for additional, high-quality affordable early care and education providers in Arizona.

A statewide early care and education system that is accessible, affordable and high-quality is essential for the social and economic health of Arizona. Investment in programs for young children leads to increased education and employment, reduced crime and better overall health.^{175,176} The investment in early childhood is also potentially one of the most productive investments a community can make, with experts estimating that society gets back about \$8.60 for every \$1 spent on early learning programs.¹⁷⁷

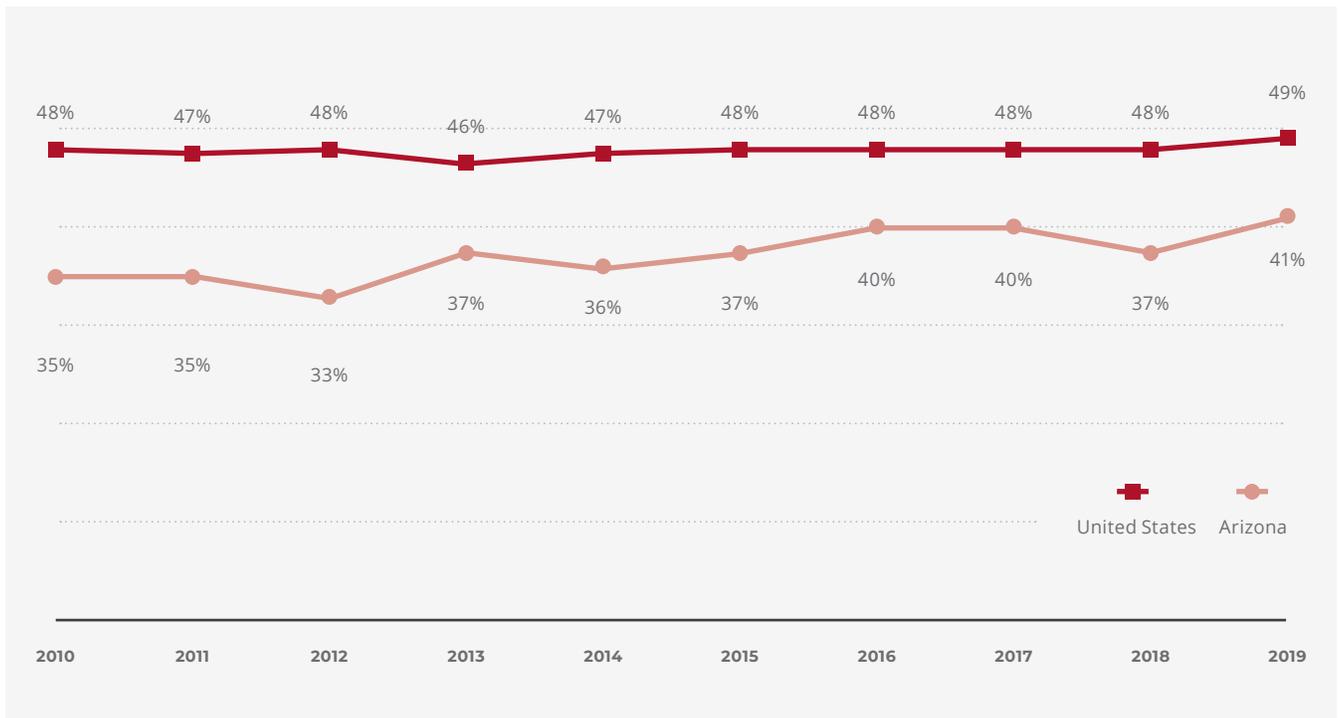
How Arizona's Young Children Are Faring

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.¹⁷⁸ 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.^{179,180} In Arizona as a whole, there were notably fewer 3- and 4-year-old children enrolled in school (41%) than nationwide (49%) in 2019 (Figure 35). Though enrollment has increased over time, this still leaves 59% of preschool-aged children who were not accessing early education programs in Arizona.

Figure 35. Children (ages 3-4) enrolled in school 2010-2019



Source: U.S. Census Bureau. (2021). American Community Survey one-year estimates 2010 to 2019, Table B14003

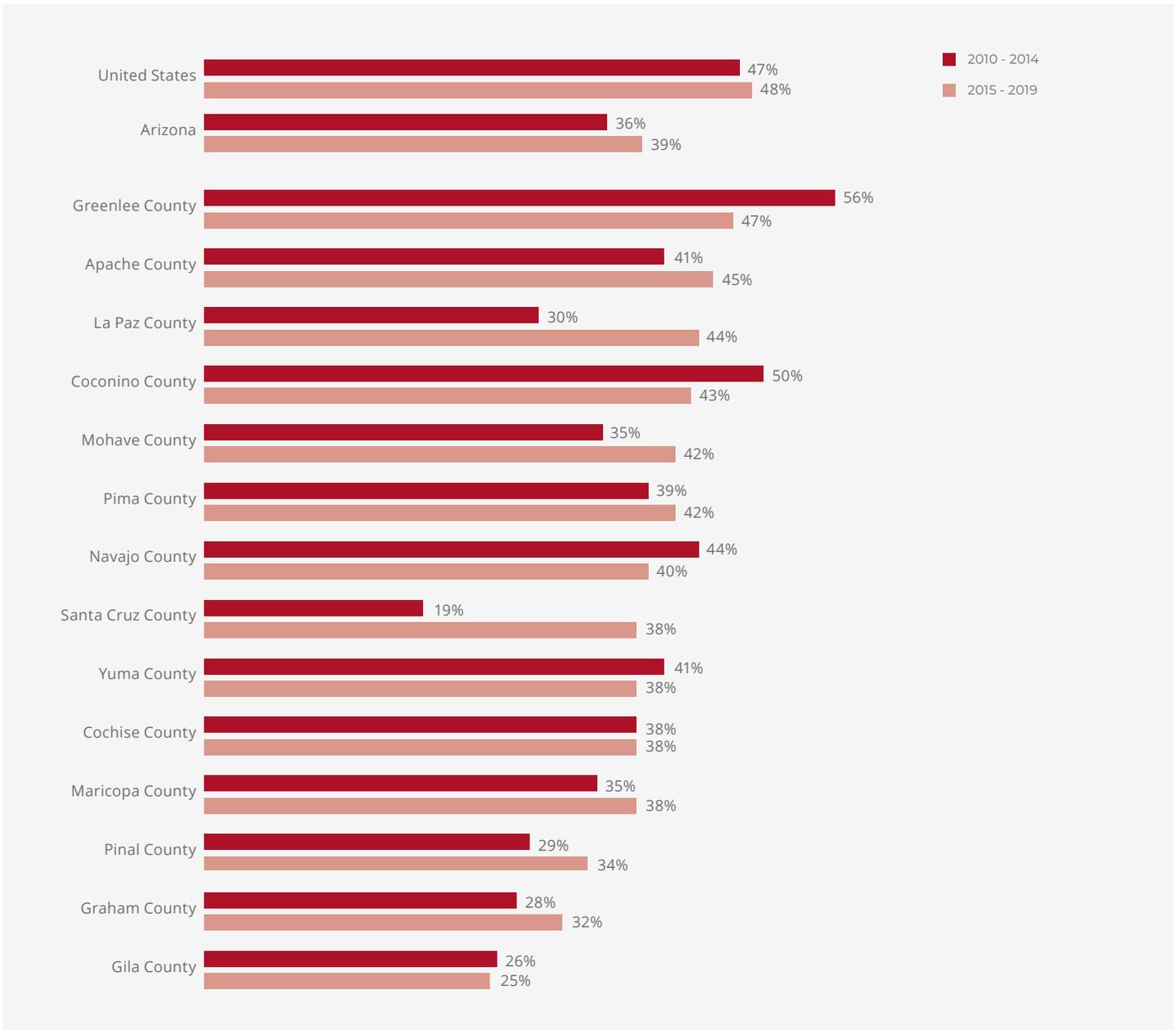
Note: "School" may include nursery school, preschool or kindergarten.

EDUCATION

Changes in enrollment of young children (ages 3-5) in school varied across the state between 2010-2014 and 2015-2019. Enrollment in preschool increased in nine counties, with enrollment in Santa Cruz County doubling from 19% to 38%. With

the exception of Yavapai County (51%), all counties in Arizona fell below the national average for preschool enrollment (48%) between 2015 and 2019 (Figure 36).

Figure 36. Percent of 3- and 4-year-olds enrolled in school, 2010-2014 and 2015-2019



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2010-2014 & 2015-2019, Table B14003

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

EDUCATION

Supporting early care and education programs in meeting quality standards is important to ensure these early environments support positive outcomes for children’s well-being, academic achievement and success later in life.¹⁸¹ Quality early learning environments build on basic health and safety regulatory standards. Quality settings include teachers and staff who know how to work with young children, learning environments that nurture the development of every child, and positive, consistent relationships and interactions that give children the individual attention they need. Quality First is Arizona’s Quality Rating and Improvement System (QRIS) for early child care and preschool providers.¹⁸² A Quality First Star Rating represents where along the continuum of quality (1 to 5 stars) a program was rated and how they are implementing early childhood best practices. The number of providers across the state that meet quality standards (3-star rating or higher) has increased across the last 5 years, from 25% of 857 participating providers in state fiscal year 2013 meeting or exceeding quality standards, compared to 79% percent of 1,016 participating

providers in state fiscal year 2020.^{183,184} However, the percentage of 3- and 4-year-old children in quality early learning settings^{viii} in Arizona declined in recent years, from 24% in 2017 to 19% in 2019, a decline linked in part to the loss of the federal Preschool Development Block Grants (PDG) and Preschool Development Birth through Five Grants (PDG B-5), which resulted in a loss of \$20 million in annual funding that served more than 70 Arizona school districts.^{185,186,187}

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.^{188,189,190,191} As of 2019, Arizona needed an additional 76,740 licensed or registered early care and education slots to provide spaces for all young children in working families according to analyses by the Bipartisan Policy Center (Figure 37).¹⁹²

Figure 37. Child care gap analysis for Arizona, 2019



Source: Bipartisan Policy Center (2020). The supply of, potential need for and gaps in child care in Arizona in 2019.

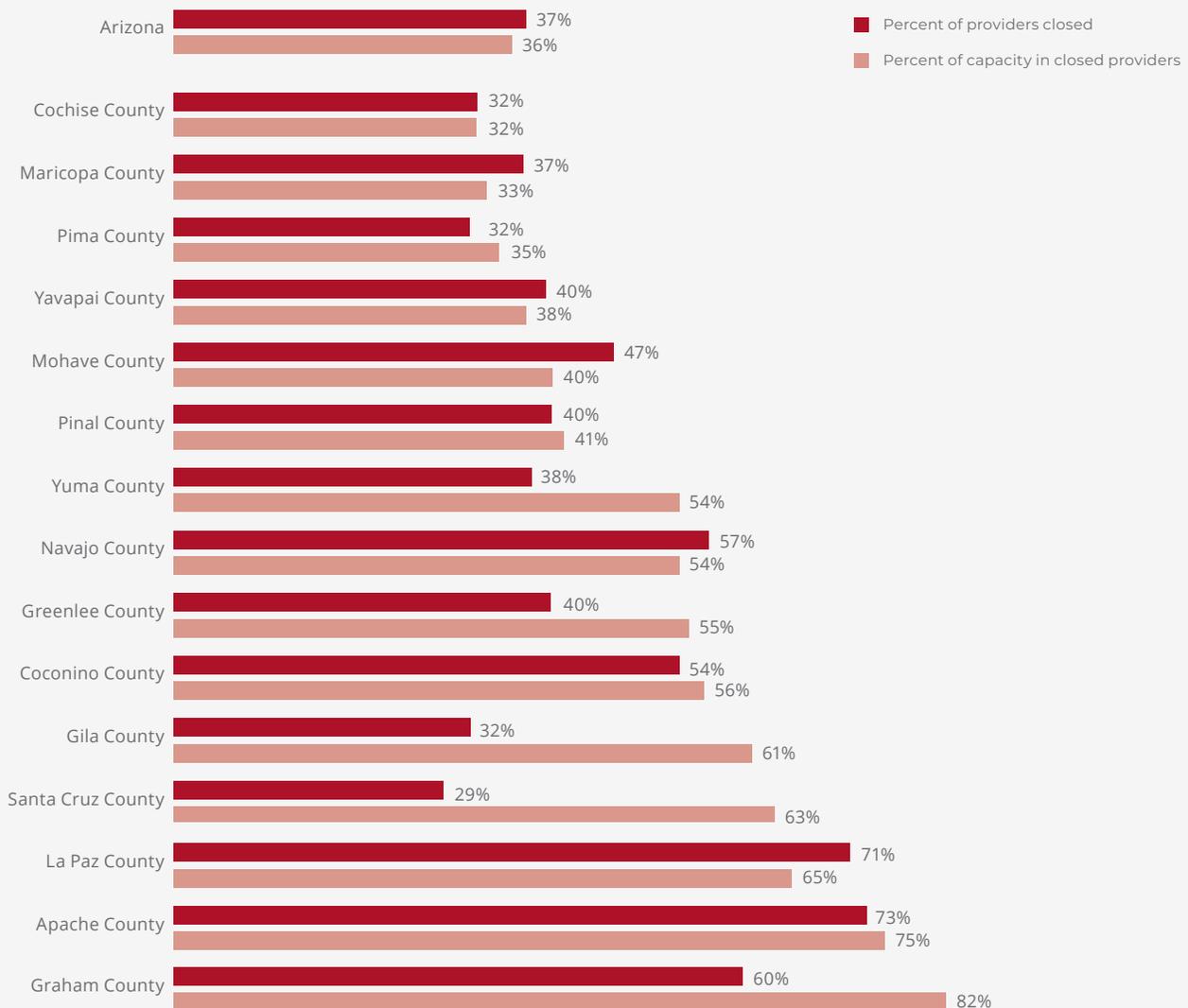
^{viii} Providers are considered quality educational environments by the Arizona Department of Economic Security if they receive a Quality First 3-star rating or higher or are accredited by a national organization, such as the Association for Early Learning Leaders or the National Association for the Education of Young Children (NAEYC).

EDUCATION

During the month of December 2020, more than one-third (37%) of the regulated early care providers that were listed in the Arizona Child Care Resource and Referral Guide were closed. These providers accounted for 36% of the known care capacity in the state. A recent national study estimated that two-thirds of licensed child care centers closed in April 2020 and one-third of centers were still closed in April 2021, suggesting similar trends nationwide.¹⁹³ There was considerable variation in closure

patterns across Arizona counties. In Cochise and Maricopa counties, about one-third (32% and 33%, respectively) of early care capacity was closed in December 2020. In contrast, in Graham and Apache counties, more than three-quarters (82% and 75%, respectively) of early care capacity was closed and unavailable during this time. Although Santa Cruz County saw relatively few (29%) providers close, those providers accounted for 63% of the county's early care capacity (Figure 38).

Figure 38. Early care and educational providers listed in the Child Care Resource & Referral Guide by status in December 2020 (open or closed)



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

Note: This is not a comprehensive listing of providers in the state of Arizona, and the closure status of provider changes week by week. This data provides a snapshot of the scale of closures in Arizona but may not reflect current openings and closures.

COVID-19 Pandemic Effects

The COVID-19 pandemic made child care even less accessible for many families. Many child care centers and homes closed in the early days of the pandemic due to concerns about safety of children, staff and families.^{194,195} The pandemic's effect on out-of-home child care arrangements heightened stress for families and widened pre-existing inequities in work, income and well-being. In the summer of 2020, about half of families with young children (47%) in a nationally-representative survey reported that they lost their pre-pandemic child care arrangements, and the majority of parents and caregivers surveyed (70%) were worried about returning to prior arrangements.¹⁹⁶

Even if child care centers remained opened during the pandemic, they had to shoulder additional costs related to cleaning and staffing changes, among others. Over half of centers (56%) surveyed by the National Association for the Education of Young Children (NAEYC) reported that they were losing money while operating in December 2020, and one-quarter of home-based providers and one-third of center-based providers surveyed indicated that they would close in the next three months without additional support.¹⁹⁷ While the extent which these costs are passed on to families remains to be seen, estimates indicate that child care monthly operating costs increased by an average of 47% nationwide. In Arizona, costs were projected to jump substantially more, potentially increasing by 84% for center-based providers (\$685 to \$1,257) and 75% for family home providers (\$732 to \$1,281).¹⁹⁸

Through Quality First, child care health consultants helped provide health and safety guidance to providers.¹⁹⁹ First Things First also helped recruit providers to become Arizona Enrichment Centers.²⁰⁰ The Arizona Enrichment Center program funded through federal COVID-19 relief dollars provided funding to licensed child care facilities in order to serve the children of essential workers during the pandemic in 2020 and provided scholarships to essential workers making less than \$65,000 annually.^{201,ix} Two-thirds of all Arizona Enrichment Centers were Quality First participating providers (334 of 506 total enrichment centers).²⁰² In addition, federal relief funded three-month grants made available from October-December 2020 to assist providers in re-opening or remaining open, as well as grants during the summer of 2021 to help providers recruit and retain staff.

For many providers, relief funds provided through the CARES Act, Coronavirus Response and Relief Supplemental Appropriations Act and American Rescue Plan Act have been critical for reducing debt incurred during the pandemic.²⁰³ However, challenges remain. Many providers continue to face significant staffing challenges and low enrollments. According to a survey by NAEYC in July 2021, most Arizona child care centers surveyed (84%) experienced staffing shortages, driven in large part by the low wages in the early education sector.²⁰⁴

The relief bills passed by Congress during the pandemic have allocated significant funds for child care providers, including \$1.2 billion allocated for Arizona for the next three years through the American Rescue Plan Act and Coronavirus Response and Relief Supplemental Appropriations Act.²⁰⁵ In summer 2021, the Arizona Department of Economic Security (administrators of federal child care funds) began implementing a 20-strategy child care recovery plan focused on four areas: stabilizing the child care network; expanding access to care; improving the quality of early learning; and accelerating educational support and early childhood literacy. These investments, and others, are aimed at preserving Arizona's early learning infrastructure, including offsetting the 2019 loss of \$20 million in federal funding through the Preschool Development Block Grants (PDG) and Preschool Development Birth through Five Grants (PDG B-5).^{206,207}

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

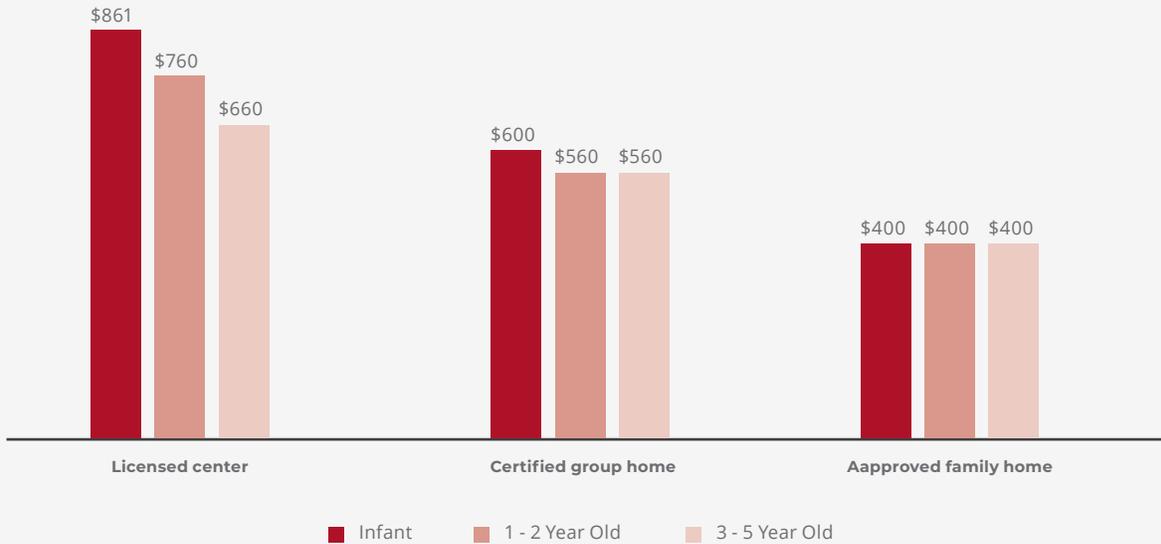
EDUCATION

Affordability

Another important barrier to young children’s participation in early education is cost. The high cost of early care and education can place formalized care out of reach of 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 39). 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 \$1,521 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.^{x,208,209} A married family with two children living at the poverty line in Arizona, for example, would need to pay over 77% of their household income for center-based care.^{210,211}

Figure 39. Monthly median cost of care by type of provider and age of child, 2018



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

^x 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 one child (\$25.16). For more information on early care and education workforce wages visit <https://cscce.berkeley.edu/workforce-index-2020/the-early-educator-workforce/early-educator-pay-economic-insecurity-across-the-states/>

EDUCATION

Although families often struggle to afford the high cost of care, only 18% of 4-year-olds in Arizona were enrolled in publicly funded free or reduced-cost preschool programs, compared to 44% nationally in 2019, 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.²¹² Child care subsidies provided by government agencies can help to offset families' child care costs, reducing financial barriers to accessing child care and ensuring parents can remain employed and provide for their family's needs.²¹³ 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.²¹⁴ This was due to \$56 million in additional federal funds from the Child Care and Development Fund (CCDF) that was authorized by the Arizona State Legislature. The funding increase has also allowed DES to increase provider reimbursement rates, which may make it easier for families to use their child care subsidies.²¹⁵

With the suspension of the waiting list part way through the year, the number of children receiving DES child care subsidies statewide increased

Percent of four-year-olds enrolled in publicly funded free or reduced-cost preschool programs in 2019



18%



44%

Friedman-Krauss, A., Barnett, W. S., Garver, K., Hodges, K., Weisenfeld, G., and Gardiner, B. (2020). The state of preschool 2019. Newark, NJ: National Institute for Early Education Research.

substantially in 2019, but there was a notable decline from 2019 to 2020 (Figure 40). This 2020 decline reflects the impact the pandemic had on child care arrangements, with many parents and caregivers using no out-of-home care for their children.²¹⁶ In the summer of 2020 about half of families with young children (47%) in a nationally representative survey reported that they lost their pre-pandemic child care arrangements, and the majority of parents and caregivers surveyed (70%) were worried about returning to prior arrangements.²¹⁷ Given these substantial disruptions to the early care and education system, it is difficult at this moment to determine what the longer term effects of the suspension of the child subsidy waitlist will be as providers begin to return to normal operations.

Figure 40. Children (ages 0-5) receiving DES child care subsidies and children (ages 0-5) on the waitlist for subsidies, 2015 to 2020



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

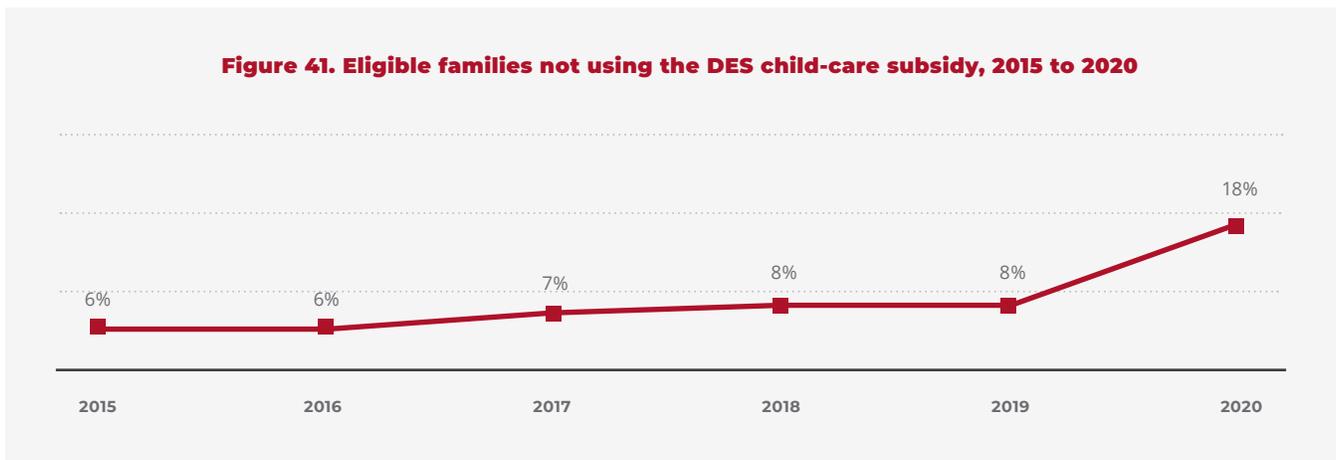
Note: Figure does not include DCS-involved children receiving child care subsidies. The waitlist was suspended in June 2019; hence there is no waitlist data for 2020.

EDUCATION

Eligible families may not access child care subsidies for a number of reasons, including limited knowledge about how to navigate the system, an inability to afford child care even with the subsidy, or a lack of providers within their area who will take subsidy payments.^{218,219} The percentage of families who apply and are found eligible for DES child-care subsidies but do not utilize them increased slowly from 2015 (6%) to

2019 (8%) but increased sharply to 18% in 2020, another reflection of the pandemic effect on child care arrangements (Figure 41). In absolute terms, while the number of families eligible for subsidies remained consistent between 2019 and 2020 with about 18,000 families found eligible each year, the number of families not utilizing subsidies more than doubled from approximately 1,400 families to 3,400.²²⁰

Figure 41. Eligible families not using the DES child-care subsidy, 2015 to 2020



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

Note: Figure does not include DCS-involved children receiving child care subsidies. The waitlist was suspended in June 2019; hence there is no waitlist data for 2020.

Special Needs

Ensuring all families have access to timely and appropriate screenings for children who may benefit from early identification of special needs can help improve outcomes for these children and their families. Timely intervention can help young children with, or at risk for, developmental delays to improve language, cognitive and socio-emotional development.^{221,222} It also reduces educational costs by decreasing the need for special education.²²³ In Arizona, services available to families with children with special needs include those provided through the Arizona Early

Intervention Program (AzEIP),²²⁴ the Division of Developmental Disabilities (DDD),²²⁵ and the Arizona Department of Education Early Childhood Special Education Program.²²⁶

The Arizona Early Intervention Program (AzEIP)²²⁷ is an interagency system of services and supports for families of young children (birth to age 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.^{xi,228}

^{xi} DDD provides services to individuals with qualifying disabilities through adulthood. Qualifying children may receive services from both AzEIP and DDD.

EDUCATION

Although the proportion of infants and toddlers (birth through age 2) in the state being served has increased since 2009, Arizona was one of the bottom five states in terms of young children receiving early intervention services in 2018, with only 2.3% receiving services, compared to 3.5% nationally.²²⁹ A 2008 study using nationally representative data estimates that approximately 13% of children ages 0-2 in the U.S. have developmental delays that could benefit from early intervention services, but only about 3% of children actually receive services, which is consistent with current early intervention service data.²³⁰ These data suggest that there are likely many children across Arizona who would benefit from early intervention services but are not receiving them. This is likely in part because Arizona has some of the strictest eligibility requirements for early intervention services compared to most other states in the U.S.²³¹ Service

Proportion of infants and toddlers (ages 0-2) receiving early intervention services in 2018.



2.3%

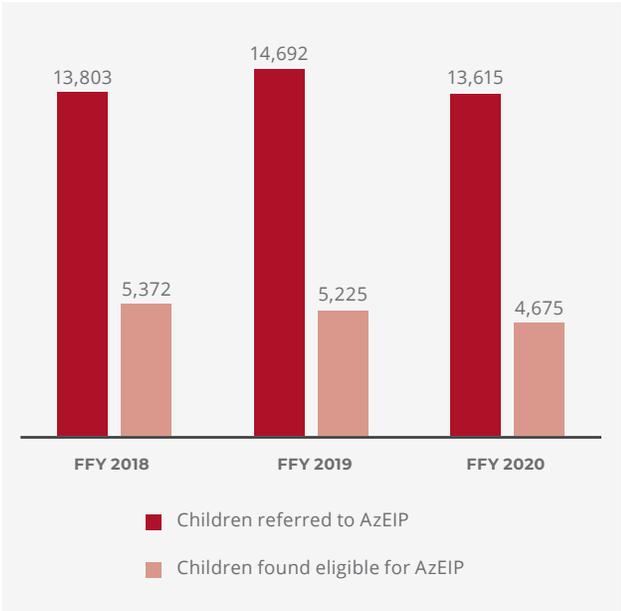


3.5%

U.S. Department of Education, Office of Special Education and Rehabilitative Services (2021). 42nd Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2020.

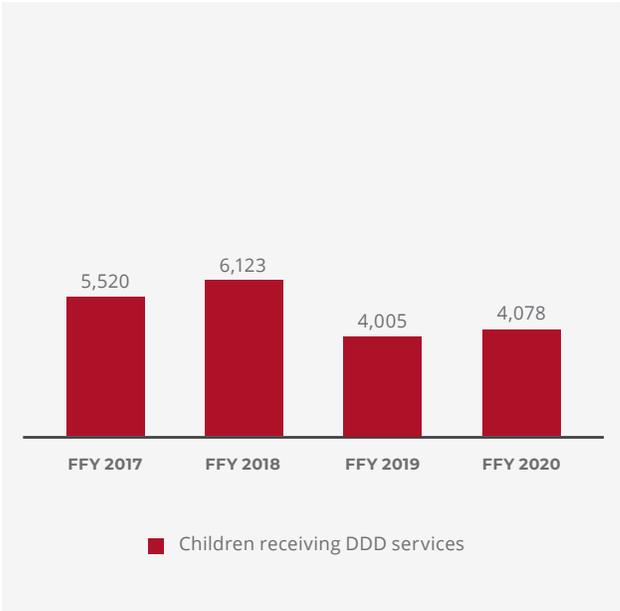
numbers from both AzEIP and DDD show that a downward trend in service numbers started even before the pandemic. Slightly fewer children were found eligible for AzEIP services in 2019 (5,225) than in 2018 (5,372), in spite of an increase in referrals (Figure 42). The number of children birth to age 5 served by DDD fell by 35% from 2018 to 2019 (from 6,123 to 4,005) (Figure 43).

Figure 42. Children (ages 0-2) referred to and found eligible for AzEIP, 2018 to 2020



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

Figure 43. Children (ages 0-5) receiving DDD services, 2017 to 2020



Source: Arizona Department of Economic Security (2021). [Division of Developmental Disabilities dataset]. Unpublished data.

Note: Data on AzEIP referrals and children found eligible reflect a point-in-time snapshot, not children served cumulative throughout the entire year.

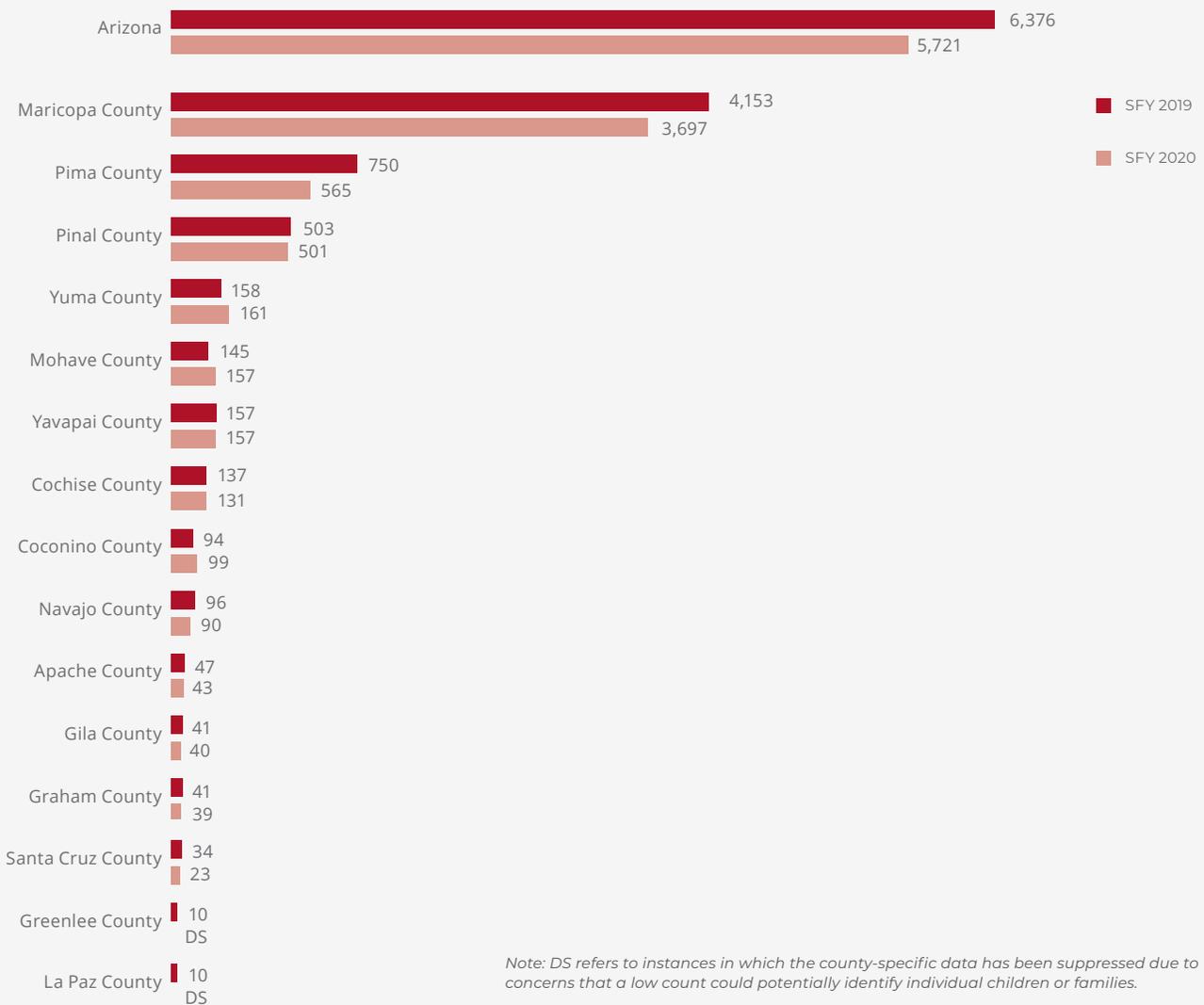
EDUCATION

Overall, in 2020,^{xii} there was a decline in both the number of young children referred and the number found eligible for AzEIP services compared to previous years, though the number of children receiving DDD services increased slightly from the previous year. The declines in referrals to AzEIP are largely tied to the effects of the pandemic. While AzEIP saw a record number of referrals in 2019, social distancing, delays in routine pediatric care and school and early care closures

during the pandemic all contributed to a drop in referrals during 2020, which also led to a drop in children found eligible.²³²

In Arizona, the total unduplicated number of young children birth to age 2 who received services from AzEIP and/or DDD decreased by 10% statewide from 2019 to 2020. Similarly, the number of children receiving services decreased in eight counties from 2019 to 2020 (Figure 44).

Figure 44. Infants and toddlers (ages 0-2) served by AzEIP or DDD, 2019 & 2020



Source: Arizona Department of Economic Security (2021). [Arizona Early Intervention Program & Division of Developmental Disabilities dataset]. Unpublished data.

^{xii} Federal Fiscal Year 2020, or October 2019 to September 2020

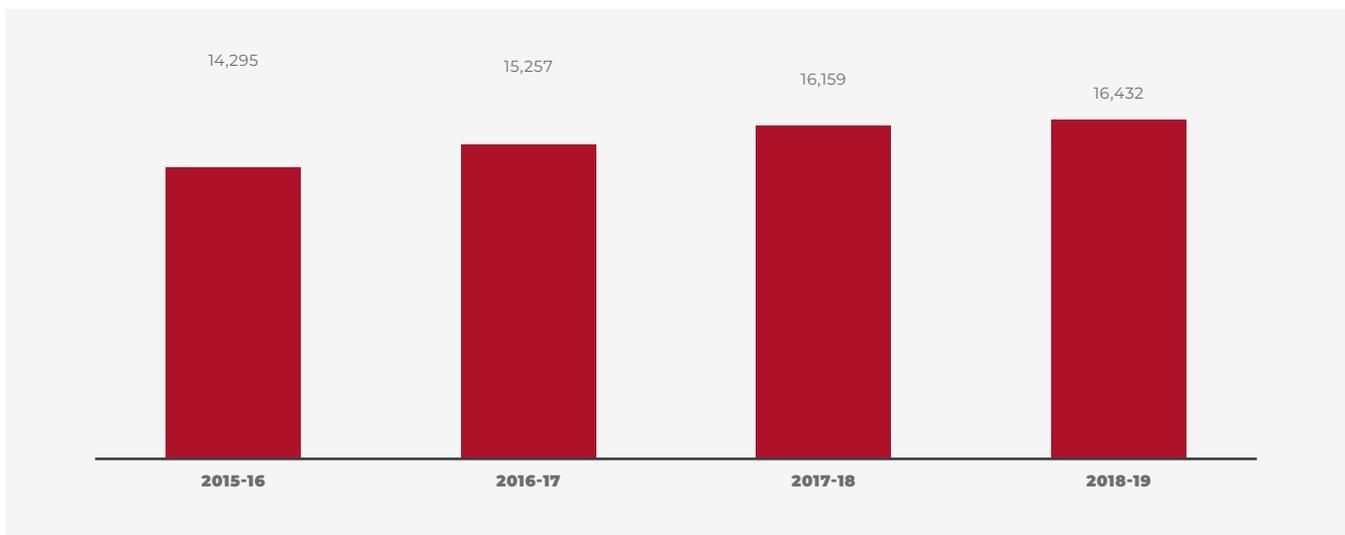
COVID-19 Pandemic Effects

The pandemic likely added to already decreasing service numbers through disrupting much of the system for providing services and learning opportunities to children with special needs. In spring 2020, AzEIP halted in-home and community services and transitioned to alternative delivery modes such as virtual visits (computer-or phone-based).²³³ The transition to remote services was challenging for both service providers and families. Technology was a barrier to families receiving early intervention services, and the form of services often transitioned to more of a family-coaching approach rather than direct interaction with the child.²³⁴ Given these added challenges, it is not surprising that families with young children with special needs also struggled more emotionally and psychologically through the pandemic. According to a nationally representative series of surveys throughout the pandemic, in households of children with disabilities, both young children and their caregivers experience higher levels of stress and anxiety than households of typically developing children.^{235,236}

As a child with special needs approaches age 3, they transition from receiving services through AzEIP to receiving services from their local education authority (LEA). Data from the Arizona Department of Education show that the number of young children (ages 3 to 5) with special needs receiving services from LEAs has increased since the 2015-16 school year, with 16,432 children receiving services in 2018-19 (Figure 45). These increases in the number of children with special needs receiving services match national trends.

Nationwide, the number of children receiving special education services has been increasing over the past few years.^{237,238,239} Providing early intervention services for young children has been shown to reduce the need for special education services later in childhood,²⁴⁰ so assuring that children have access to timely and adequate screening and intervention services from birth to age 5 can be key for helping children to be ready for kindergarten.

Figure 45. Number of children (ages 3 to 5) receiving special education services from LEAs, 2015-16 to 2018-19



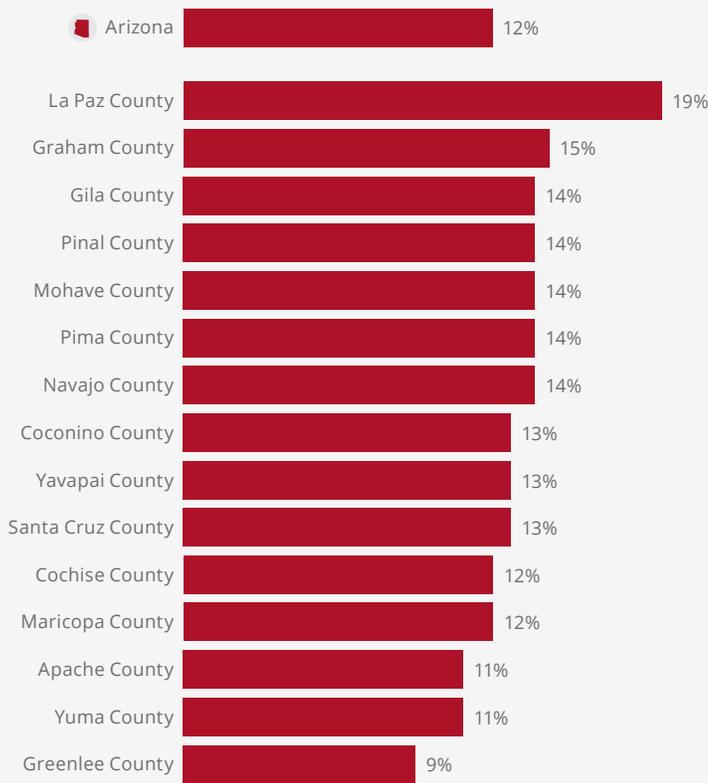
Source: Arizona Department of Education (2019). 2015-16 to 2018-19 Special Education Enrollments. Unpublished data received by request.

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For elementary-age children, the proportion of children enrolled in special education in public school varied by county in 2018-19. La Paz County had the highest percentage of children enrolled

in special education (19%), while Greenlee (9%), Yuma (11%) and Apache (11%) counties had lower enrollment in special education compared to the state overall (12%) (Figure 46).

Figure 46. Students enrolled in special education (grades 1-3), 2018-19



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

COVID-19 Pandemic Effects

Children with special needs were especially impacted by pandemic-related school closures across the state. In-person services for children through local education authorities were disrupted and required transitions to remote modalities.²⁴¹ School-based services for children with special needs were also significantly impacted, with remote learning creating barriers to fulfilling students' Individualized Education Plans (IEPs) resulting, for some, in a loss of academic, social and physical skills that will require targeted support to address.²⁴² As schools return to in-person learning, children with special needs may need additional supports to build skills and recover unfinished learning over the past year and a half.

Why K-12 Education Matters

A community's K-12 education system can support positive outcomes for children and their families, as well as the economic well-being of the entire community. Individuals with higher levels of education are less likely to live in poverty and tend to live longer and healthier lives.²⁴³ Graduating from high school, in particular, is associated with better health and financial stability, lower risk for incarceration and better socio-emotional outcomes compared to dropping out of high school.^{244,245} Parents with more education are also more likely to have children with positive outcomes related to school readiness and educational achievement, with children of parents who have at least a high school diploma or GED scoring higher in reading, math and science in their first four years of school.^{246,247} The educational achievement of adults within a region speaks

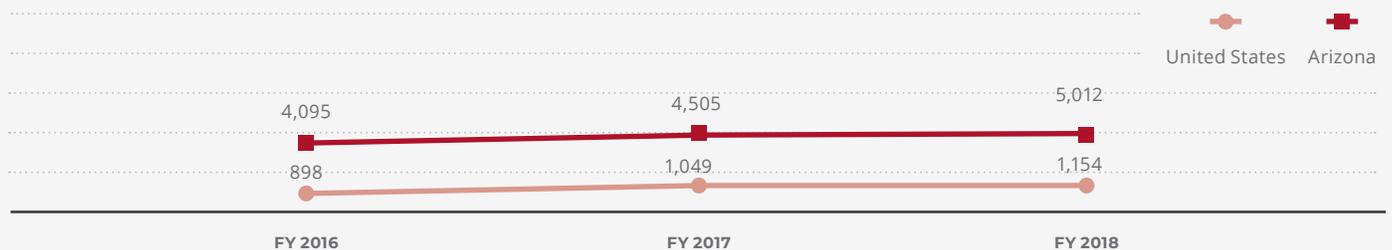
to the assets and challenges of a community's workforce, including those that are working with or on behalf of young children and their families. High-quality early learning experiences lay a foundation for children's learning in kindergarten, early elementary school and beyond.²⁴⁸ Participation in high-quality early education has been linked to better school performance in elementary and high school.²⁴⁹ Reading skills in third grade, specifically, are an important predictor of later academic learning and success measured in standardized tests. Students who are at or above grade-level reading in third grade are more likely to graduate high school and attend college.²⁵⁰ Given these intergenerational impacts of educational attainment and the cascading effect of early education on later academic achievement and success in adulthood, it is critical to provide substantial support for early education and promote policies and programs that encourage the persistence and success of Arizona's children.

How Arizona's K-12 Children Are Faring Educational Investment

At the state level, Arizona ranked last in the country for the amount of money spent per student on public elementary and secondary education in 2019.²⁵¹ During the 2018-2019 school year, Arizona spent \$8,625 per student, \$4,562 less

per student than the national average (\$13,187) (Figure 47). Research suggests that increased per-pupil spending is linked in the short-term to better student-to-teacher ratios and higher teacher salaries and in the long-term to greater educational attainment, higher wages and lower poverty rates.²⁵² Thus, greater investment in the education system contributes to improved economic well-being for the community as a whole.

Figure 47. Trends in per pupil spending for Arizona and the United States, 2013 to 2017



Source: U.S. Census Bureau (2021). Annual Survey of School System Finances: Per Pupil Amounts for Current Spending of Public Elementary-Secondary School Systems by State: Fiscal Years 2013-2019. Retrieved from <https://www.census.gov/programs-surveys/school-finances/data/tables.html>

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School Enrollment and Attendance

The COVID-19 pandemic dramatically disrupted K-12 education during the 2019-20 and 2020-21 school years as schools closed in March 2020 and transitioned to distance learning. Data from the U.S. Census Bureau’s Household Pulse Survey shows the magnitude of this shift for children in Arizona and the United States as a whole. In late spring of 2020, between 66 and 77% of the adults

in households with children under age 18 reported that their children were engaged in distance learning using online materials at home, and between 16 and 21% reported that their children were using paper materials at home. These trends were largely similar to those seen nationwide, though there was higher variability week to week in the Arizona estimates (Figure 48 and Figure 49).

Figure 48. Adults in households with children (ages 0-17) engaged in distance learning in spring 2020 by modality, Arizona

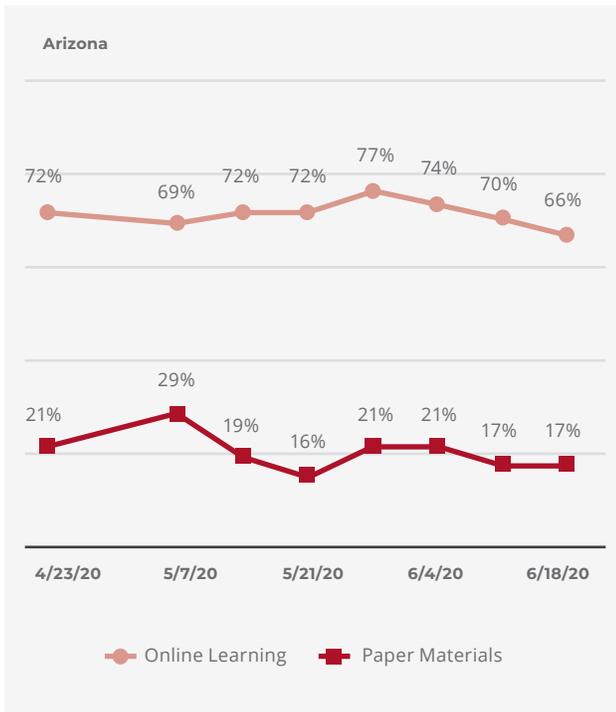
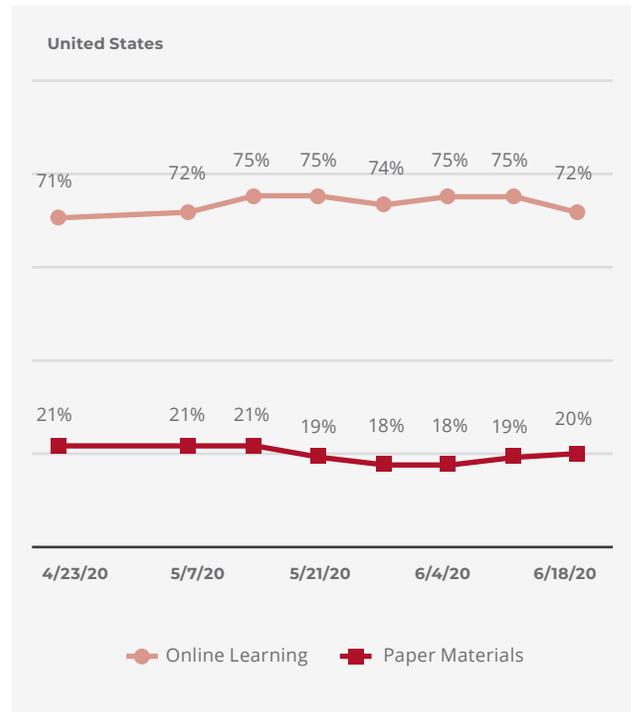


Figure 49. Adults in households with children (ages 0-17) engaged in distance learning in spring 2020 by modality, U.S.



Source: U.S. Census Bureau (2021). [Household Pulse Survey Data, Phases 1, 2, & 3]. Retrieved from <https://www.census.gov/programs-surveys/household-pulse-survey.html>

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In the 2020-21 school year, trends in distance learning diverged in Arizona and the United States overall. The proportion of adults reporting that their children were engaged in distance learning using online materials remained above 70% through most of the 2020-21 school year in Arizona, whereas only about two-thirds of adults reported that children in their household were learning online in the United States in the same

period. Similarly, the proportion of adults reporting that their children were using paper materials for distance learning was usually two to five percentage points higher in Arizona than in the United States. This indicates that overall a larger share of children in Arizona were likely engaged in distance learning than in the nation as a whole during the 2020-21 school year (Figure 50 and Figure 51).

Figure 50. Adults in households with children (ages 0-17) engaged in distance learning in 2020-2021 by modality, Arizona

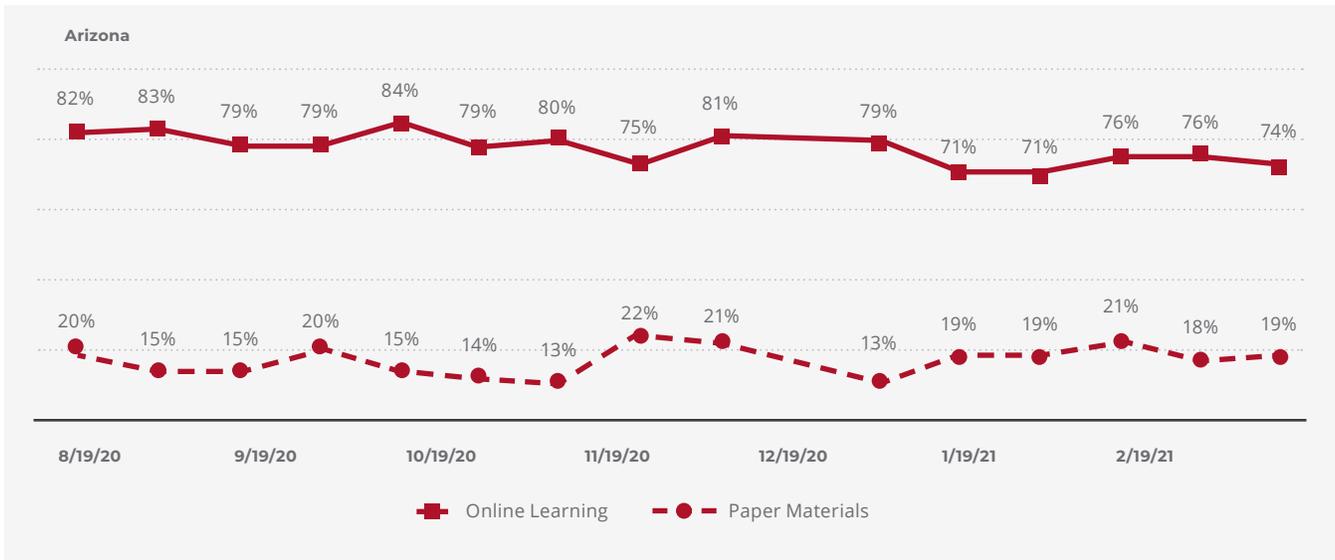
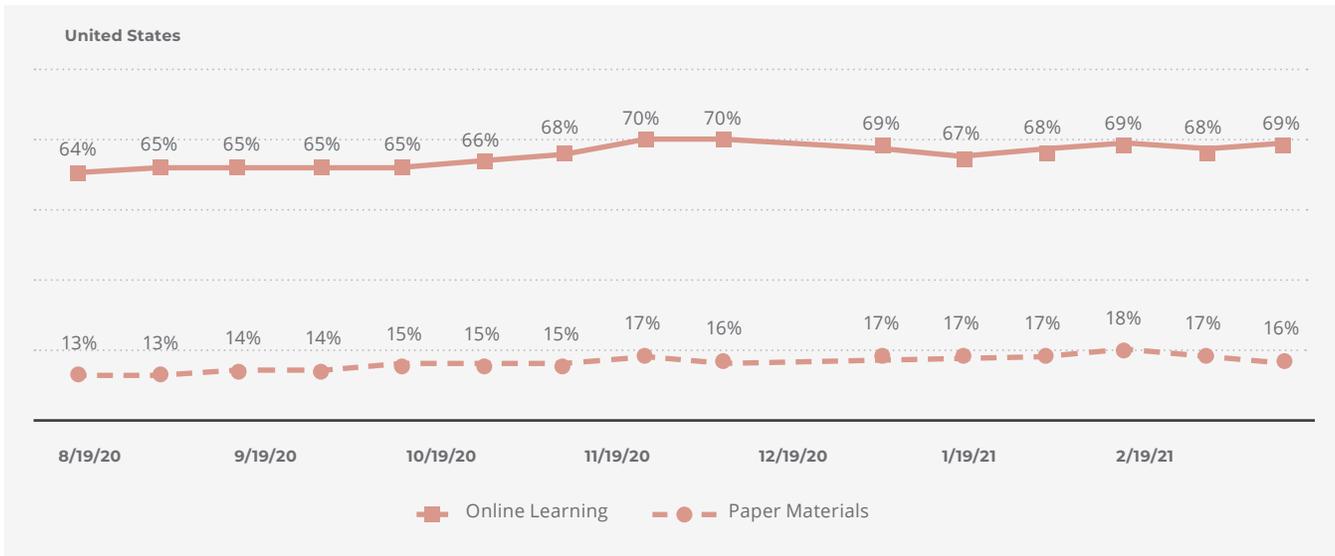


Figure 51. Adults in households with children (ages 0-17) engaged in distance learning in 2020-2021 by modality, United States



Source: U.S. Census Bureau (2021). [Household Pulse Survey Data, Phases 1, 2, & 3]. Retrieved from <https://www.census.gov/programs-surveys/household-pulse-survey.html>

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With the vast majority of students learning at home, through either online instruction or paper-based materials, the home environment was all the more central to students' education, which exacerbated pre-existing disparities in educational access. Low-income, Black and Hispanic students nationwide were less likely to have high-quality distance learning environments with effective technology and internet access or a parent at home who could help supervise learning.²⁵³ English language learners and students with disabilities also faced substantial challenges in engaging in distance learning as families struggled with language barriers and students with disabilities

were unable to access specialized instructional supports.²⁵⁴

In both Arizona and the United States overall, Hispanic or Latino adults reported that children in their household were spending less time on learning activities at higher rates than non-Hispanic White adults for nearly all weeks in the 2020-21 school year (Figure 52 & Figure 53). Given pre-pandemic gaps in school resources and academic achievement for Hispanic and Latino students compared to their White peers, this trend may translate to widening disparities in outcomes for these students.²⁵⁵

Figure 52. Adults in households with children (ages 0-17) in school in 2020-2021 who reported that children were spending less time on learning activities, Arizona

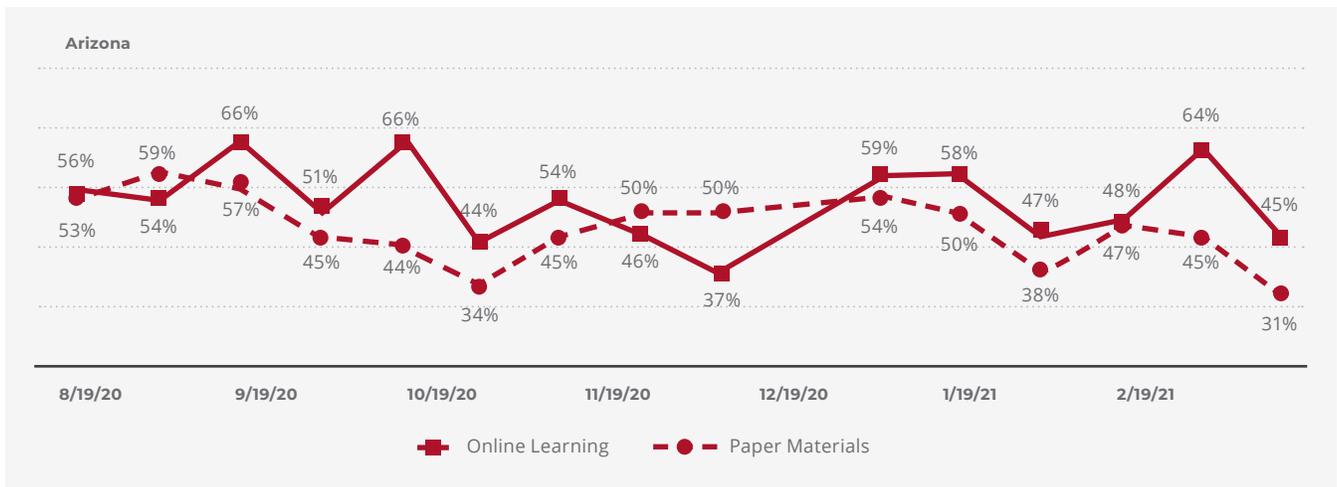
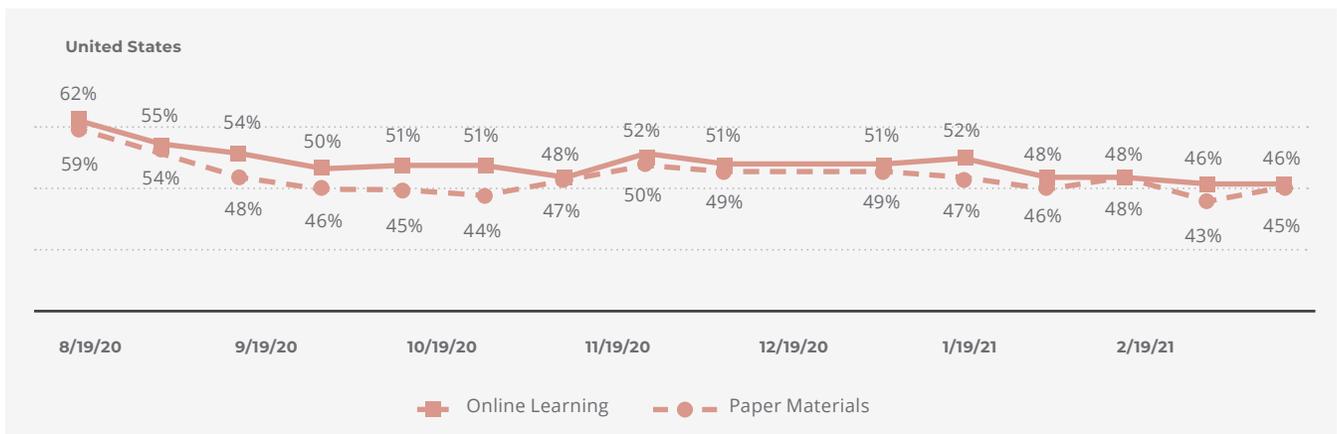


Figure 53. Adults in households with children (ages 0-17) in school in 2020-2021 who reported that children were spending less time on learning activities, United States



Source: U.S. Census Bureau (2021). [Household Pulse Survey Data, Phases 1, 2, & 3]. Retrieved from <https://www.census.gov/programs-surveys/household-pulse-survey.html>

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The disruptions to K-12 education and transitions to online learning also had substantial implications for school enrollments. The Household Pulse survey asked adults across the United States about the school enrollment status of children in their household both before and during the pandemic. Pre-pandemic, the vast majority of

adults reported that their children were enrolled in public or private school in both Arizona and United States as a whole. Rates of reported pre-pandemic homeschooling ranged from 3 to 6% in Arizona and 4 to 6% in the United States, depending on the survey week (Figure 54 & Figure 55).

Figure 54. Pre-pandemic school enrollment for children (ages 0-17), Arizona

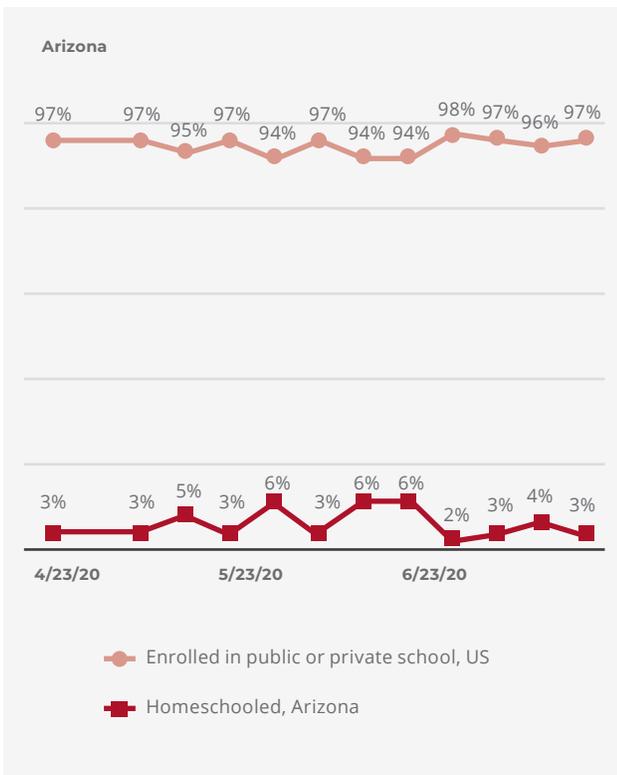
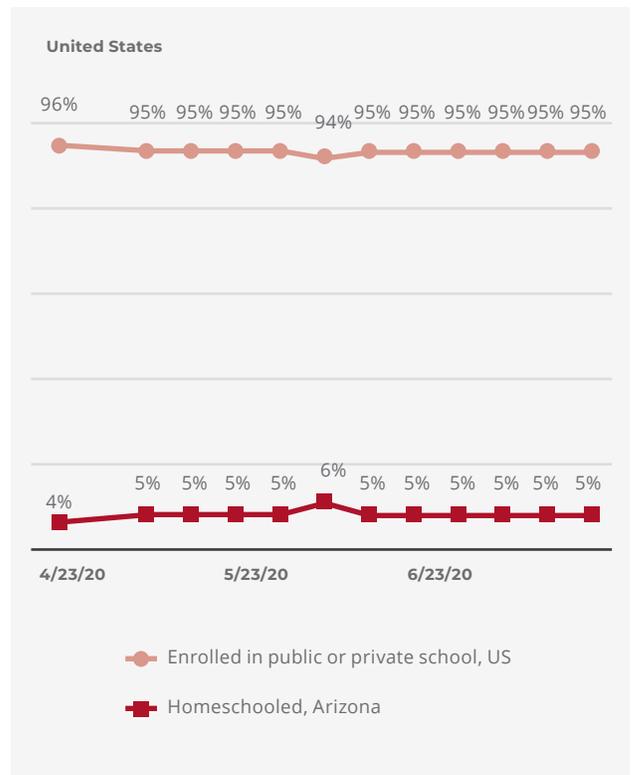


Figure 55. Pre-pandemic school enrollment for children (ages 0-17), United States



Source: U.S. Census Bureau (2021). [Household Pulse Survey Data, Phases 1, 2, & 3]. Retrieved from <https://www.census.gov/programs-surveys/household-pulse-survey.html>

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However, in the 2020-21 school year, rates of reported homeschooling increased dramatically, doubling or tripling in both the United States and Arizona, depending on the survey week. Reported enrollment in public or private school dropped correspondingly, dipping well below 90% in most of the early spring of 2021 in Arizona (Figure 56 & Figure 57). This drop in reported enrollment mirrors the drop seen in Arizona public school enrollments for the 2020-21 school year, and these declining enrollments have serious implications

for school budgets as school funding in Arizona is tied to current year enrollments.²⁵⁶ The Enrollment Stabilization Grant program, funded through the CARES Act, was designed to help make up the budget shortfall for K-12 public and charter schools during the 2020-21 school year, but longer term implications for school funding have yet to become clear.²⁵⁷ Both the CRRSA Act and ARPA included additional investments in public K-12 education that will also help school districts as they plan for the future.²⁵⁸

Figure 56. School enrollment during the 2020-21 school year for children (ages 0-17), Arizona

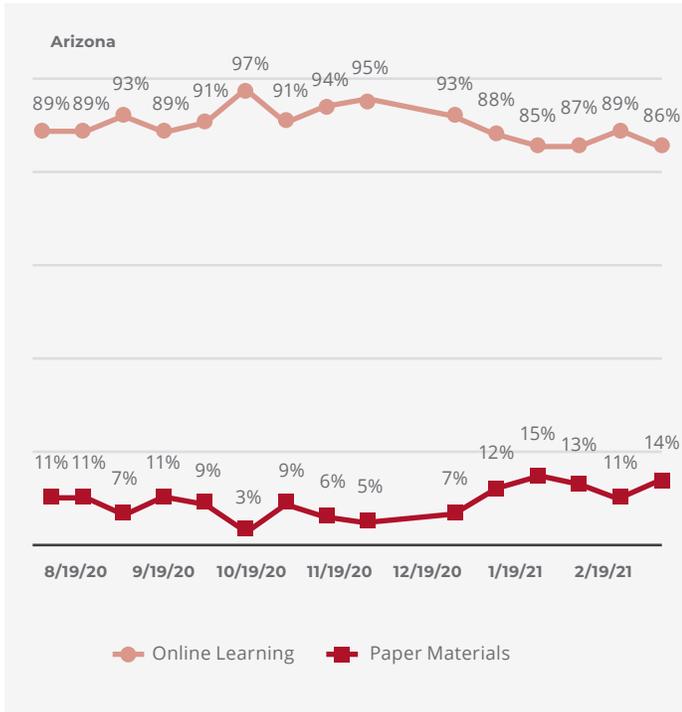
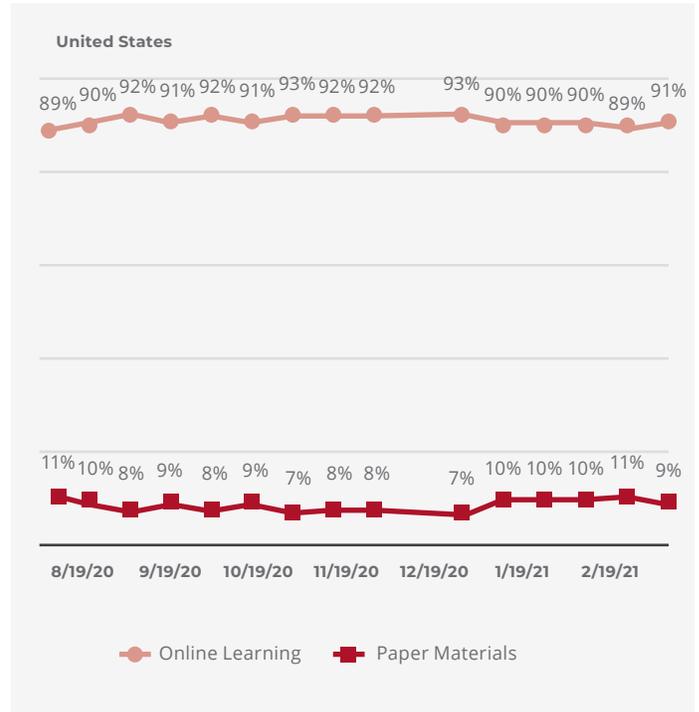


Figure 57. School enrollment during the 2020-21 school year for children (ages 0-17), United States



Source: U.S. Census Bureau (2021). [Household Pulse Survey Data, Phases 1, 2, & 3]. Retrieved from <https://www.census.gov/programs-surveys/household-pulse-survey.html>

Achievement on Standardized Testing

A child's third grade reading comprehension skills have been identified as a critical indicator of future academic success.²⁵⁹ Students who are at or above grade level reading in third grade are more likely to go on to graduate high school and attend college.²⁶⁰ The link between poor reading skills and risk of dropping out of high school is even stronger for children living in poverty. More than one-quarter (26%) of children who were living in poverty and not reading proficiently in third grade did not finish high school. This is more than six times the high school dropout rate of proficient readers.²⁶¹

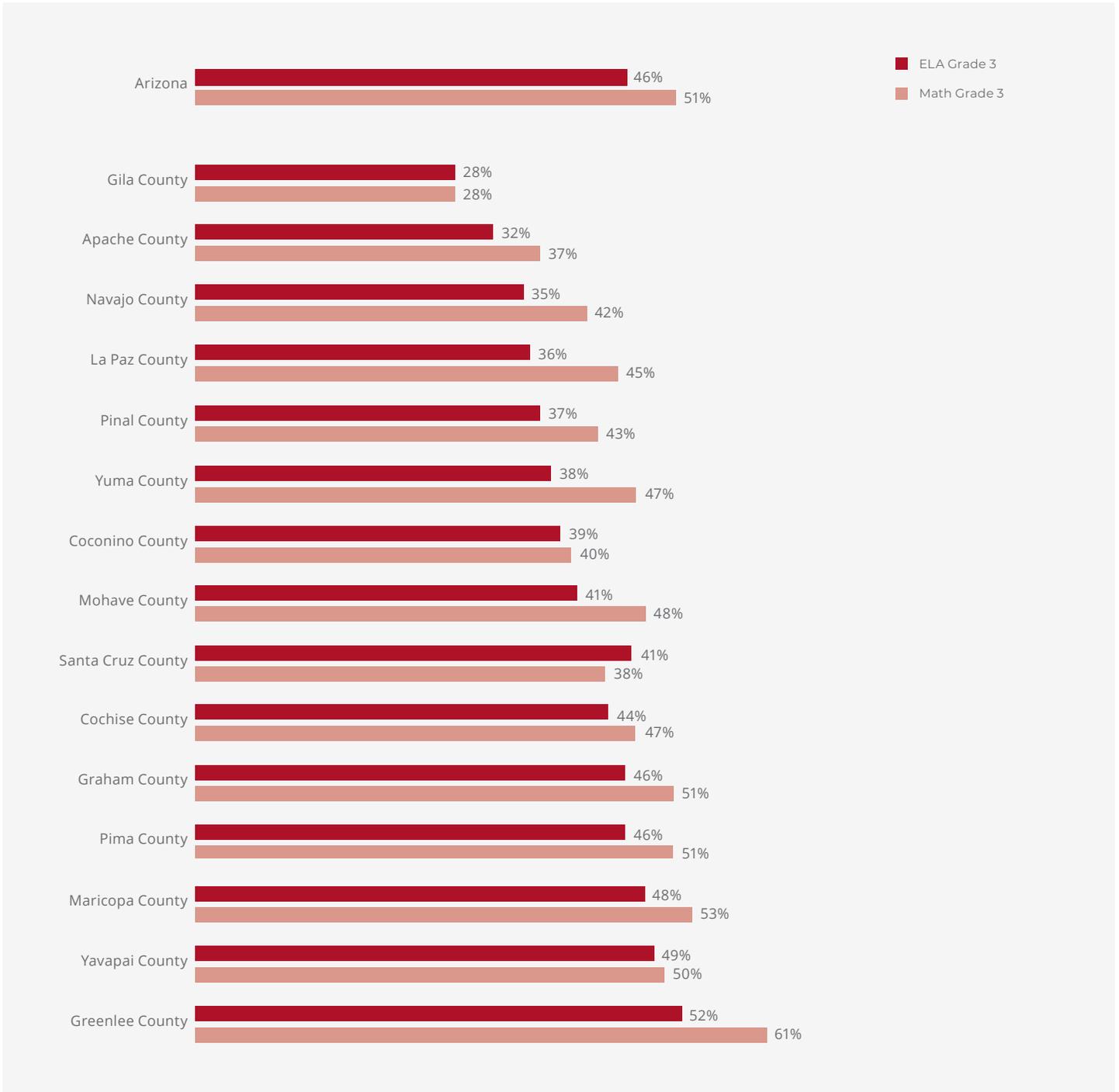
In 2010, the Arizona legislature, recognizing the importance of early identification and targeted intervention for struggling readers, enacted Move on When Reading legislation. As of the 2019-20 school year, the statewide assessment tool for English language arts (ELA), including reading and writing, is Arizona's Statewide Achievement Assessment for English Language Arts and Math (AzM2), known as Arizona's Measurement of Educational Readiness to Inform Teaching (AzMERIT) prior to 2019..^{xiii,262,263}

AzM2 scores are used to determine promotion from the third grade in accordance with the Move on When Reading policy. Move on When Reading legislation states that a student shall not be promoted to fourth grade if their reading score falls far below the third-grade level, as established by the State Board of Education.²⁶⁴ Exceptions exist for students identified with or being evaluated for learning disabilities and/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.

Prior to the pandemic, during the 2018-19 school year, 46% of the third-graders in the state passed the English Language Arts (ELA) test and 51% passed Math. The highest passing rates were found in Greenlee County (52% on ELA and 61% on Math) and the lowest were in Gila County (28% on both). Only five counties had ELA passing rates that met or exceeded that of the state – Greenlee (52%), Yavapai (49%), Maricopa (48%), Pima (46%) and Graham (46%) (Figure 58).

^{xiii} AzM2 was previously known as Arizona's Measurement of Educational Readiness to Inform Teaching (AzMERIT), and was renamed during the 2019-2020 school year. In 2022, AzM2 will be replaced by Arizona's Academic Standards Assessment (AASA).

Figure 58. Passing rates for third-grade AzMERIT, 2018-19



Source: Arizona Department of Education (2020). 2018-19 AzMERIT Assessment Results

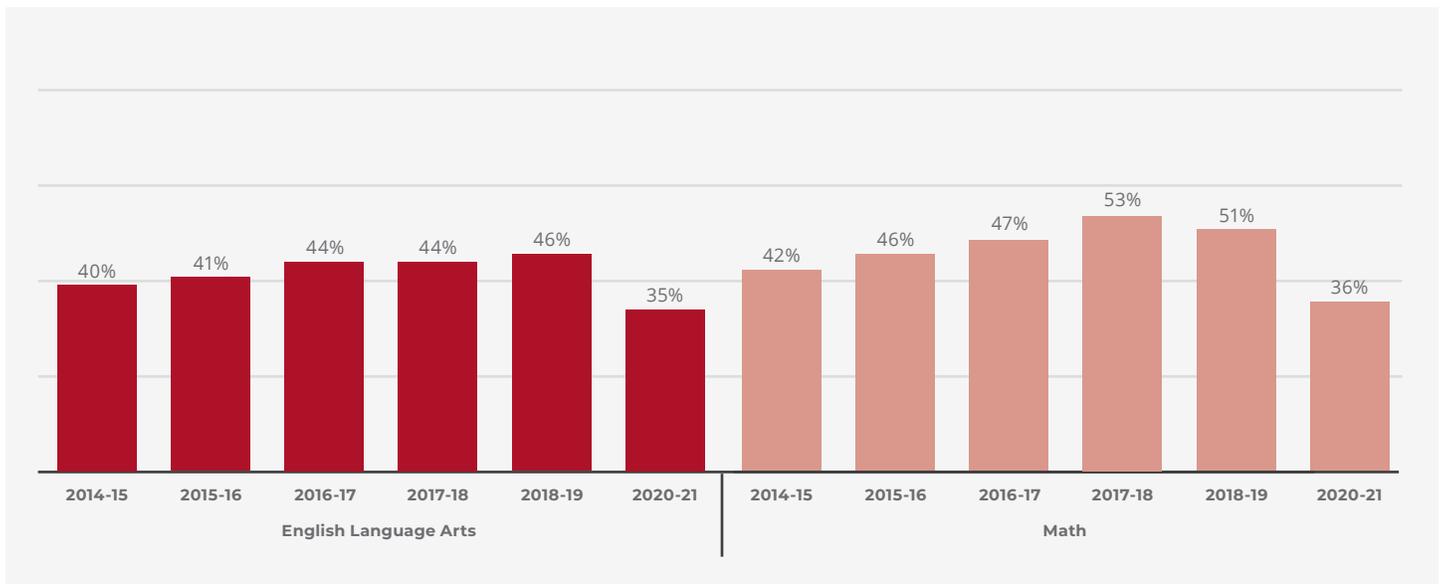
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In March 2020, Arizona passed legislation (H.B. 2910) to support schools during pandemic-related closures and transitions to distance learning, including cancelling required statewide AzM2 testing and other statewide assessments, for the 2019-20 school year.²⁶⁵ Testing resumed in April 2021; however, to account for the impacts of the pandemic, letter grades assigned to schools, based on student performance and used to administer millions of dollars in results-based funding, were not given for the 2020-21 school year.^{266,267,268}

Only about one-third of third-graders in Arizona achieved passing scores on the ELA (35%) and Math (36%) assessments during the 2020-21 school year (Figure 59). These rates starkly contrast with

the steadily increasing passing rates in both assessments seen prior to the pandemic but aligned with national research on missed learning during the pandemic which found that, on average, students ended the 2020-21 school year four months behind on reading and five months behind on math.²⁶⁹ Passing rates for both ELA and Math were even lower among students who identified as Black (22% for ELA; 18% for Math), American Indian (12% for both ELA and Math) and Hispanic or Latino (23% for ELA; 21% for Math).²⁷⁰ Strategies to recover unfinished learning will be critical, not only for students current academic progress but their long-term academic and professional trajectory.

Figure 59. AzMERIT/AzM2 passing rates for third-grade students



Source: Arizona Department of Education (2020). 2014-15 to 2018-19 AzMERIT Assessment Results & 2020-21 AzM2 Assessment Results.

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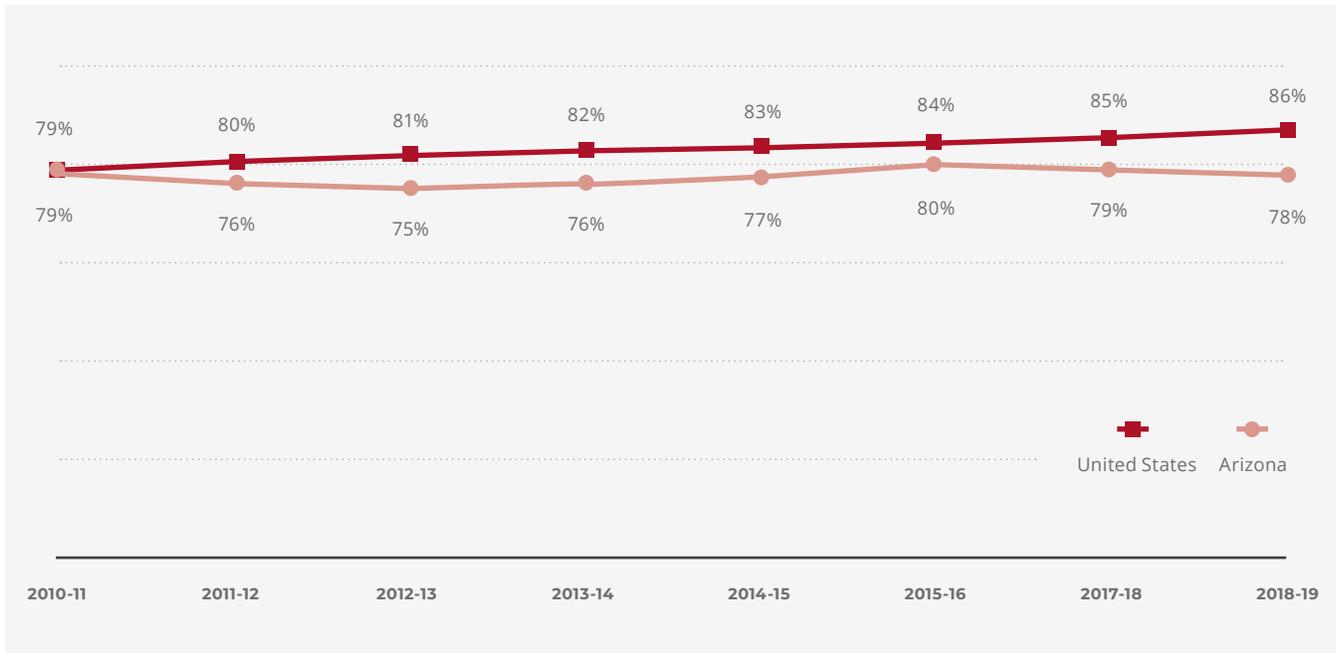
High School Graduation

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. Adults who graduated from high school have better health and financial stability, lower risk for incarceration and better socio-emotional outcomes compared to adults who dropped out of high school.^{271,272} Increasingly, a high school education is necessary for employment in the US, with nearly two-thirds of all jobs in 2020 requiring more than a high school education.²⁷³ Educational attainment has

also heightened economic challenges during the pandemic, with adults with less than a high school diploma experiencing more than twice the unemployment rate of adults with a bachelor's degree or higher.²⁷⁴

In contrast to steadily increasing high school graduation rates across the nation, Arizona high school graduation rates have remained largely steady over the past 10 years and are consistently lower than U.S. rates overall. Given the positive outcomes linked to high school graduation, further efforts need to be made to support students in Arizona in completing high school (Figure 60).

Figure 60. Adjusted cohort graduation rates, 2010-11 through 2018-19



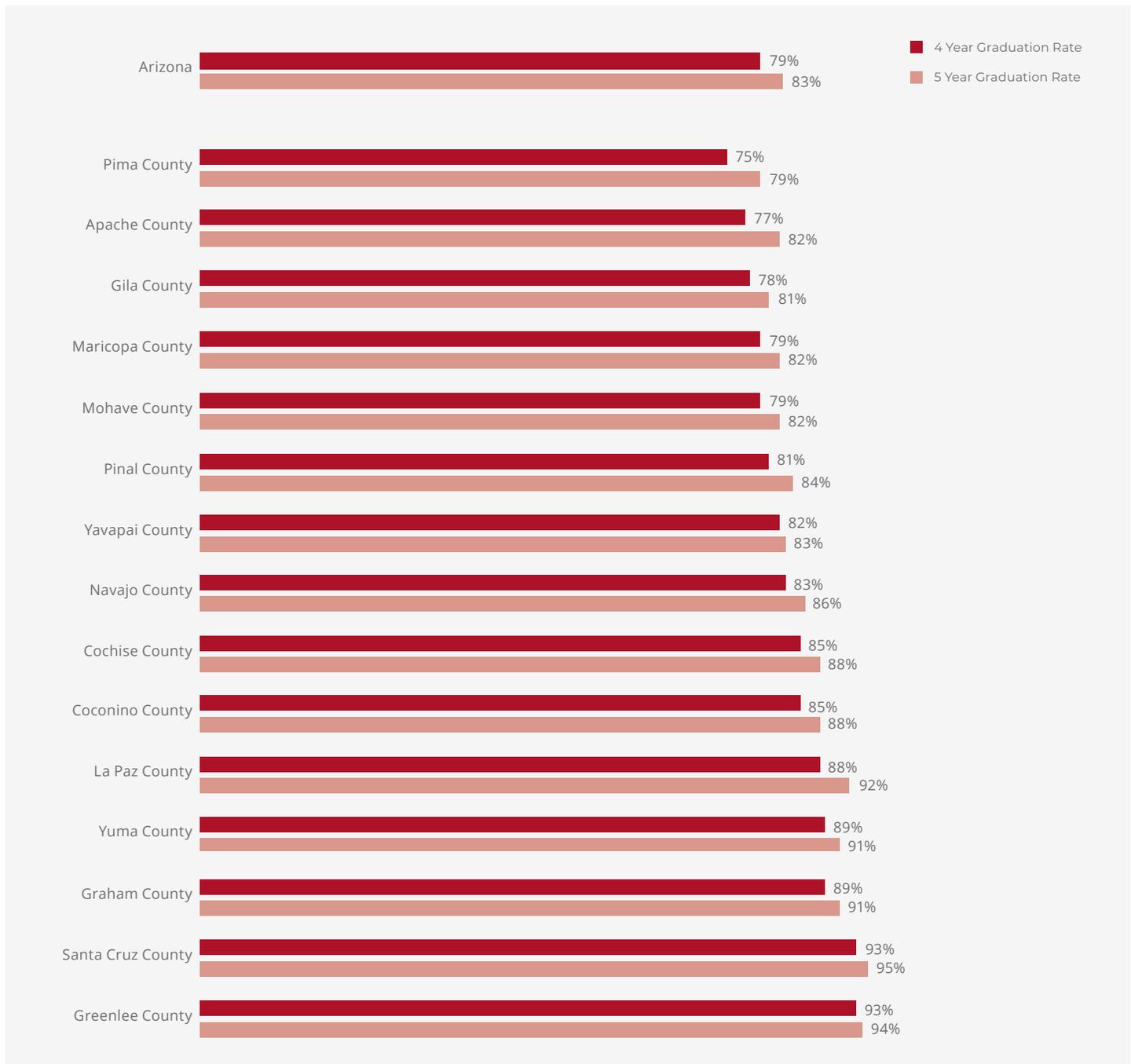
Source: National Center for Education Statistics (2020). Public high school 4-year adjusted cohort graduation rate (ACGR), by selected student characteristics and state: 2010-11 through 2018-2019 [Digest Table 219.46]. Retrieved from https://nces.ed.gov/programs/digest/d20/tables/dt20_219.46.asp

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In 2019, the four-year graduation rate in Arizona was 79% and the five-year rate was 83%. Greenlee and Santa Cruz counties had the highest four-year graduation rates (93%), while Pima (75%), Apache (77%) and Gila (78%) counties had four-year

rates lower than rates seen statewide (Figure 61). Statewide, the 7th through 12th grade drop-out rate has been declining in recent years, from a high of 5% during the 2017-18 school year down to 3.3% in 2019-20 (Figure 62).

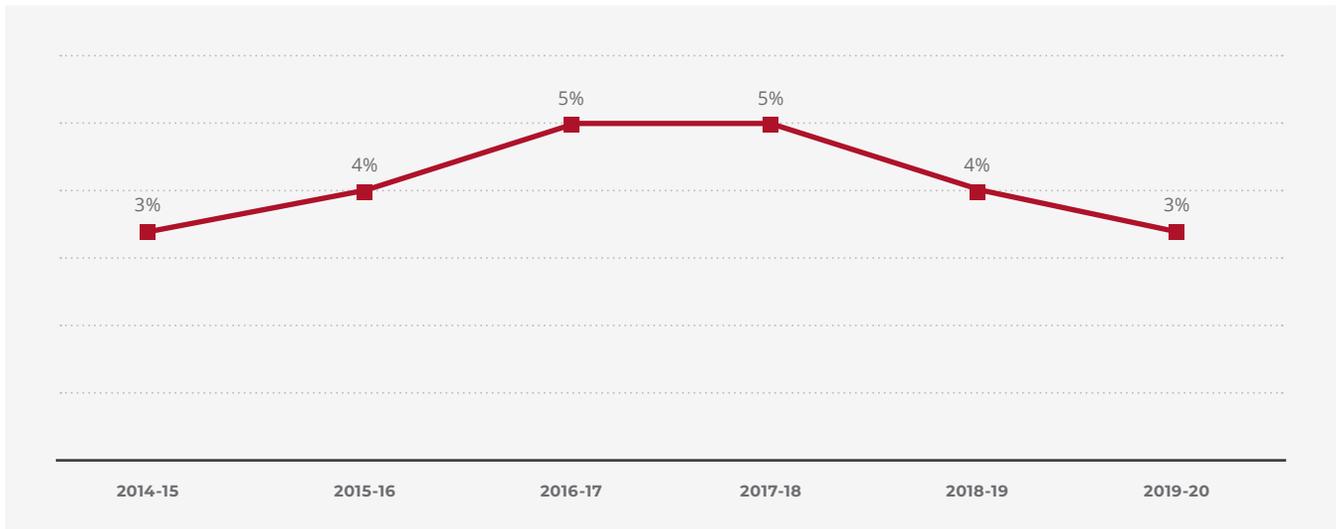
Figure 61. Four- and five-year graduation rates, 2019



Source: Arizona Department of Education (2021). Cohort 2019 Four Year Graduation Rate Data, Cohort 2019 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 four or five years.

Figure 62. Drop-out rates for 7th- to 12th-grade students



Source: Arizona Department of Education (2021). 2014-15 to 2019-20 Dropout rate data. 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].

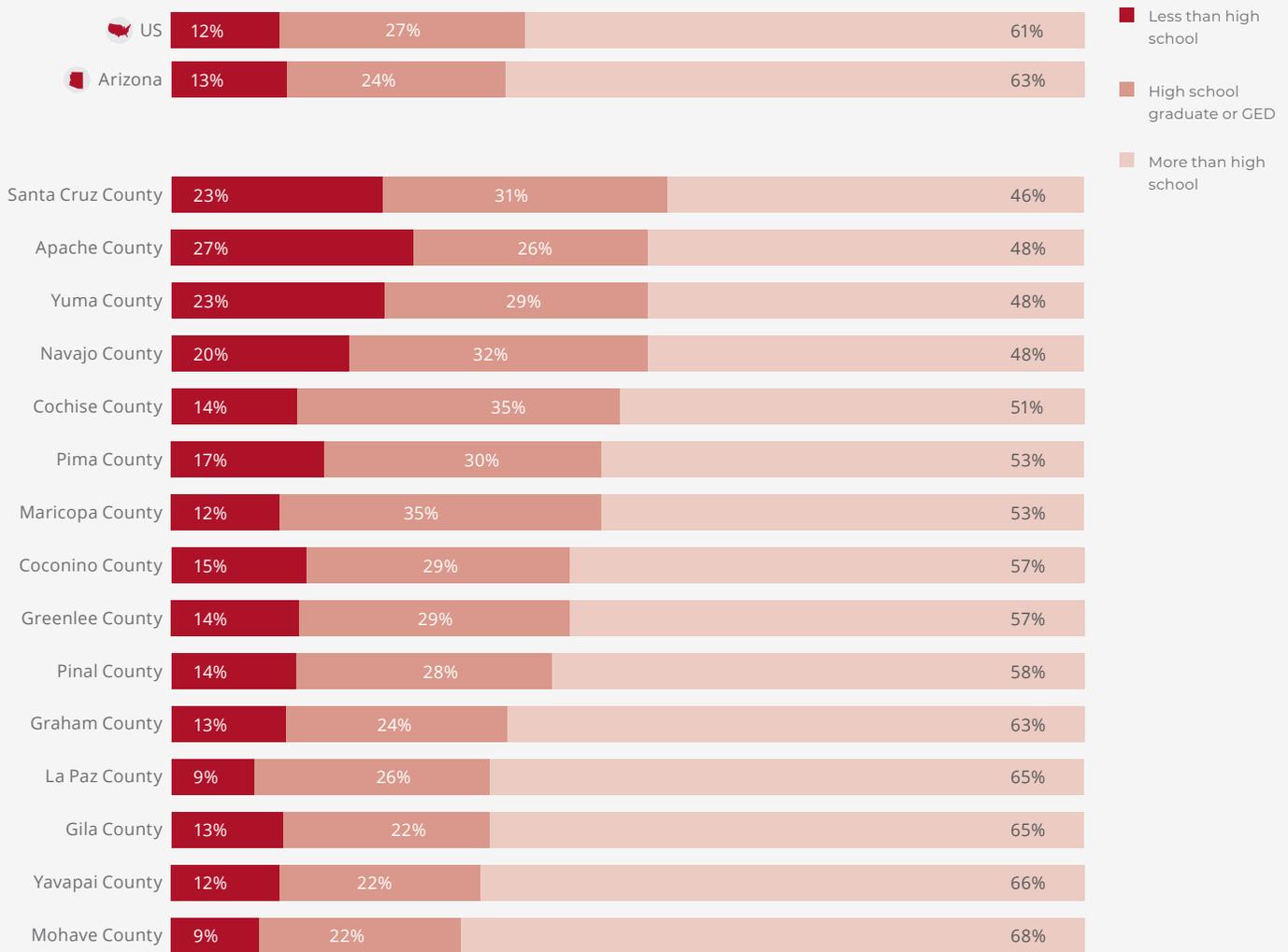
Education Attainment Among Adults

Parental educational attainment has been shown to influence child educational outcomes.²⁷⁵ Education is a key mechanism for upward mobility; parents with higher educational levels typically secure higher incomes to support their families.²⁷⁶ Estimates from the Georgetown Center on Education and the Workforce indicate that as of 2020, over two-thirds (68%) of jobs in Arizona require some postsecondary credential, compared to 65% nationally.²⁷⁷ Overall, a larger proportion of adults in Arizona have more than a high school

education compared the U.S. as a whole (63% and 61%, respectively). However, the educational attainment of adults in Arizona counties varies. Five counties have higher percentages of adults with more than a high school education compared to the nation as a whole (61%): Coconino (68%), Pima (66%), Maricopa (65%), Yavapai (65%) and Cochise (63%). In contrast, the percentage of adults who have less than a high school education is high in Yuma (27%), Santa Cruz (23%), La Paz (23%) and Apache counties (20%) compared to the state (13%) and adults nationwide (12%) (Figure 63).

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Figure 63. Level of education for the adult population (ages 25 and older)



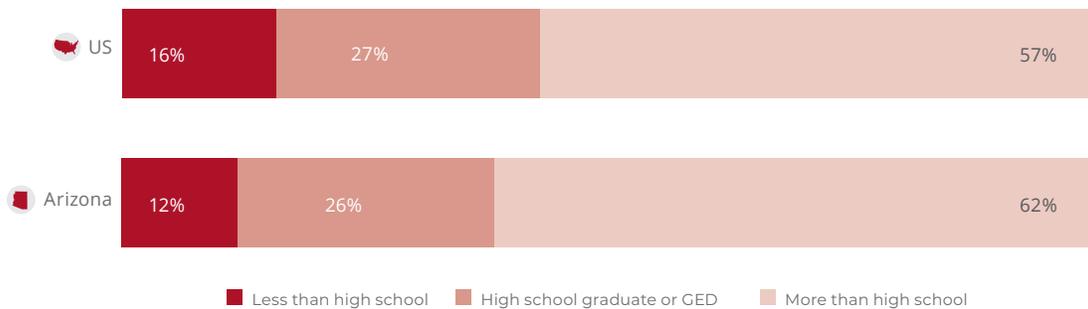
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2010-2014 & 2015-2019, Table B15002

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Higher maternal education, in particular, is linked to both cognitive and socio-emotional development as well as general health in young children.²⁷⁸ In Arizona, 16% of mothers giving birth lack a high school diploma, compared to the 12% nationwide (Figure 64). Arizona is therefore particularly poised to benefit from programs that aim to simultaneously serve both young children and their parents. Such two-generation programs are designed to provide family-centered supports to low-income parents and their young children by providing access to education and workforce development for parents and high-quality early education for young children.^{279,280} Developmental scientists are increasingly aware of the synergistic benefits of such two-generation programs.²⁸¹

For example, a two-generation program in Tulsa, Oklahoma, which pairs Head Start early education programs with healthcare career training for parents, has had positive impacts on both parental employment and well-being and child school readiness.^{282,283} The passage of HB 2016 in April 2021, which allows Arizona parents enrolled in full-time education and training programs to obtain a waiver from the 20-hour-per-week work requirement currently present in the DES child care subsidy program, will remove a barrier to two-generation approaches in the state.²⁸⁴ Providing resources and programming to support parental and youth education can help grow the human capital of both.²⁸⁵

Figure 64. Level of education for mothers giving birth, 2019



Source: Centers for Disease Control and Prevention, National Center for Health Statistics (2021). [Nativity 2007-2019 on CDC WONDER Online Database, released in 2020]. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on Sep 10, 2021



Why It Matters

The physical and mental health of both children and their parents are important for optimal child development and well-being. Early childhood health, and even maternal health before pregnancy, has lasting impacts on an individual's quality of life.^{286,287} Experiences during the prenatal and early childhood period can result in lifelong impacts on immune functioning, brain development and risk for chronic diseases.^{288,289} Poor health in childhood can also result in lower educational attainment and socioeconomic status in adolescence and adulthood, impacting both an individual's own health and economic and the health and economic well-being of their future children, perpetuating intergenerational poverty^{290,291}

Adverse childhood experiences (ACEs) also impact children's immediate and long-term well-being. ACEs include eight 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.²⁹² ACEs have been associated with developmental disruption, mental illness, drug and alcohol use

and overall increased health care utilization, with negative outcomes more likely as the number of ACEs an individual experiences increases.^{293,294} Therefore, adequate access to health insurance, preventive care and treatment services are not only vital to support a child's current health, but for their long-term development and future success.^{295,296,297}

One useful set of metrics for evaluating child health in Arizona are the Healthy People objectives. These science-based objectives define priorities for improving the nation's health and are updated every 10 years. Understanding where Arizona children and mothers fall in relation to these national benchmarks (Healthy People 2020)^{xiv,298} can help highlight areas of strength in relation to young children's health and those in need of improvement in the state. The Arizona Department of Health Services monitors state level progress towards a number of Healthy People maternal, infant and child health objectives for which data are available at the county level, including increasing the proportion of pregnant women who receive prenatal care in the first trimester, reducing low birth weight, reducing preterm births and increasing abstinence from cigarette smoking among pregnant women.²⁹⁹

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

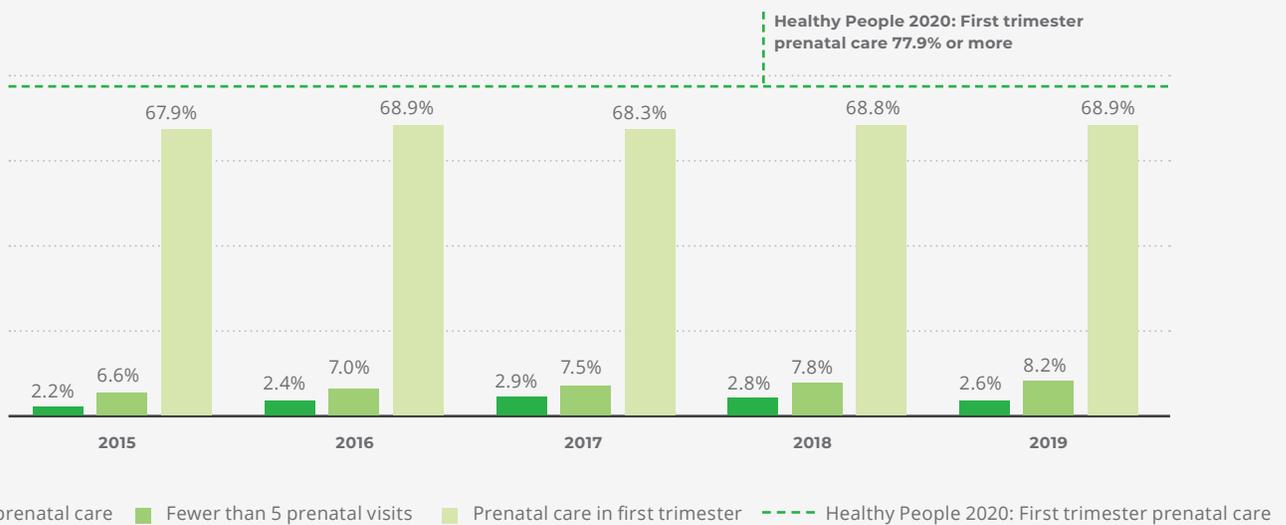
How Arizona's Young Children Are Faring

Prenatal Care

Consistent and accessible health care during and after pregnancy is critical for supporting pregnant mothers and young children. Prenatal care, starting early in pregnancy and continuing at regular intervals to delivery, can improve health outcomes for mothers and infants and reduces the risk of prenatal smoking, pregnancy complications, prematurity and maternal and infant mortality.^{300,301,302,303} While the percentage

of pregnant women who began prenatal care in the first trimester has slowly increased over the past five years in Arizona, it was still well below the Healthy People 2020 target of 77.9% in 2019 (68.9%). While the proportion of mothers receiving no prenatal care has remained relatively consistent over time, an increasing proportion of pregnant women had fewer than five prenatal visits (Figure 65). Given the impacts of inadequate prenatal care on birth outcomes, targeted efforts to engage more women in early and adequate prenatal care could help improve the health of Arizona mothers and babies.

Figure 65. Prenatal care for mothers giving birth in Arizona, 2015 to 2019



Sources: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. & Arizona Health Status and Vital Statistics, Tables 5B-11 and 5B-12.

COVID-19 Pandemic Effects

Early evidence indicates that the stillbirth rate has risen dramatically in many countries during the COVID-19 pandemic, including the United States.³⁰⁴ Researchers propose that this increase has been largely due to decreased access to routine prenatal care because of fears around contracting COVID-19, transitions to remote appointments or strain on the health care system.³⁰⁵ These studies of maternal and infant health have also found increased rates of maternal depression, indicating an ongoing need for quality prenatal and postpartum care as the pandemic continues.³⁰⁶

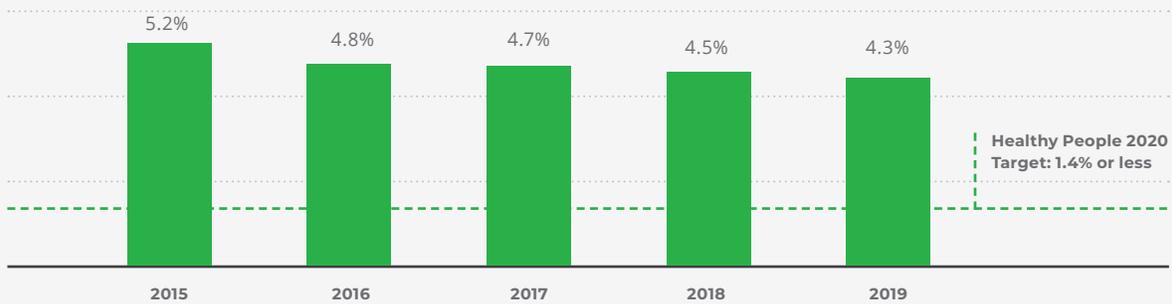
CHILD HEALTH & WELL-BEING

Maternal Characteristics

Certain maternal characteristics can increase the risk of poor health outcomes for both mothers and their babies. A mother's health status before, during and after pregnancy influences her child's health. A mother's use of substances, such as drugs and alcohol, has implications for her baby. Babies born to mothers who smoke are more

likely to be born early (pre-term), have low birth weight, die from sudden infant death syndrome (SIDS), and have weaker lungs than babies born to mothers who do not smoke.^{307,308} The percentage of mothers who report using tobacco during pregnancy in Arizona has declined each year since 2015, though it was still notably higher than the Healthy People 2020 target of just 1.4% of mothers using tobacco while pregnant (Figure 66).

Figure 66. Mothers giving birth who used tobacco during pregnancy in Arizona, 2015 to 2019



Sources: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. & Arizona Health Status and Vital Statistics, Tables 5B-11 and 5B-12.

Note: The Healthy People 2030 target for maternal use of tobacco during pregnancy was increased to 4.3% of females giving birth reporting smoking during pregnancy, or alternatively 95.7% of females reporting abstaining from smoking during pregnancy.

Pregnancy during the teen years is also associated with a number of health concerns for children, including neonatal death, sudden infant death syndrome and child abuse and neglect.³⁰⁹ Teenaged parents are less likely to complete high school or college and more likely to require public assistance and live in poverty than their peers who

are not parents.^{310,311,312} The percentage of mothers giving birth while in their teens has declined each year since 2015 to 5.5% in 2019. The overall percentage of mothers who were younger than 18 also declined to a five-year low of 1.5% in 2019 (Figure 67).

Figure 67. Mothers giving birth who were younger than 20, 2015 to 2019



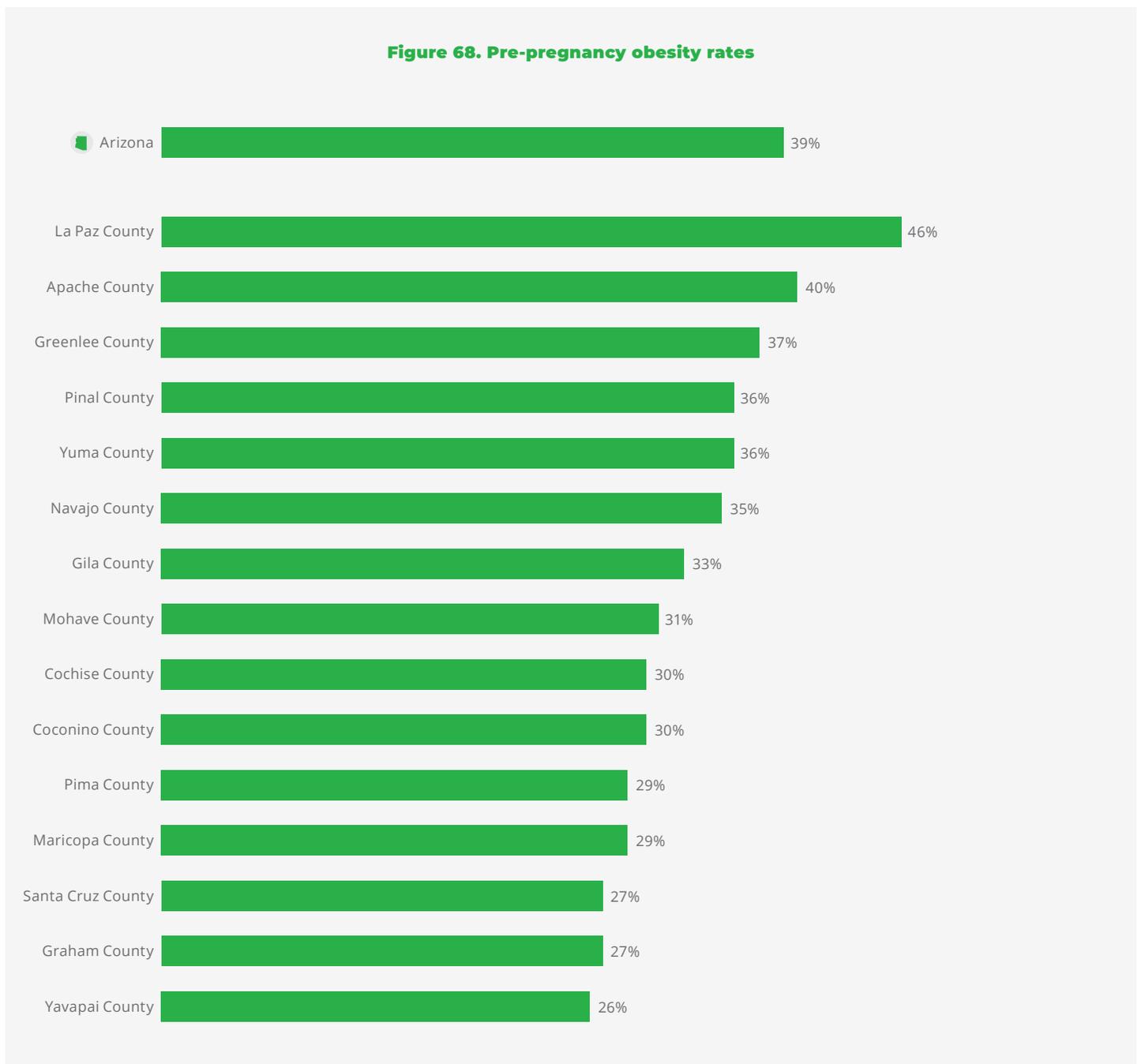
Sources: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. & Arizona Health Status and Vital Statistics, Tables 5B-11 and 5B-12.

CHILD HEALTH & WELL-BEING

Maternal obesity is associated with increased risk of birth complications and neonatal and infant mortality.^{313,314} In 2019, almost 1 in 3 (30%) pregnant mothers in Arizona were considered obese before becoming pregnant. Rates of pre-pregnancy obesity varied across the state, with nearly half of mothers considered obese prior to pregnancy in La

Paz County (46%) compared to about one-quarter of mothers in Yavapai County (26%) (Figure 68). In addition to health implications early in life, babies of mothers who are obese are at an increased risk for chronic conditions in childhood and adulthood, including asthma, diabetes and heart disease.³¹⁵

Figure 68. Pre-pregnancy obesity rates



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

CHILD HEALTH & WELL-BEING

Preterm Birth and Low Birth Weight

Babies born at a low birth weight (less than 5 pounds, 8 ounces) are at increased risk of infant mortality and longer-term health problems such as diabetes, hypertension and cardiac disease.^{316,317} Arizona consistently met the Healthy People 2020 target of 7.8% or fewer live births being low birth weight between 2015 and 2019 (Figure 69).³¹⁸ Preterm birth (birth at less than 37 weeks of gestation) is associated with higher infant and child mortality and often results in longer hospitalization, increased health care costs and longer-term impacts such as physical and developmental impairments.^{319,320} The Healthy People 2020 target for babies born preterm is 9.4%

or fewer of live births, a target Arizona met in 2019 (9.3%) (Figure 70).

Newborns are admitted into neonatal intensive care units (NICUs) for numerous reasons that can vary across medical providers and have implications for the short and long-term health of babies.³²¹ The percentage of newborns who were admitted to a neonatal intensive care unit (NICU) in Arizona increased in recent years, from 6.9% in 2015 to 7.7% in 2019 (Figure 71). While NICU admissions may be an indicator of important health concerns in newborns, including low birth weight, they can also be a site of family-based interventions that can positively impact infant development and parent-child relationships.³²²

Figure 69. Share of births with low birthweight (less than 2,500 grams) in Arizona, 2015 to 2019

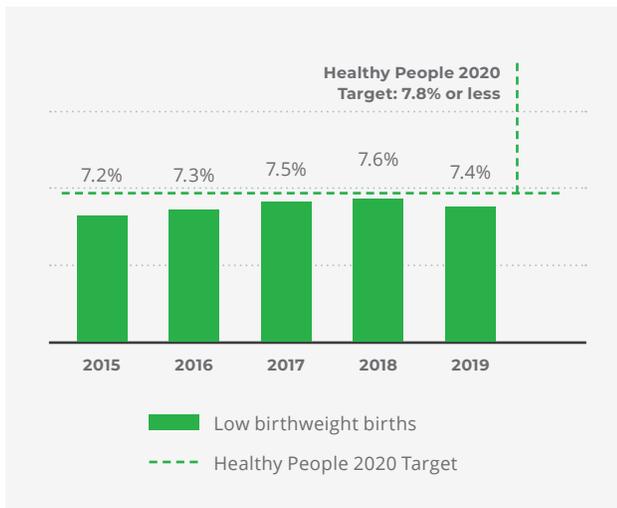


Figure 70. Share of births that were pre-term (less than 37 weeks), 2015 to 2019

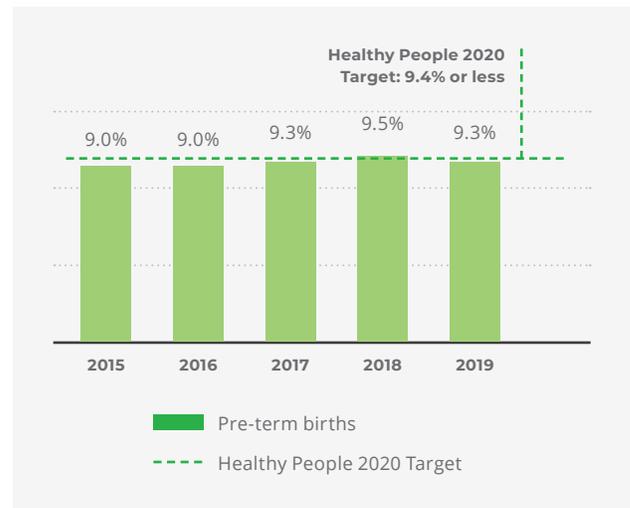
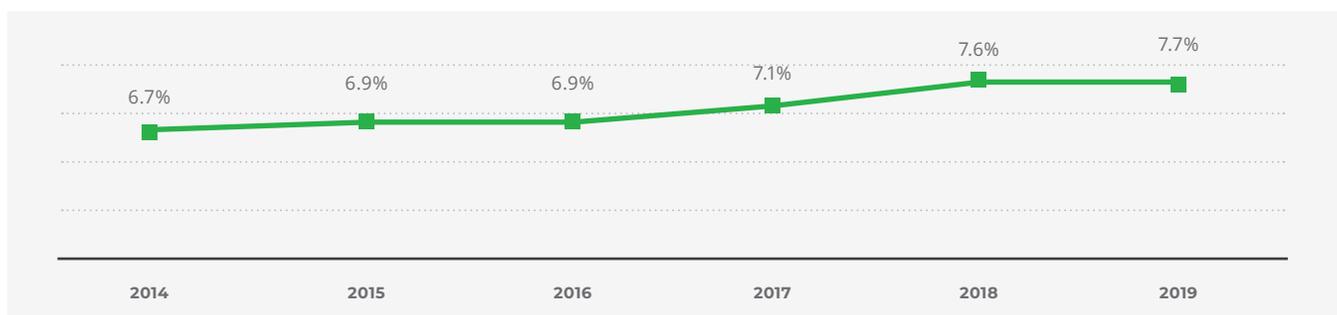


Figure 71. Share of births where the newborn was admitted to the Neonatal Intensive Care Unit (NICU) in Arizona, 2015 to 2019



Sources: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. & Arizona Health Status and Vital Statistics, Tables 5B-23, 5B-24, and 5B-30.

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

CHILD HEALTH & WELL-BEING

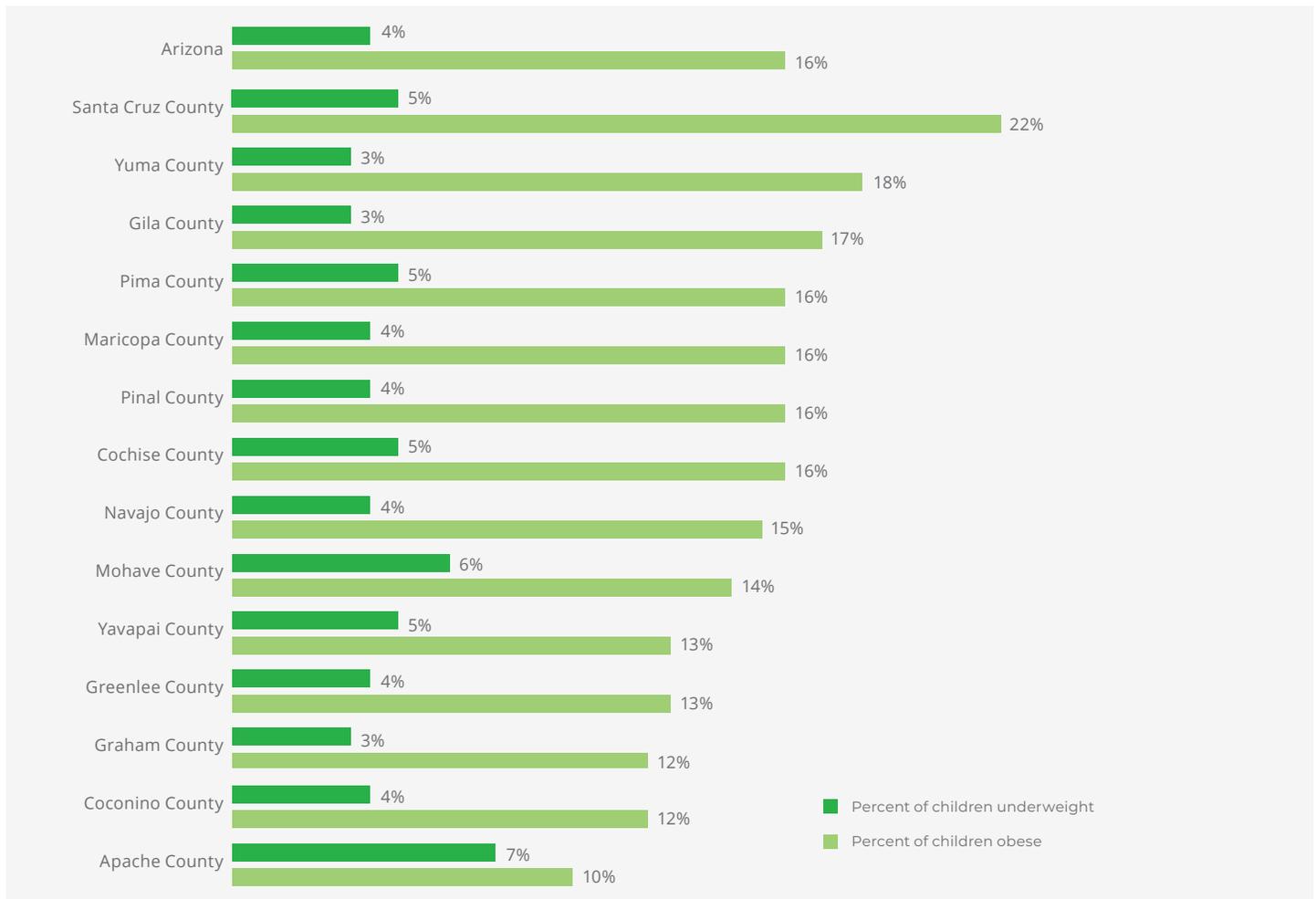
Child Obesity and Underweight

A child's weight status can have long-term impacts on health and well-being. Nationwide, an estimated 19% of children (ages 2-19) are obese and 4% are underweight, numbers that have both increased in recent years.^{323,324} Obesity can have negative consequences on physical, social and psychological well-being that begin in childhood and continue into and throughout adulthood.³²⁵ Higher birth weight and higher infancy weight, as well as lower-socioeconomic status and low-quality mother-child relationships, have all been shown to be related to higher childhood weight and increased risk for obesity and metabolic syndrome (which is linked to an increase risk of heart disease, stroke and diabetes).^{326,327} Child underweight, or low weight-for-age, can be caused by chronic

undernutrition or infectious disease and can lead to long-term impacts on cognitive and physical development.³²⁸

According to data from the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), about 1 in 6 (16%) young children participating in that program are considered obese and 4% are underweight. Child obesity among WIC participants in Santa Cruz (22%), Yuma (18%) and Gila (17%) counties is higher than in the state. While the statewide proportion of children considered underweight aligns with national figures (4%), six counties have higher rates of child underweight including in Apache County (7%) where the rate of child underweight is nearly twice that of the state (Figure 72).

Figure 72. Weight status for children ages 2 through 5 enrolled in WIC, calendar year 2020



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

Note: Data for La Paz County were not available in this dataset due to small numbers.

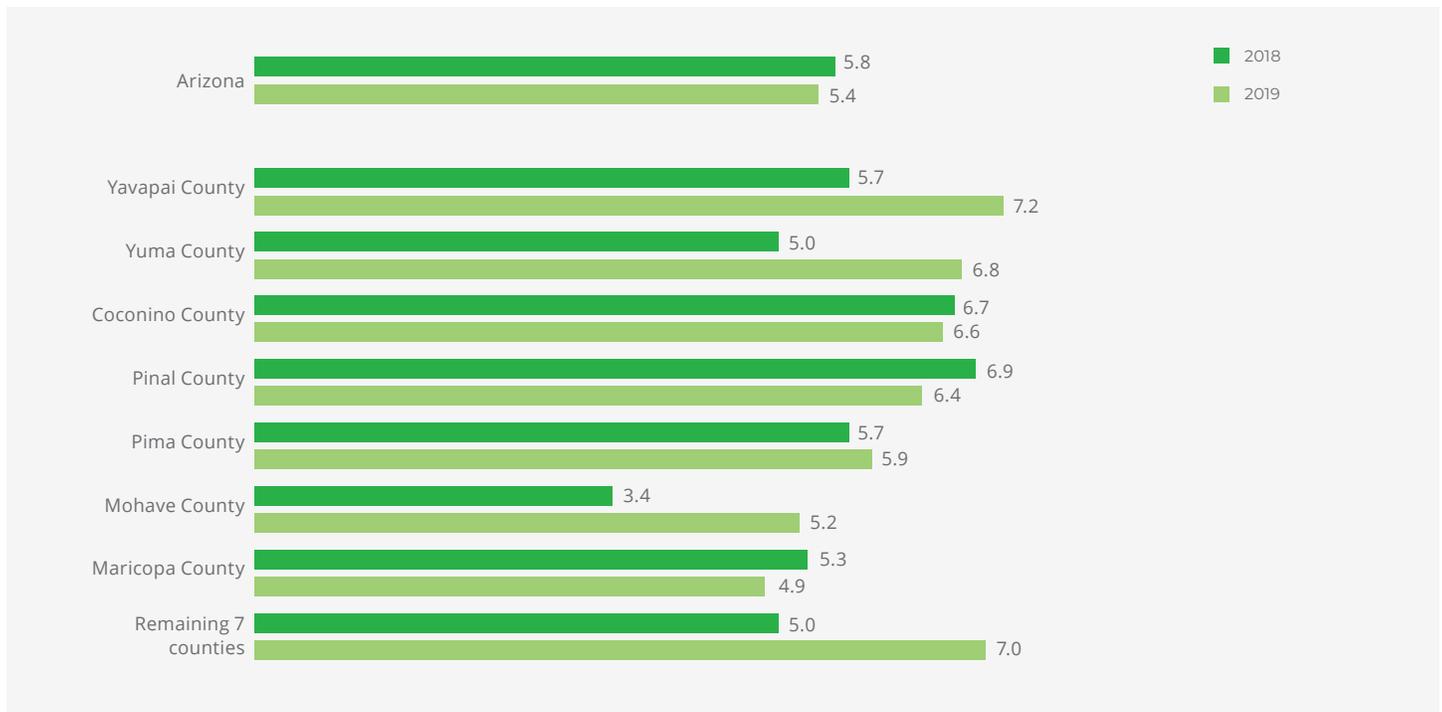
Infant and Child Mortality

Infant mortality describes the number of deaths of children under 1 year of age relative to live births. In 2019, the infant mortality rate dropped to 5.4 per 1,000 live births, or about 1 infant death for every 180 live births, from 5.6 per 1,000 live births in 2018. Though any cases of infant death are a tragic loss, this rate was slightly lower than the rate across the U.S. (5.6 per 1,000 live births in 2019) and met the Healthy People 2020 objective target (6.0 per 1,000 live births).³²⁹ Arizona ranks in the middle of U.S. states in terms of infant mortality, with the 20th lowest infant mortality rate nationwide in 2019.³³⁰ The most common causes of infant mortality in Arizona and the U.S. are congenital abnormalities, low birthweight and preterm birth, with a smaller proportion related to maternal pregnancy complications, sudden infant death syndrome

(SIDS) and unintentional injuries.^{331,332} Ensuring access to adequate and timely prenatal care and newborn screening are therefore both critical for preventing and reducing infant mortality.³³³

Infant mortality rates varied across the state of Arizona in 2019, with Maricopa, Mohave and Pima counties meeting the Healthy People 2020 target (6.0 per 1,000 live births) in 2019.^{xv} Rates ranged from the lowest in Maricopa County (4.9 per 1,000 live births) to the highest rates in Navajo County (7.4 per 1,000 live births) and Yavapai County (7.2 per 1,000 live births). Less populated counties where there are relatively fewer children, such as Navajo County, saw larger changes in mortality rates between 2018 and 2019, in part because the mortality rate can swing dramatically with the death of one or two children in these areas (Figure 73).

Figure 73. Infant mortality rate (per 1,000 live births), 2018-2019



Source: Arizona Department of Health Services (2021). [Death report dataset]. Unpublished data received by request.

Note: Because the numbers of deaths are too small to be reported in many of smaller counties in the state, this figure lists the statistics for the eight largest counties but groups the rest of the counties together so that a number can be reported.

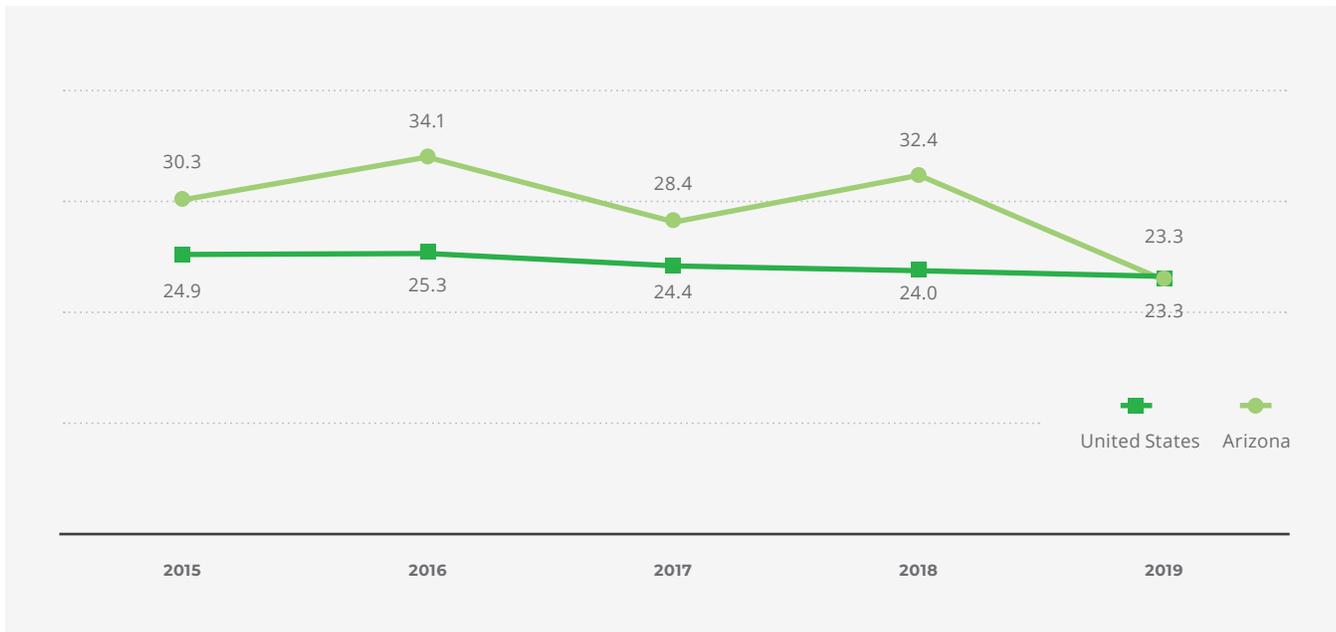
^{xv} The Healthy People 2030 target for infant mortality rate was decreased to 5 infant deaths per 1,000 live births.

CHILD HEALTH & WELL-BEING

The mortality rate for young children (ages 1 to 4) in Arizona was consistently higher than the US from 2015 to 2018, peaking in 2018 at 32.4 deaths per 100,000 children. In 2019, the state aligned

with the national rate of 23.3 deaths per 100,000 children (Figure 74). Of the 38 states with available young child mortality data in 2019, Arizona had the 24th highest child mortality rate.³³⁴

Figure 74. Crude mortality rates* for children (ages 1-4), 2015 to 2019



Source: Centers for Disease Control and Prevention, National Center for Health Statistics (2021). [Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, released in 2020]. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on Sep 10, 2021

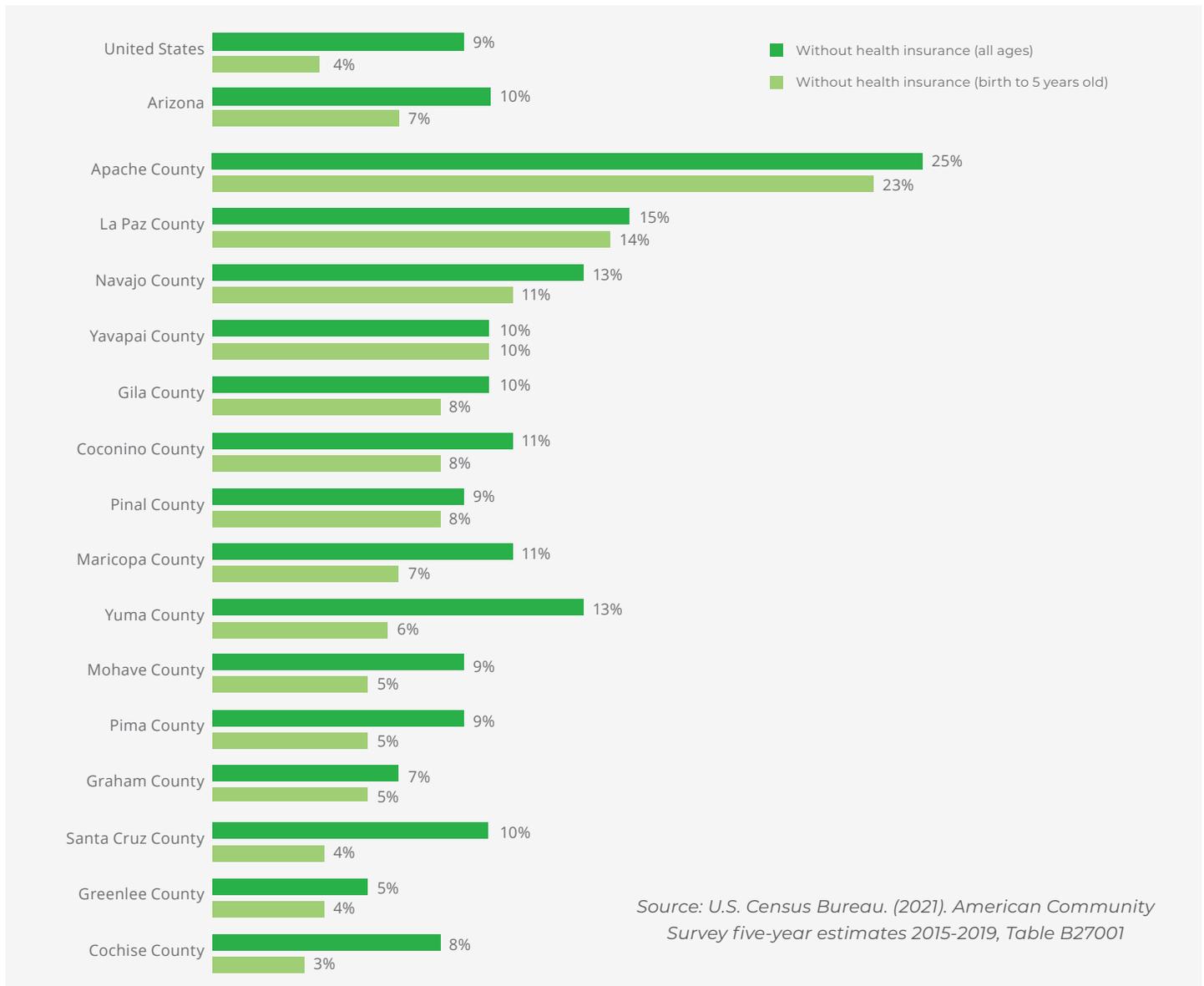
CHILD HEALTH & WELL-BEING

Health Insurance Coverage and Well-Child Visits

Access to health insurance is an important indicator of children’s access to health services. Children who lack health insurance are more likely to be hospitalized and to miss school.³³⁵ According to data from the 2019 American Community Survey, about 10% of the population of Arizona does not have health insurance. A smaller percentage (7%) of young children under 6 years old are estimated to be without health insurance in Arizona, but this percentage is still nearly double that of the national percentage

of uninsured children (4%). The share of the population without health insurance varies widely across the state, with the share of young children without health insurance lowest in Cochise County (3%) and Greenlee County (4%). Apache County has the highest prevalence of uninsured people (25% for all ages and 23% for children under 6) (Figure 75). However, the American Community Survey considers persons who are covered by the Indian Health Service (IHS) uninsured, so many of those deemed uninsured in counties with a substantial Native American population may have access to health care through IHS.³³⁶

Figure 75. Health insurance coverage (all ages and children ages 0-5)



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

CHILD HEALTH & WELL-BEING

In the early years of a child's life, well-baby and well-child visits allow clinicians to assess and monitor the child's development and offer developmentally appropriate information and guidance to parents.³³⁷ Data from the Centers for Medicare and Medicaid Services show that fewer young children in Arizona have had at least one well-child visit compared to young children in the U.S. over the last four years, though the proportion

has been steadily increasing. In federal fiscal year 2020, 63.9% of young children (ages 3-6) in Arizona had at least one well-child visit with a primary care practitioner compared to 70.4% of young children in the U.S. (Figure 76). Families without health insurance are more likely to skip these visits and less likely to receive preventive care for their children or care for health conditions and chronic diseases.^{338,339}

Figure 76. Percent of children who had 1 or more well-child visits with a primary care practitioner (ages 3-6)



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

COVID-19 Pandemic Effects

In addition to the direct impacts of COVID-19 on the health of millions of people, the pandemic has also created barriers to important preventive care for children and families. In a nationally-representative survey, it was found that more than 1 in 4 (28%) families with young children missed a well-baby/well-child visit during the pandemic, including more than 1 in 3 (36%) families with young children with special needs.^{340,341} Families with young children (18 months to 5 years), low-income families and Black and Hispanic families experienced the greatest barriers to attending well-child visits and scheduled vaccinations.³⁴²

Federal relief efforts during the pandemic have included expansion of subsidies for health insurance purchased on Affordable Care Act marketplaces as well as special and expanded enrollment periods for insurance through these marketplaces.³⁴³ These efforts helped prevent losses of insurance for many Americans despite the enormous number of jobs lost,³⁴⁴ and may make health insurance more accessible for families in Arizona.

CHILD HEALTH & WELL-BEING

Immunizations & Infectious Disease

Vaccination against preventable diseases protects children and the surrounding community from illness and potentially death. Childhood vaccinations also have long-term effects on the physical, social and economic welfare of children, their families and their communities.³⁴⁵ In order to attend licensed child care programs and schools, children must obtain all required vaccinations or obtain an official exemption, which can be

requested based on a specific medical condition or based on personal or religious beliefs.³⁴⁶ During the 2020-21 school year, Arizona did not meet any of the Healthy People 2020 targets for kindergarten immunization rates. Yuma and Santa Cruz counties were the only counties that met the Healthy People 2020 targets for kindergarten immunization rates during this time, while Yavapai and Mohave counties had the lowest immunization rates across all required vaccines (Table 3).

Table 3. Kindergarten immunization rates for select required vaccines, 2020-21 school year

	Number enrolled	DTaP	Polio	MMR	Personal belief exemption	Medical exemption	Exempt from every required vaccine
Arizona	71,303	92.1%	92.3%	91.9%	5.4%	0.1%	3.3%
Apache County	630	94.1%	94.3%	92.7%	4.3%	0.0%	3.5%
Cochise County	1,183	92.7%	93.0%	92.2%	2.7%	0.2%	1.8%
Coconino County	1,079	88.6%	88.5%	87.3%	5.2%	0.2%	3.9%
Gila County	377	88.6%	89.7%	87.5%	10.1%	0.0%	4.0%
Graham County	515	91.5%	92.4%	90.5%	3.1%	0.0%	2.1%
Greenlee County	23	91.3%	91.3%	91.3%	0.1%	0.0%	0.1%
La Paz County	143	89.5%	91.6%	90.2%	0.0%	0.0%	0.0%
Maricopa County	47,729	91.9%	92.2%	91.9%	5.9%	0.1%	3.6%
Mohave County	1,515	87.4%	88.4%	87.1%	8.0%	0.0%	5.2%
Navajo County	923	88.6%	89.5%	88.9%	6.0%	0.1%	4.0%
Pima County	9,195	94.7%	94.7%	94.3%	2.6%	0.1%	1.5%
Pinal County	3,395	92.0%	92.7%	92.1%	7.0%	0.3%	4.1%
Santa Cruz County	588	96.8%	96.6%	97.3%	1.4%	0.3%	1.4%
Yavapai County	1,684	81.1%	81.2%	79.5%	11.5%	0.2%	7.2%
Yuma County	2,324	96.9%	97.2%	96.9%	2.0%	0.1%	1.4%
Healthy People 2020 Target		95.0%	95.0%	95.0%			

Source: Arizona Department of Health Services (2021). Kindergarten Immunization Coverage by County, 2020-2021 School Year. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

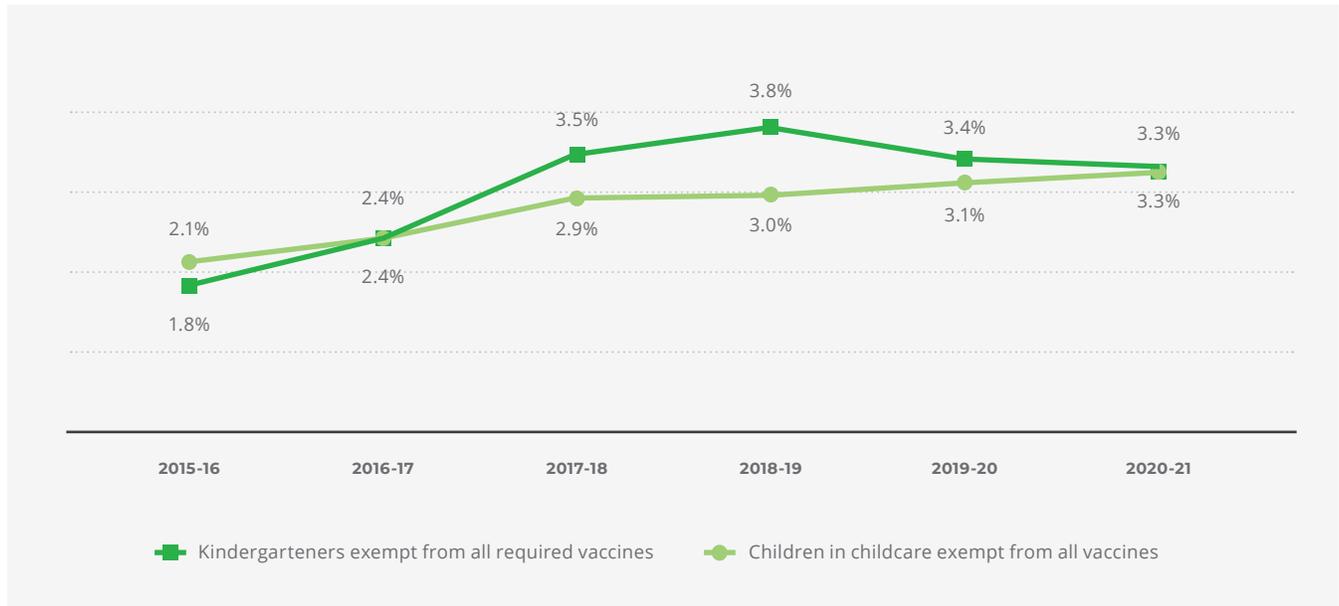
Note: The Healthy People 2030 target for immunization rates of children in kindergarten for the MMR vaccine remains 95%.

CHILD HEALTH & WELL-BEING

In recent years, there has been a rise in the percentage of families requesting exemption from required vaccinations for their children in Arizona. For children in child care settings, the rates of exemption from all required vaccines have been steadily increasing each year from 2015-16 to 2020-21, with over 3% of children enrolled in child care exempt from all vaccines during the 2020-21 school year. For children in kindergarten, rates of exemptions from all required vaccines increased from 2015-16 to 2018-19 and declined slightly by 2020-21. Statewide, over 3% of kindergarteners are exempt from all required vaccines (Figure 77). Gila County (9.8%) and Yavapai County (7.5%)

had the highest rates of exemptions from all required vaccines for children in child care, and Yavapai County had a comparably high rate of exemption from all required vaccines for children in kindergarten (7.2%) (Figure 78). These trends are worrisome because in order to assure community immunity of preventable infectious diseases, which helps to protect unvaccinated children and adults, vaccination rates need to remain high.³⁴⁷ For measles, for example, between 90% and 95% of children need to be vaccinated in order to prevent the disease spreading if one child becomes infected.³⁴⁸

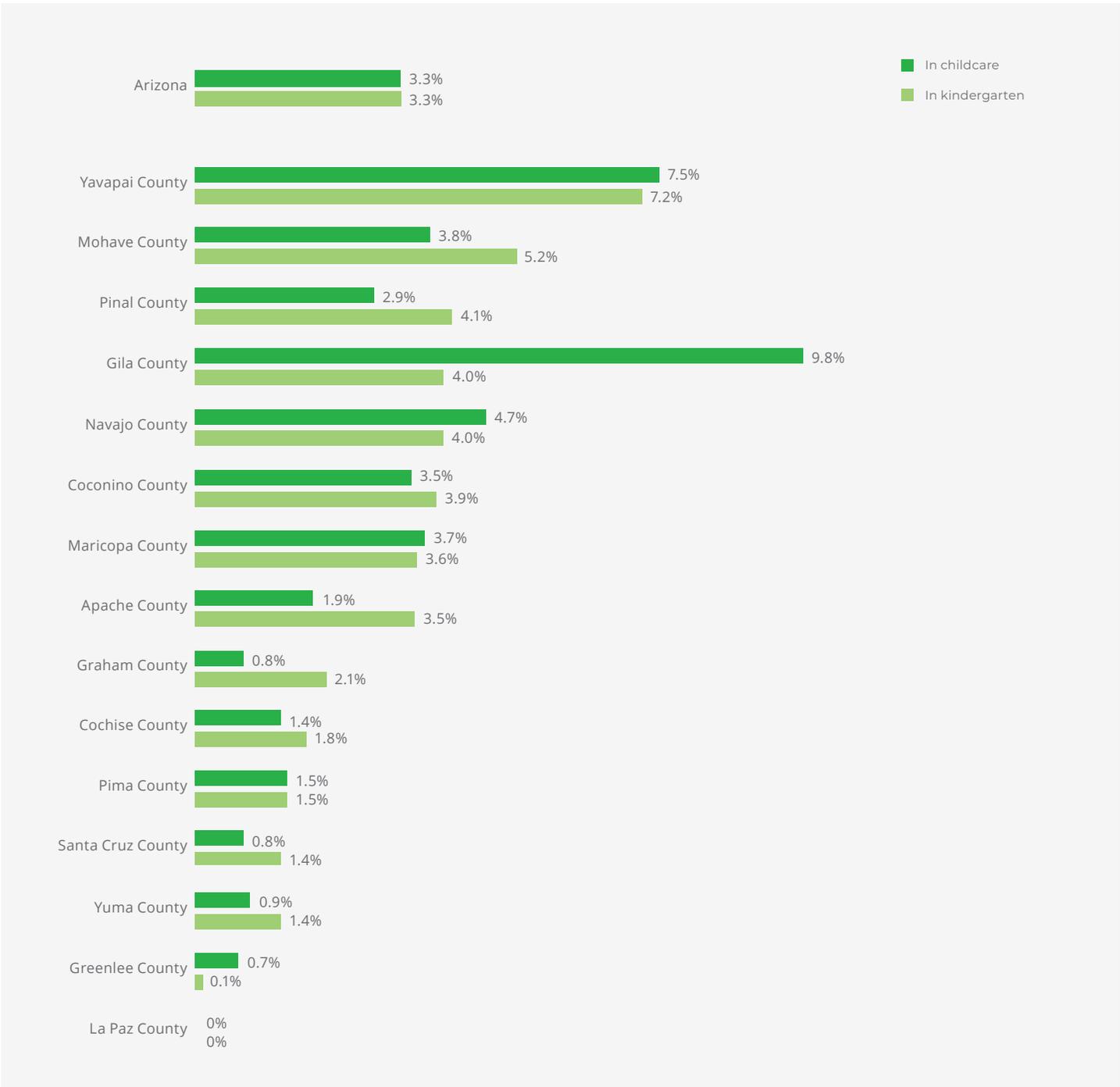
Figure 77. Trends in exemption rates for all required vaccines for children in child care and kindergarten settings



Source: Arizona Department of Health Services (2021). *Childcare Immunization Coverage by County, 2015-2016 through 2020-2021 School Years; Kindergarten Immunization Coverage by County, 2015-2016 through 2020-2021 School Years*. Retrieved from: <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

CHILD HEALTH & WELL-BEING

Figure 78. Exemption rates for all required vaccines for children in child care and kindergarten settings by county, 2020-21



Source: Arizona Department of Health Services (2021). Kindergarten Immunization Coverage by County, 2020-2021 School Year; Childcare Immunization Coverage by County, 2019-2020 School Year. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

COVID-19 Pandemic Effects

Throughout the COVID-19 pandemic, young children have largely been spared the worst effects of the disease. According to national data, COVID-19 cases among children birth to age 4 only make up 2.3% of total COVID-19 cases, while this age group represents 6% of the U.S. population.³⁴⁹ There have been fewer than 200 recorded deaths due to COVID-19 among children birth to 4 nationwide.³⁵⁰ However, with the emergence of the Delta variant, cases among children have been climbing. A recent study found that hospitalizations of children birth to age 4 due to COVID-19 increased tenfold between June 26 and August 14, 2021.³⁵¹ The weekly incidence in COVID-19 cases among children birth to age 4 also increased nearly ten-fold in that same period, from 13 cases per 100,000 young children in the week of June 26 to 115.4 cases per 100,000 young children in the week of August 14.³⁵² Since COVID-19 vaccines authorized for adults and adolescents have not yet been approved for young children, community public health measures are vitally important for protecting young children.³⁵³ Another recent study found that pediatric emergency department visits and hospitalizations for COVID-19 were lowest in states with high vaccination coverage.³⁵⁴ Arizona was among the states within the second lowest quartile of vaccination coverage rates for the population 12 and older.³⁵⁵

The pandemic has impacted young children's access to vaccinations for other preventable diseases. Among children under 2 enrolled in Medicaid/CHIP nationally, vaccination rates dropped 34% between January 2020 and May 2020.³⁵⁶ In addition, a separate national study of eight U.S. health systems in six states found that a lower proportion of children under age 2 were up to date with all age-specific recommended vaccines compared to prior to the pandemic, with just 74% of young children (age 7 months) considered up-to-date in September 2020 compared to 81% in September 2019.³⁵⁷

Adverse Childhood Experiences

Adverse childhood experiences (ACEs)^{xvi} have been associated with developmental disruption, mental illness, drug and alcohol use and overall increased healthcare utilization.^{358,359} Arizona is among the top 10 states with the highest proportion of children birth to age 5 who have experienced at least one ACE, with nearly 1 in 3 (31.8%) young children in Arizona having one or more ACEs.³⁶⁰ Children in Arizona are nearly twice as likely to have experienced two or more ACEs (15.5%) compared to children across the country (8.6%).³⁶¹ Future poor health outcomes are more likely as an individual's ACE score increases.³⁶² Very young children are most at risk for extremely adverse experiences, such as child abuse, neglect and fatalities from abuse and neglect. In 2019, children birth to age 5 made up more than half (55%) of child maltreatment victims in Arizona.³⁶³

Alternatively, Positive Childhood Experiences (PCEs), including positive parent-child relationships and feelings of safety and support, have been shown to have similarly cumulative, though positive, long-term impacts on mental and relational health.³⁶⁴ Children benefit when their families have the knowledge, resources and support to use positive parenting practices that support their child's healthy development, nutrition, early learning and language acquisition. Specifically, parental knowledge of positive parenting practices and child development is one of five key protective factors that improve child outcomes and reduce the incidence of child abuse and neglect.^{xvii,365} Over 80% of Arizona families surveyed in the National Survey on Children's Health reported using resilient approaches to dealing with difficult times, such as talking together, relying on strengths, and staying hopeful^{xviii} similar to rates of families nationwide (84% and 84.9%, respectively).³⁶⁶

^{xvi} ACEs include eight categories of traumatic or stressful life events experienced before the age of 18 years. The eight ACEs categories are sexual abuse, physical abuse, emotional abuse, household adult mental illness, household substance abuse, domestic violence in the household, incarceration of a household member and parental divorce or separation.

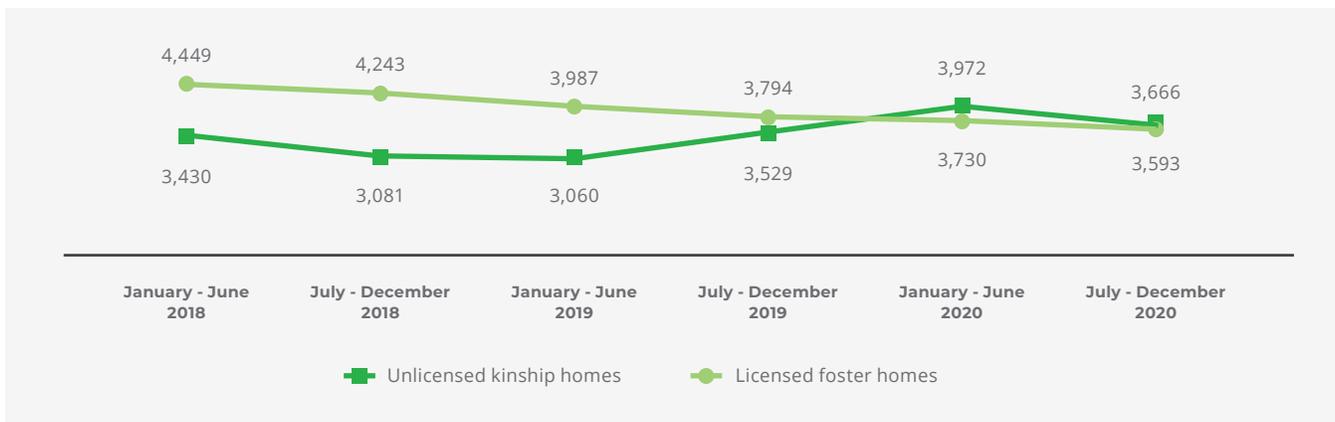
CHILD HEALTH & WELL-BEING

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. Children involved in foster care systems often have physical and behavioral health issues, in addition to the social-emotional needs brought on by being removed from a parent's care.³⁶⁷ Foster parents often need education, support and resources to ensure they are able to successfully care for foster children who may have these added health needs. The Family First Prevention Services Act, signed into law on February 9, 2018, includes reform to child welfare policies, as well as federal investments, to keep children safely with their families and avoid the traumatic experience of entering foster care when possible.³⁶⁸ The Act also aims to ensure children are placed in the least restrictive, most family-like setting appropriate to their special needs when foster care is needed. In Arizona, the Department of Child Safety (DCS) also led an agency-wide strategic effort to standardize and improve the quality of in-home preservation services, which

contributed to improved outcomes for families and stronger relationships between DCS and service providers.³⁶⁹

One effect of the Families First Prevention Services Act has been an increased focus on kinship placements, which are placements of children with relatives or close family friends.³⁷⁰ In Arizona, the number of unlicensed kinship homes with child placements surpassed the number of licensed foster homes for the first time in 2020. The number of licensed foster homes has been steadily declining over the last three years, while the number of kinship homes increased in 2019 and early 2020 (Figure 79). Research shows that children in kinship care placements have better wellbeing, fewer mental health disorders, fewer behavioral problems and less placement disruption than children in non-relative foster care.³⁷¹ However, kinship families may need additional supports navigating the child welfare system and accessing resources as they support children who may have experienced trauma.³⁷²

Figure 79. Number of licensed foster homes and unlicensed kinship homes in Arizona, Jan 2018 to Dec 2020



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

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

^{xviii} This measure asked families how often they dealt with difficulties in the following ways: (a) Talk together about what to do, (b) Work together to solve our problems, (c) Know we have strengths to draw on and (d) Stay hopeful even in difficult times. Families were considered resilient if they answered either most or all of the time.

CHILD HEALTH & WELL-BEING

In Arizona and across the nation, the COVID-19 pandemic has substantially affected the child welfare system. In Arizona, removals remained at a consistent level, between 4,500 and 5,000 children ages 0-17 removed per six-month period over the past three years. However, reports to DCS dropped by more than 10% during the first half of 2020 (Figure 80). National studies suggest that the transition to distance learning and remote work also resulted in fewer opportunities for educators, health care professionals and other key

social service providers to identify and report child maltreatment during the pandemic.³⁷³ Families also experienced limited access to key social programs, including family support services and school nutrition programs, which can promote physical and mental health and help decrease and prevent instances of child maltreatment.³⁷⁴ However, the federal response to the pandemic has included additional funds for child welfare agencies, including nearly \$15 million in CARES Act funding for the state of Arizona.³⁷⁵

Figure 80. Children removed by the Department of Child Services (DCS)



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

COVID-19 Pandemic Effects

The COVID-19 pandemic has caused heightened stress, anxiety and depression in both children and caregivers.³⁷⁶ While the average stress level for U.S. adults as a whole was significantly higher than pre-pandemic, according to the Stress in America™ survey, conducted annually by the American Psychological Association, a notably larger proportion of adults with children reported high levels of stress during the pandemic compared to adults without children (46% and 28%, respectively).³⁷⁷ Data from the U.S. Census Bureau's Household Pulse Survey shows that early in the pandemic (April 23-May 5, 2020) the proportion of U.S. adults with symptoms of anxiety disorder nearly tripled compared to pre-pandemic (30.8% and 8.1%, respectively), and a similar trend was seen for adults with symptoms of depressive disorder (25.3% and 6.5%, respectively).³⁷⁸ While a larger proportion of Arizona adults reported symptoms of anxiety disorder (32.3%) compared to the U.S. overall (30.8%) early in the COVID-19 pandemic, a smaller proportion reported symptoms of depressive disorder (22.4% compared to 25.3%). Though data from spring 2021 show declines in Arizona adults with anxiety disorder symptoms (25.8%) and depression disorder symptoms (20.4%) over the course of the pandemic, these proportions are still notably higher than those seen pre-pandemic.

The stress and uncertainty of the pandemic led to an increase in overall conflict, spousal conflict and parent-child conflict during the pandemic. Low-income households and households with children with special needs, in particular, reported higher levels of children's emotional difficulties alongside greater anxiety, depression, loneliness and stress among caregivers.^{379,380,381} Parents' and caregivers' inability to access early intervention services and well-child visits has not only impacted young children's healthy development, but also limited access to the critical emotional and mental health support caregivers and children receive from medical and social services professionals.³⁸² Access to family support services will be all the more critical for young children and their families as the COVID-19 pandemic continues.

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