# ## FIRST THINGS FIRST

Northwest Maricopa Region



2022

NEEDS AND ASSETS

REPORT

# INTRODUCTORY SUMMARY AND ACKNOWLEDGMENTS

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

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

The report is organized by topic areas pertinent to young children in the region, such as population characteristics or educational indicators. Within each topic area are sections that set the context for why the data found in the topic areas are important (Why it Matters), followed by a section that includes available data on the topic (What the Data Tell Us).

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

## **Acknowledgements**

The Northwest Maricopa Regional Partnership Council wishes to thank all of the federal, state and local partners whose contributions of data, ongoing support and partnership with First Things First made this report possible. These partners included the Arizona Departments of Administration (Education, Employment and Population Statistics), Child Safety, Economic Security and Health Services; the Arizona Health Care Cost Containment System; Child Care Resource and Referral; and the U.S. Census Bureau. We are especially grateful for the spirit of collaboration exhibited by all our partners during an unprecedented time of crisis for our state and our nation.

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

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

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## **EXECUTIVE SUMMARY**

First Things First (FTF) is the only state agency in Arizona dedicated exclusively to investing in and enhancing the early childhood system. FTF works through regional partnership councils that partner with local communities to create a family-centered, comprehensive, collaborative, and high-quality early childhood system that supports the development, health, and early education of all Arizona children, from birth to age five.

Every two years, each regional partnership council develops a report detailing the needs and assets of the region's youngest children and their families. The intent of the report is to inform the council and the local community about the overall status of children zero to five years of age in the region in order to support data-driven decision making around future funding and programming. Data for this report were gathered from federal and local data sources, as well as provided directly to FTF by state agencies.

## **Overview of the FTF Northwest Maricopa Region**

The Northwest Maricopa Region is located entirely inside Maricopa County. Maricopa County is the most populous county in Arizona with a population of about 4.4 million people. The communities of the Northwest Maricopa Region are diverse, spanning urban communities proximal to Phoenix as well as less densely populated, suburban and rural communities reaching towards the edges of the Maricopa County boundary. The Northwest Maricopa Region includes rural places of Aguila, Waddell, Wittmann, Morristown, and Wickenburg, and on the urban side, El Mirage, Glendale, Luke Air Force Base, Peoria, Sun City, Sun City West, Surprise, and Youngtown. Diverse in terms of topography, population density, and economic status, among other factors, the Northwest Maricopa Region has both similarities and differences with Maricopa County as a whole.

The Northwest Maricopa Regional Partnership Council (Council) makes strategic investments to support the healthy development and learning of the young children in the region. The Council's priorities include:

- Multigenerational households;
- Kindergarten readiness;
- Third grade reading and math performance; and
- Improving the quality of child care and preschool programs

The following section provides a summary of the key findings for each of the six domains of the 2022 Regional Needs and Assets report, highlighting the major data findings, the needs and assets they

<sup>&</sup>lt;sup>1</sup> Maricopa County. Retrieved from https://www.maricopa.gov/3598/County-Quick-Facts

uncover for the Northwest Maricopa Region, potential considerations, and opportunities for further exploration. The considerations provided below do not represent comprehensive approaches and methods for tackling the needs and assets in the region. Instead, the considerations represent possible approaches that early childhood system partners, including FTF, could take to address needs and assets in the region, as conceptualized by the authors of this report.

## **Key Findings**

#### **Population Characteristics**

The demographic profile of residents in a particular community helps policy and decision makers make effective decisions that will positively impact the community's well-being. The Northwest Maricopa Region has a total population of 683,160 residents and about 55,000 children under age six. Less than half (48%) of these preschool-age children are non-Hispanic white and most of the rest (40%) are Hispanic or Latino. Five percent are African American, three percent are Asian or Pacific Islander, and one percent are American Indian.

In the Northwest Maricopa Region, 79% of residents (age 5 and older) speak English at home with Spanish (15%) being the second most common home language. The highest proportion of Spanish speakers reside in the Aguila (68%) and El Mirage (30%) sub-regions. Most of the residents who speak a language other than English at home report that they also speak English 'very well'. Six percent of households in the region are classified as limited-English-speaking, which means that there is no adult who speaks English very well.

About two-thirds (68%) of households with children under six are married-couple households, with about 22% of households led by single females and ten percent led by single males, comparable to statewide numbers. Additionally, 12% of young children live in the same household as a grandparent, which is lower than the state but same as the county. Sub-regions with a high percentage of young children living in a grandparent's households include Sun City West (24%) and Wittmann (25%). Of children under 18 that live in the same household as a grandparent, 49% are primarily cared for by a grandparent. The high percentage of children growing up in dual-parent households is an asset for the region, as is the experience of children living in a multigenerational household, suggesting that children likely have more permanent connections with adult role models. Though living with grandparents can be an asset, it can also indicate that the child's parents are emotionally or financially unable to care for their child on their own. Grandparents who are taking on the task of raising a second generation may need resources and parenting education.

#### **Economic Circumstances**

As children are growing and developing, outcomes such as school achievement, physical health, and emotional well-being are all impacted by a child's economic situation.<sup>2</sup> The average unemployment rates for both the state and county increased in 2020 due to the COVID-19 pandemic but started to decrease in 2021 (though not fully down to pre-pandemic rates). Almost all households with children under six years old in the region (91%) have at least one parent who is employed. The median annual income for families with children under 18 in the county is consistently higher than the statewide median for all household types. Married-couple families in the county have a median income of about \$94,782 while single females have a median income of \$32,479. This suggests that single females may experience financial hardships and need support through federal assistance programs.<sup>3</sup>

About 20% of children in the Northwest Maricopa Region live under the poverty level, slightly less than the state (22%). However, over half of children under age six in Aguila (53%) and Wittmann (56%) subregions live in poverty. This data may help identify geographic areas and populations to target for further intervention or support around increasing financial resources.

Technology serves many purposes in people's lives, providing access to information and communication resources. Many households (75%) in the region have both a smartphone and computer, slightly higher than the statewide rate (73%) but lower than the county (77%). Similarly, the majority (89%) of Northwest Maricopa residents live in households with a computer and internet, which is a slightly larger proportion than the county (88%) and state (87%). For children specifically, household access to a computer and internet in the region is slightly higher at 90%. However, fewer children in Aguila (48%) and Wickenburg (79%) sub-regions have access to a computer and internet. Of people living in households with a computer and internet in the region, 71% have fixed broadband with a cellular data plan. Though many of the households in the Northwest Maricopa Region have access to technology and internet, some sub-regions (i.e., Aguila and Wickenburg) are less likely to have these resources in their household. This may further the digital divide within the Northwest Maricopa Region.

#### **Educational Indicators**

Children's participation in early learning experiences is likely to result in higher academic performance in future years. 4 Participation in early learning experiences supports higher academic performance in future years. However, in the Northwest Maricopa Region, less than half of children ages three and four (44%) are enrolled in nursery school, preschool, or kindergarten. Particularly low percentages of children ages three and four enrolled in school can be found in Wickenburg (11%), Morristown (23%) and Youngtown (24%) sub-regions, while higher proportions can be found in Peoria (52%) and Waddell (58%) sub-regions. In addition, only about half of the third grade students in the region scored proficient

<sup>&</sup>lt;sup>2</sup> Brooks-Gunn, J., & Duncan, G. J. (1997). The effects of poverty on children. The future of children, 55-71.

<sup>&</sup>lt;sup>3</sup> U.S. Census Bureau (2019) American Community Survey, 5-year estimates (2015-2019), Table B19126

<sup>&</sup>lt;sup>4</sup> Bakken, L., Brown, N., Downing, B. (2017) Early Childhood Education: The Long-Term Benefits. Journal of Research in Childhood Education. Volume 31. Issue 2. Retrieved from: https://doi.org/10.1080/02568543.2016.1273285

or highly proficient on the AZ Merit English Language Arts (48%) and Math (53%) assessments in 2018-2019. Though similar to state and county results, the finding that about half of the region's third graders are not proficient in math or English suggests a need to boost participation in early education.

The percentage of first, second, and third graders missing ten or more days of school slightly decreased between 2019 to 2020 across the Northwest Maricopa Region, county, and state. The region's high school graduation rate has remained fairly steady since 2017 at around 86% and the high school dropout rate has remained at around one percent since 2018. Northwest Maricopa Region's high school graduation rate was higher than the county and Arizona.

A majority of the adults in the region have completed high school, received a GED, or pursued some college or professional education (63%), in similar proportions to the state and county. An additional 26% have completed a bachelor's degree, a lower proportion than the state and county. The Aguila subregion had the highest percentage of adults that did not complete high school or receive a GED (56%), while the Sun City West sub-region had the lowest (4%).

#### **Early Learning**

Participation in early care and education programs plays an important role in preparing children for kindergarten and beyond.<sup>5</sup> About 64% of households are estimated to need child care based on the employment status of the adults in the household, yet only 44% of preschool-aged children in the region are enrolled in early care and education programs. One factor that may influence this finding is the high cost of child care in the region. The percent of eligible children receiving child care subsidies decreased from 2019 to 2020, indicating that fewer families in 2020 were able to afford and/or access needed child care.

According to the most recent data, there are currently 484 early childhood centers and homes with a capacity of 49,009 children in the region. Many of these centers are located in Glendale or Peoria; there are two or fewer in Aguila (2), Morristown (1), Wittmann (2), and Youngtown (2). Additionally, over 5,900 children in the region are enrolled in Quality First centers rated three, four, or five stars. Increasing access to quality early care and education programs is essential for the regions' children.

In the Northwest Maricopa Region, fewer children were served by the Arizona Early Intervention Program (AzEIP) in FY2020 (375) than in either of the two years prior (446 in 2018 and 392 in 2019). The numbers served by the Division of Developmental Disabilities (DDD) have also decreased over time. In the region, 790 children (ages birth to 5) were served by DDD in 2017 but decreased to 516 children in 2020.

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<sup>&</sup>lt;sup>5</sup> University of Massachusetts Global (2021) What is the purpose of early childhood education? Why it's so important. Retrieved from: https://www.umassglobal.edu/news-and-events/blog/what-is-purpose-of-early-childhood-education

#### **Child Health**

Ensuring healthy development through early identification and treatment of children's health issues helps families understand healthy developmental pathways and how health issues affect children and their school readiness. According to American Community Survey data averaged over the five years from 2015 to 2019, seven percent of young children in the Northwest Maricopa Region are estimated to be without health insurance, along with eight percent of the all-ages population in the region. Seventy-one percent of children in the Wickenburg sub-region were without health insurance.

In calendar year 2019, Northwest Maricopa Region residents gave birth to 8,055 babies, which was ten percent of all births in the state. Of those who gave birth in the region in 2019, 51% were non-Hispanic white, 37% were Hispanic or Latina, 7% were Black or African American, 3% were Asian or Pacific Islander and 1% were American Indian or Alaska Native. Those who gave birth in 2019 in the region had a slightly lower level of educational attainment (25% with a Bachelor's degree or higher), compared to the county (29%). People who gave birth under the age of twenty accounted for six percent of the total in the region, and fewer people in the region reported smoking while pregnant (4%). Sixty-six percent of people who gave birth who participated in WIC were overweight or obese before becoming pregnant, compared to 64% statewide. The rate of pre-pregnancy obesity in the region and the state has gradually increased each year since 2017. Nearly all expecting residents (99%) received at least some form of prenatal care, and five percent of babies in the region were born to residents who had had fewer than five prenatal care visits (less than the statewide rate of 8%).

In the region in 2019, seven percent of babies were low birth weight, which is the same percentage as the state. The percentage of infants participating in WIC in the region being breastfed (74%) in 2020 was lower than the state (78%) and county (78%).

Although immunization rates vary by vaccine, over 90% of children in child care and kindergarten in the Northwest Maricopa Region had completed each of the three major (DTAP, polio, and MMR) vaccine series. Rates of personal exemptions for vaccinations among children in child care (6% for religion exemption and 0.3% for medical exemption) were similar to exemption rates at the county and state level.

Among children participating in WIC in the Northwest Maricopa Region in 2020, 15% were obese and an additional 16% were overweight. The region's proportion of children that were obese or overweight has increased in recent years, from 28% in 2017 to 31% in 2020.

## **Family Support**

Support for young families is an essential piece of the holistic efforts around kindergarten readiness and

<sup>&</sup>lt;sup>6</sup> Schools & Health (2016). Impact of Health on Education. Retrieved from http://www.schoolsandhealth.org/pages/Anthropometricstatusgrowth.aspx

long-term success for children.<sup>7</sup> The number of families and children receiving assistance from Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) has decreased over the years. While the number of young children participating in SNAP and TANF has declined since 2017, SNAP still supports about 19,500 children while TANF supports nearly 1,300 children annually in the Northwest Maricopa Region. WIC enrollment has also declined slightly from 2017 (40% of children under five) to 2020 (36% of children under five). About 50% of all public- and charter-school students in the region have been eligible for free or reduced-price lunch since 2018.

The total number of fatal opiates or opioid overdoses in the Northwest Maricopa Region was 407 from 2017 to 2020, which consisted of seven percent of the total deaths in Arizona. In Maricopa County, the number of the number of non-fatal overdoses from opiates or opioids increased from 963 in 2017 to 2,772 in 2020.

#### **Opportunities for Further Exploration**

Most of the findings provided in this report are based on secondary data sources. As the Northwest Maricopa Regional Partnership Council continues to make increasingly difficult decisions with diminishing funds, the following suggestions for further data collection and analysis may provide evidence to inform those decisions. These opportunities would help fill gaps in available data to meet priorities identified by the Council. Methods could include gathering existing data from local sources or conducting locally-focused surveys. Listed in order of the domains in this report, the Council may want to consider collecting additional information regarding:

- Available resources for non-English speaking guardians or parents, especially for parents of young children.
- Impact of the **COVID-19 pandemic** on young children's mental health and socioemotional wellbeing.
- School districts with **high third grade proficiency** scores versus those with lower scores and factors that contribute to those results to inform policy and practice changes supporting lower-performing districts. In addition, looking at scores in relation to socioeconomic status and racial and ethnic identity of students to identify best practices.
- Where families are turning for **child care** if licensed care is too expensive or not available in their communities.

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<sup>&</sup>lt;sup>7</sup> Center for the Study of Social Policy (2013). Knowledge of Parenting and Child Development. Retrieved from http://www.cssp.org/reform/strengthening-families/2013/SF Knowledge-of-Parenting-and-Child-Development.pdf

## BACKGROUND AND APPROACH

Family well-being is an important indicator of child success.<sup>8, 9</sup> Healthy families and healthy communities create a context in which young children can thrive, developing the cognitive, emotional, motor, and social skills they will need to succeed in school and life. <sup>10</sup> Early childhood interventions promote well-being and impact outcomes for children and adults later in life, including school readiness, parent involvement, K-12 achievement, educational attainment, crime prevention and remedial education.11

First Things First (FTF) is one of the critical partners in the family-centered, comprehensive, collaborative, and high-quality early childhood system that supports the development, health, and early education of all Arizona children from birth to age five. FTF is intent on bolstering current child-focused systems within Arizona as a strategic way to maximize current and future resources. The Northwest Maricopa Regional Partnership Council (Council) makes strategic investments to support the healthy development and learning of the young children in the region. The Council's priorities include:

- Multigenerational households;
- Kindergarten readiness;
- Third grade reading and math performance; and
- Improving the quality of child care and preschool programs

## **Methodology**

This is the eighth Needs and Assets report conducted on behalf of the Northwest Maricopa Regional Council. It fulfills the requirement of ARS Title 8, Chapter 13, Section 1161, to submit a biennial report to the Arizona Early Childhood Health and Development Board detailing the assets, coordination opportunities, and unmet needs of children from birth to age five and their families in the region. This report is designed to provide updated information to the Northwest Maricopa Council about the needs and assets in their region to help them make important programmatic and funding decisions. This report describes the current circumstances of young children and their families as it relates to unmet needs and assets for the region.

<sup>&</sup>lt;sup>8</sup> Bøe, T., Serlachius, A., Sivertsen, B., Petrie, K., Hysing, M. (2017) Cumulative effects of negative life events and family stress in children's mental health: the Bergen child study. Social Psychiatry and Psychiatric Epidemiology. https://link.springer.com/article/10.1007/s00127-017-1451-4

<sup>9</sup> Sosu, E., Schmidt, P. (2017) Economic deprivation and its effects on childhood conduct problems: the mediating role of family stress and investment factors. https://doi.org/10.3389/fpsyg.2017.01580

<sup>10</sup> Knitzer, Jane. (2000). Early childhood mental services: a policy and systems development perspective. In J. Shonkoff & S. Meisels (Eds.), Handbook of early childhood intervention) (pp. 416-438). New York, NY: Cambridge University Press.

<sup>11</sup> Reynolds, A., Ou, S., Mondi, C., Hayakawa, M. (2017) Processes of early childhood interventions to adult well-being. Child Development. Volume 88 Issue 2. https://doi.org/10.1111/cdev.12733

This report is organized by topic area followed by subtopics and indicators. When available, data are presented for the state, county, region, and subregional breakdowns as appropriate. Key data indicators are represented in this report in six unique domains:

- Population characteristics;
- Economic circumstances:
- Educational indicators:
- Early learning;
- Child health; and
- Family support.

A systematic review designed to reveal the needs and assets of the Northwest Maricopa Region was used to collect and summarize data for this report. Quantitative data components included a review and analysis of current and relevant secondary data describing the FTF Region, Maricopa County, and State of Arizona. Wherever possible, data throughout the report are provided specifically for the Northwest Maricopa Region and are often presented alongside data for the County and the State of Arizona for comparative purposes. Subregional data from the American Community Survey and 2010 Census were calculated by aggregating the ZIP Code Tabulation Areas (ZCTA) in each subregion. ZCTAs were assigned to a subregion by FTF, and Harder+Company then used those assignments to determine which ZCTAs belonged to each subregion. For ZCTAs that are in more than one subregion, a percentage of the tabulation area was assigned to each subregion based upon the population living in ZCTA within the subregions' portion of the ZCTA.

Secondary data was gathered to better understand demographic trends for the Northwest Maricopa Region. The assessment was conducted using data from state and local agencies and organizations who provided public data or who have an existing data sharing agreement with FTF. A special request for data was made to the following state agencies by First Things First on behalf of Harder+Company Community Research: Arizona Department of Education (ADE), Arizona Department of Economic Security (DES), Arizona Department of Health Services (ADHS), Department of Child Safety (DCS) and First Things First itself.

Further secondary data were gathered directly from public databases. For example, demographic data included in this report were primarily gathered from the US Census and the American Community Survey. Understanding the true needs and assets of the region required extracting data from multiple data sets that often do not have similar reporting standards, definitions, or means for aggregating data. This suggests that, for some indicators, data were only available at the county level, for small towns, or certain zip codes, whereas for other indicators, data were available at all levels. Whenever possible this report presents all data available. In some cases, not enough data is available to make meaningful conclusions about a particular indicator within a region, city, or county.

Furthermore, many agencies are collecting data independent of other public entities which results in

duplication of data efforts, gaps in the collection of critical indicators, or differences in method of collection, unit of analysis, or geographic level. Many indicators that are of critical importance to understanding the well-being of children under age six and their families were not available for the Northwest Maricopa Region, such as more detailed data on housing or homelessness, home visiting, oral health, hearing loss screenings, and child welfare. The analysis presented in this report aims to integrate relevant data indicators from a variety of credible sources, including regional and subregional, and/or community-level analyses for a subset of data indicators. This report represents the most up-to-date representation of the needs and assets of young children and their families in the region and interpretation of the identified strengths of the community (i.e., the assets available in the region).

In addition to systematically reviewing secondary data, key findings and data trends were synthesized and presented to the FTF Regional Council and community members, FTF Research and Evaluation Unit, and FTF Regional Directors which allowed for a deeper discussion on the interpretation of the findings. Whenever possible, the rich context provided by these stakeholders is incorporated throughout the report to help contextualize the findings. To further expand the meaningfulness of data trends, a brief literature review was conducted to ensure the inclusion of other relevant research studies that help explain the needs and assets of the region.

Per FTF guidelines, education data from the Arizona Department of Education (ADE), with counts of or percentages related to fewer than eleven, excluding counts of zero (i.e., all counts of one through ten) are suppressed. Percentages greater than 98% or less than 2% were presented as >98% and <2% respectively. For data related to health or developmental delay, all counts and rates/ratios/percentages are based on non-zero counts less than six, excluding counts of zero (i.e., all counts of one through six, depending on the indicator) are suppressed.

#### Limitations

In the United States, the COVID-19 pandemic began in March 2020 and continues through the writing of this report. Thus, it is important to contextualize how the pandemic impacted data availability and the process to develop this report. First, the delivery of some data sets was impacted due to as public agencies having limited capacity to support data requests while they focused on their pandemic response. For this reason, the timeline for the 2022 RNA report was modified to adapt to the barriers in collecting data and moving forward with the report process.

This report relied primarily on secondary data. Most of the data were extracted by teams other than the evaluation team conducting the asset and needs assessment, except for the data of the Arizona Department of Education (ADE) which the evaluation team accessed through the ADE data system. Some of the most recent data was not available for this report. The demographic and economic profile of the region relied mostly on Census and ACS data. For some of the Census indicators, only 2010 Census data were available as 2020 Census data were delayed due to COVID-19. For some of the indicators reported, the most recent data for the region was released in 2018, thus trends may have changed within

the past four years, especially due to the pandemic. For example, the most recent data for the Child Care Market Rate Survey is from 2018. This survey provides the median cost for licensed centers, approved family homes and certified group homes.

Another limitation impacting the findings and interpretation of findings is the targeted population included in each of the different data sources. For many domains reported, data were often available only at the county level rather than the region, and data for children often includes children under 18 rather than children under six. Additionally, ACS estimates are less reliable for small geographic areas or areas with smaller populations. Similarly, rural areas tend to be undercounted, along with non-white populations. Federal data also have similar limitations. For example, WIC data only includes a sample of the young children and families served. In regards to education data, ADE provided AZMerit only for 2018-2019 school year (prior to COVID-19) since this assessment was not administered during the 2019-2020 school year. The report uses public data for the 2020-2021 school year at the state and county level.

Another major limitation is the discrepancy in the definitions and criteria used by each agency that is collecting the data. Because various different data sources are used for each domain and they each have different definitions, it is difficult to make confident comparisons on indicators between data sources. Given these limitations, interpretation of key findings requires a deep understanding of the region. Contextualizing the findings is equally important as what the data tell us.



**POPULATION CHARACTERISTICS** 

## POPULATION CHARACTERISTICS

## **Why It Matters**

The demographic profile of residents in a particular community helps inform the types of services needed in that community. Policy and decision makers need to understand the demographic profile of the communities they serve in order to make effective decisions that will positively impact the community's well-being. Timely information about the demographics of a region, such as the number of children and families, number and composition of households, racial and ethnic composition, languages spoken, and living arrangements help policy makers identify the needs of the region they serve and the services and resources that would benefit the community. For example, knowing where non-English speakers live and what their primary languages are can inform translation and interpretation services to help these families access health care and other social services. Knowing where children and families are located will help identify the needs for early childhood services to support their development and well-being.

This first domain of the report provides an overview of the geographic region's population dynamics, projected growth, ethnic and racial composition, languages spoken, immigration trends, and household characteristics (e.g., living arrangements for children). Indicators about children living with grandparents are included as well. Although only limited research has been conducted on the influence of grandparents on child development and health, this data provides an overview of their participation in the region's households and shows trends in grandparental care over time. <sup>12</sup> Understanding how the population is changing and where it is growing allows decision makers to strategically and proactively allocate resources.

## What the Data Tell Us

The First Things First regional boundaries were initially established in 2007, creating 31 regions. For fiscal year 2015, the boundaries were modified and the number of regions was reduced to 28. The Northwest Maricopa Regional Partnership Council provides services within the cities of Aguila, El Mirage, Glendale, Luke Air Force Base, Morristown, Peoria, Sun City, Sun City West, Surprise, Waddell, Wickenburg, Wittmann and Youngtown. The ZIP codes associated with those cities are: 85301, 85302, 85303, 85305, 85307, 85308, 85309, 85310, 85320, 85335, 85342, 85345, 85351, 85355, 85358, 85361, 85363, 85372, 85373, 85374, 85375, 85376, 85378, 85379, 85381, 85382, 85383, 85385,

<sup>&</sup>lt;sup>12</sup> Sadruddin, A., Ponguta, L., Zonderman, A., Wiley, K., Grimshaw, A., Panter-Brick, C. (2019) How do grandparents influence child health and development? A systematic review. Social Science & Medicine. Volume 239. <a href="https://doi.org/10.1016/j.socscimed.2019.112476">https://doi.org/10.1016/j.socscimed.2019.112476</a>

85387, 85388 and 85390. The area also includes the portions of ZIP codes 85304 and 85306 within Glendale city limits.

#### **About Northwest Maricopa Region**

The Northwest Maricopa Region lies entirely in Maricopa County. These communities are diverse, spanning urban communities proximal to Phoenix as well as less densely populated, suburban and rural communities reaching towards the edges of the Maricopa County boundary.

The rural areas include Aguila, Waddell, Wittmann, Morristown and Wickenburg.

The urban areas include El Mirage, Glendale, Luke Air Force Base, Peoria, Sun City, Sun City West, Surprise and Youngtown.

For this report, the region is divided into 12 sub-regions. The region has a mixture of rural and urban areas. The region's rural areas include Aguila, Waddell, Wittmann, Morristown, and Wickenburg, and on the urban side includes El Mirage, Glendale, Luke Air Force Base, Peoria, Sun City, Sun City West, Surprise, and Youngtown.

Each sub-region is defined as one or more Zip Code Tabulation Areas (ZCTAs), as defined by the U.S. Census Bureau for reporting purposes:

The **Aguila** sub-region is defined as the 85320 ZCTA, in the northwest corner of the county. It includes the unincorporated place of Aguila and the surrounding area. Aguila is the least populated of the 12 subregions.

The El Mirage sub-region (ZCTA 85335) lies entirely within the city of El Mirage.

Glendale is the most populous sub-region. It includes eleven ZCTAs (85037, 85301, 85302, 85303, 85304, 85305, 85306, 85307, 85308, 85309, and 85310). This sub-region includes the majority of the city of Glendale as well as small parts of the cities of Phoenix, Peoria, and El Mirage. Parts of the 85304, 85306, and 85308 ZCTAs lie in the Phoenix North First Things First Region. Most of the 85037 ZCTA lies in the Phoenix South Region.

The Morristown sub-region is the 85342 ZCTA. It includes the unincorporated place of Morristown and some nearby areas.

The **Peoria** sub-region is comprised of four ZCTAs: 85345, 85381, 85382, and 85383. The majority of the city of Peoria lies in this sub-region, along with a small part of the city of Glendale and some unincorporated land. Peoria is the second most populous sub-region.

The sub-regions of Sun City (ZCTAs 85351 and 85373) and Sun City West (ZCTA 85375) are mostly the unincorporated retirement communities with few families with young children. The 85373 ZCTA, however, includes an area north of Beardsley Road which is populated by families with young children.

**Surprise** is the third most populous of the sub-regions. It includes the ZCTAs of 85374, 85379, 85387, and 85388. Almost all of the city of Surprise lies in this sub-region.

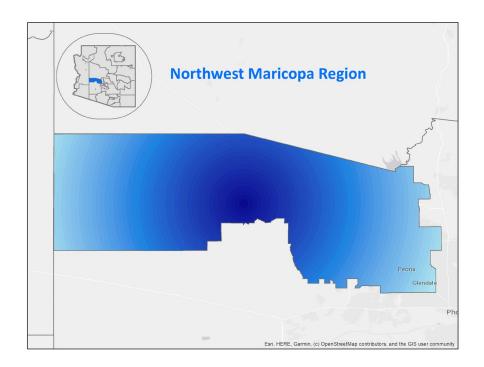
The 85355 ZCTA defines the sub-region of **Waddell**. It includes the unincorporated place of Waddell, some nearby unincorporated land, and a small part of the city of Glendale.

The sub-region of **Wickenburg** is ZCTA 85390. It includes the town of Wickenburg and some unincorporated areas around it.

The Wittmann sub-region includes the greater part of the 85361 ZCTA and a small part of the 85396 ZCTA. (The majority of 85396 and a small part of 85361 are in the Northwest Maricopa First Things First Region.) This sub-region includes the unincorporated place of Wittmann and neighboring areas.

Finally, the **Youngtown** sub-region is identified as ZCTA 85363. The entire town of Youngtown is in this sub-region.

Exhibit 1.1. Map of Maricopa County and Northwest Maricopa Region boundaries



#### **Population Counts and Projections**

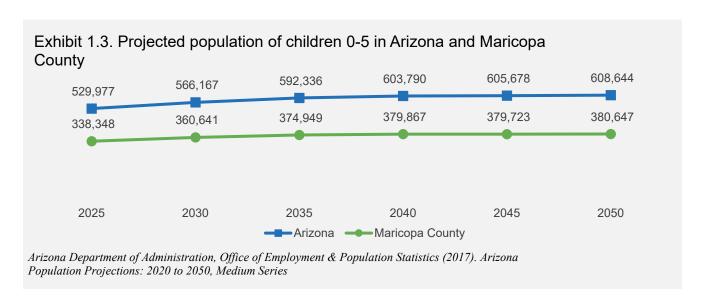
According to the 2010 Census, the Northwest Maricopa Region has a total population of 683,160 residents. There are 55,078 children under six years old in the region, accounting for eight percent of the total population in the region (Exhibit 1.2). Across the sub-regions, the proportions of young children as a proportion ranged from less than one percent in Sun City West to 13% in El Mirage.

Exhibit 1.2. Population in the 2010 Census

	All ages	Ages 0-5	Children (0-5) as a percentage of the total population
Northwest Maricopa Region	683,160	55,078	8%
Aguila	1,181	103	9%
El Mirage	31,787	4,049	13%
Glendale	268,312	23,676	9%
Morristown	1,534	116	8%
Peoria	158,086	12,352	8%
Sun City	45,145	787	2%
Sun City West	26,709	33	0%
Surprise	120,935	11,490	10%
Waddell	8,733	899	10%
Wickenburg	7,902	440	6%
Wittmann	6,680	530	8%
Youngtown	6,156	603	10%
Maricopa County	3,817,117	339,217	9%
ARIZONA	6,392,017	546,609	9%

U.S. Census Bureau; 2010 Census Summary File 1; Tables P11 & P14

The number of children under six in Maricopa County is expected to increase over the next ten years, rising to about 380,000 by 2050 (Exhibit 1.3). About 60% of Arizona's young population of children under six years old reside in Maricopa County. Over the same time period the number of children under six is expected to increase in the state as a whole.



#### **Demographics and Language**

In the Northwest Maricopa Region, more than 70% of adults 18 and over identify as white and 20% identify as Hispanic or Latino (Exhibit 1.4). This compares to 63% and 25%, respectively, for Arizona. A small proportion of adults 18 and the remaining population identifies as African American (4%), Asian or Pacific Islander (3%), or American Indian (1%).

Exhibit 1.4. Race and ethnicity of the adult population (ages 18 and older) in the 2010 Census

	Number of persons (ages 18 and older)	Hispanic or Latino	White alone (not Hispanic or Latino)	American Indian alone (not Hispanic or Latino)	African- American alone (not Hispanic or Latino)	Asian or Pacific Islander (not Hispanic or Latino)
Northwest Maricopa Region	512,786	20%	72%	1%	4%	3%
Aguila	890	51%	46%	1%	1%	0%
El Mirage	20,512	43%	46%	1%	6%	2%
Glendale	194,234	27%	61%	1%	5%	4%
Morristown	1,199	10%	86%	2%	0%	1%
Peoria	116,481	16%	76%	1%	3%	3%
Sun City	43,007	3%	94%	0%	1%	1%
Sun City West	26,615	1%	96%	0%	1%	1%
Surprise	87,852	15%	76%	0%	4%	3%
Waddell	6,044	18%	74%	0%	4%	3%
Wickenburg	6,474	12%	86%	1%	0%	0%
Wittmann	4,880	19%	77%	1%	1%	1%
Youngtown	4,598	27%	65%	1%	4%	3%
Maricopa County	2,809,256	25%	64%	1%	4%	4%
ARIZONA	4,763,003	25%	63%	4%	4%	3%

U.S. Census Bureau; 2010 Census Summary File 1; Tables P11 & P14

In the region, children under five are more likely to identify as Hispanic or Latino (40%) than the overall population (Exhibit 1.5 and Exhibit 1.6). Across the region, there is considerable variation in the racial and ethnic composition of young children within communities. For example, the vast majority of children in the Aguila sub-region (85%) identify as Hispanic or Latino, while about 20% in the Sun City sub-region (20%) and Sun City West sub-region (21%) identify as Hispanic or Latino. A small proportion of young children (9%) across the Northwest Maricopa Region identify as either African American (5%), Asian or Pacific Islander (3%), or American Indian (1%).

Exhibit 1.5. Race and ethnicity of children (ages 0-4) in the 2010 Census

	Number of persons (ages 0-4)	Hispanic or Latino	White alone (not Hispanic or Latino)	American Indian alone (not Hispanic or Latino)	African- American alone (not Hispanic or Latino)	Asian or Pacific Islander (not Hispanic or Latino)
Northwest Maricopa Region	45,656	40%	48%	1%	5%	3%
Aguila	91	85%	12%	5%	0%	0%
El Mirage	3,339	54%	35%	1%	5%	1%
Glendale	19,748	50%	36%	2%	7%	3%
Morristown	95	32%	63%	1%	0%	0%
Peoria	10,163	29%	58%	1%	4%	3%
Sun City	660	20%	74%	0%	2%	2%
Sun City West	28	21%	68%	0%	0%	4%
Surprise	9,498	27%	61%	1%	5%	2%
Waddell	730	25%	63%	1%	4%	2%
Wickenburg	370	40%	57%	1%	0%	0%
Wittmann	441	34%	62%	2%	1%	0%
Youngtown	493	48%	43%	1%	4%	3%
Maricopa County	282,770	46%	40%	3%	6%	4%
ARIZONA	455,715	45%	40%	6%	5%	3%

U.S. Census Bureau; 2010 Census Summary File 1; SF 1, Tables P12B, P12C, P12D, P12E, P12H, and P12I

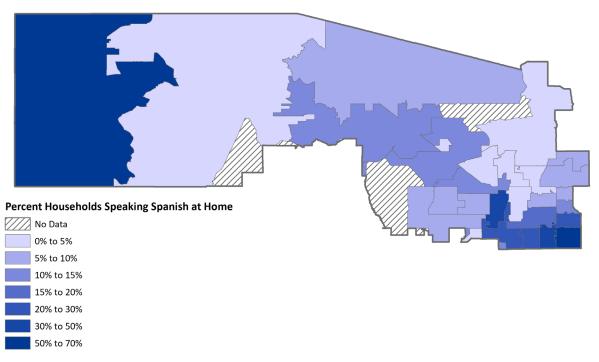
Exhibit 1.6. Percent of children (0-4) reported to be Hispanic in the 2010 Census Northwest Maricopa Region 40% Aguila 85% El Mirage 54% Glendale 50% Morristown 32% Peoria 29% Sun City 20% Sun City West 21% Surprise 27% Waddell 25% Wickenburg 40% Wittmann 34% Youngtown 48% Maricopa County 46% **ARIZONA** 45% U.S. Census Bureau; 2010 Census Summary File 1; SF 1, Table P12H

Approximately four out of five people (79%) in the region speak English as their primary language, while 15% primarily speak Spanish and an additional six percent speak a language other than English or Spanish (Exhibit 1.7). Compared to Arizona and Maricopa County, more households speak English at home (73% versus 79%) and fewer families speak Spanish (20% versus 28%) in Northwest Maricopa. In Sun City West (96% speak English at home), Sun City (94%), Wickenburg (93%) and Morristown (91%), households that speak another language besides English are rare. In the Aguila sub-region, over two-thirds of people are Spanish speakers (68%) and Aguila has the highest proportion of households that do not speak English "very well" (35%, Exhibit 1.9). The map in Exhibit 1.8 shows concentrations of Spanish-speaking households in central Glendale, El Mirage, and Aguila.

Exhibit 1.7. Primary language spoken at home for population ages 5 and over

	• • •		•	
	Estimated population (ages 5 and older)	Speak English at home	Speak Spanish at home	Speak another language at home
Northwest Maricopa Region	714,319	79%	15%	6%
Aguila	1,148	32%	68%	0%
El Mirage	32,486	66%	30%	4%
Glendale	274,973	68%	24%	8%
Morristown	1,567	91%	6%	3%
Peoria	165,096	85%	9%	6%
Sun City	46,942	94%	3%	3%
Sun City West	29,266	96%	2%	3%
Surprise	129,987	86%	9%	5%
Waddell	12,217	82%	9%	9%
Wickenburg	8,182	93%	4%	3%
Wittmann	6,058	84%	12%	3%
Youngtown	6,395	72%	23%	5%
Maricopa County	4,050,301	73%	20%	7%
ARIZONA	6,616,331	73%	20%	7%

Exhibit 1.8. Percent of households speaking Spanish at home



Source: U.S. Census Bureau, American Community Survey, 5-year estimates (2015-2019). Table B16001

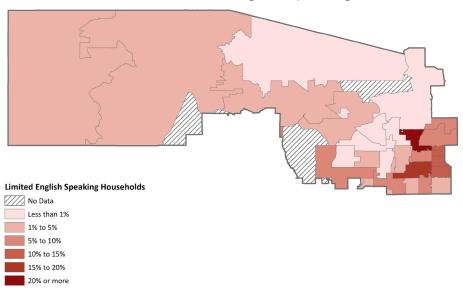
Exhibit 1.9. Proficiency in English (ages 5 and older)					
	Population (ages 5 and older)	Speak English at home	Speak another language at home, and speak English "very well"	Speak another language at home, and do not speak English "very well"	
Northwest Maricopa Region	714,319	79%	14%	7%	
Aguila	1,148	32%	32%	35%	
El Mirage	32,486	66%	24%	9%	
Glendale	274,973	68%	21%	11%	
Morristown	1,567	91%	7%	2%	
Peoria	165,096	85%	11%	4%	
Sun City	46,942	94%	4%	2%	
Sun City West	29,266	96%	3%	1%	
Surprise	129,987	86%	10%	4%	
Waddell	12,217	82%	12%	6%	
Wickenburg	8,182	93%	5%	1%	
Wittmann	6,058	84%	11%	4%	
Youngtown	6,395	72%	17%	11%	
Maricopa County	4,050,301	73%	18%	9%	
ARIZONA	6,616,331	73%	19%	9%	

A household is considered "limited-English-speaking" if there is no adult (age 14 or older) who speaks English well. Five percent of households in Northwest Maricopa Region are classified as limited English-speaking, which is higher than the proportion of households in Arizona (3%) and Maricopa County (3%, Exhibit 1.10). Peoria (19%) has the highest proportion of limited English-speaking households across the region, and all of these limited English-speaking households speak Spanish. The map in Exhibit 1.11 shows the high concentration of limited English-speaking households in Peoria.

	Exhibit 1.10.	Limited-English-S	peaking households
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	Number of households	Households which speak a language other than English	Limited- English- speaking households (Total)	Limited-English- speaking households (Spanish)
Northwest Maricopa Region	275,116	37%	6%	5%
Aguila	16,854	23%	3%	2%
El Mirage	10,608	11%	1%	1%
Glendale	130,284	48%	8%	7%
Morristown	7,817	23%	1%	0%
Peoria	15,533	64%	19%	19%
Sun City	17,773	11%	2%	1%
Sun City West	514	15%	0%	0%
Surprise	43,482	28%	2%	1%
Waddell	14,699	37%	10%	8%
Wickenburg	414	83%	2%	0%
Wittmann	7,293	21%	1%	0%
Youngtown	9,845	23%	1%	0%
Maricopa County	1,552,096	27%	4%	3%
ARIZONA	2,571,268	28%	4%	3%

Exhibit 1.11. Percent of Limited-English-Speaking households



Source: U.S. Census Bureau, American Community Survey, 5-year estimates (2015-2019). Table B16002

There is a slightly lower proportion of children living with parent(s) born outside the United States in the region (26%) compared to the county (29%, Exhibit 1.12). The highest percentages of children living with parent(s) born outside the United States reside in the sub-regions of Aguila (77%), Glendale (34%), and Youngtown (34%).

Exhibit 1.12. Children (ages 0 to 5) living with parents born outside the United States

Otatos		
	Children (ages 0-5) living with one or two parents	Children (ages 0-5) living with one or two parents born outside the U.S.
Northwest Maricopa Region	51,563	26%
Aguila	44	77%
El Mirage	3,192	22%
Glendale	23,839	34%
Morristown	29	14%
Peoria	12,786	19%
Sun City	1,069	13%
Sun City West	213	28%
Surprise	8,274	15%
Waddell	935	18%
Wickenburg	359	2%
Wittmann	332	30%
Youngtown	491	34%
Maricopa County	319,099	29%
ARIZONA	494,590	25%

The number of kindergarten through third grade students in the region that are migrants remained at less than 11 students for each year from 2018 to 2020 (Exhibit 1.13). Arizona defines a migrant child as "child or youth, from birth up to 20 [22 with an IEP], who made a qualifying move in the preceding 36 months as a migratory agricultural worker or migratory fisher; or with, or to join, a parent or spouse who is a migratory agricultural worker or migratory fisher."<sup>13</sup>

Exhibit 1.13. Children in grades K to 3 that are migrants from 2018 to 2020

	Arizona	<b>Maricopa County</b>	Northwest Maricopa Region
2018	662	52	<11
2019	570	43	<11
2020	809	33	<11

Arizona Department of Education (2021). Migrant Children. Provided by AZ FTF

The percent of kindergarten through third grade students in the region from 2018 to 2020 who are English Language Learners (ELL) is seven to eight percent, which is lower than the county and state (Exhibit 1.14).

Exhibit 1.14. Percentage of children in grades K to 3 that are English Language Learners from 2018 to 2020

	Arizona	Maricopa County	Northwest Maricopa Region
2018	10%	12%	8%
2019	9%	11%	7%
2020	10%	12%	8%

Arizona Department of Education (2021). English Language Learners. Provided by AZ FTF

extension://efaidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fwww.azed.gov%2Fsites%2Fdefault%2Ffiles%2F20 22%2F01%2FArizona%2520Comprehensive%2520Needs%2520Report%25202021.pdf&clen=1108104&chunk=true

<sup>13</sup> chrome-

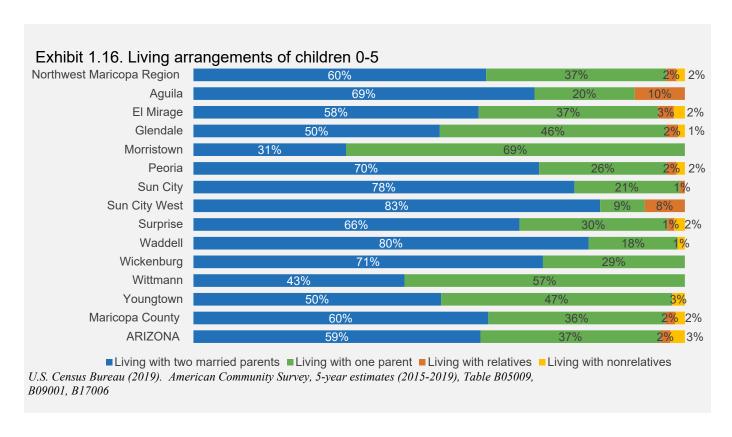
#### **Household Characteristics**

In the Northwest Maricopa Region there are almost 190,000 households, about 29,000 (15%) of which include children under six years old (Exhibit 1.15). Sub-regions with the highest proportion of households with children under six years include El Mirage (22%) and Youngtown (25%).

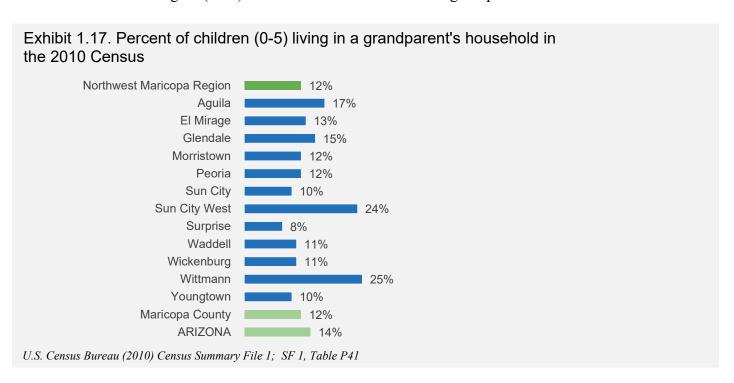
Although three out of five children under six (60%) live in married-couple households, almost two out of five (37%) live in single-parent households (Exhibit 1.16). Sub-regions with the highest proportion of single-parent households include Morristown (69%) and Whitman (57%). In addition, four percent of children ages 0 to 5 in the Northwest Maricopa Region are in kinship or other family arrangements with extended families, friends, and non-relatives caring for them. Children living with adults other than their parents is especially common in the Aguila (10%) and Sun City West (8%) sub-regions.

Exhibit 1.15. Number of households and household characteristics

	Total number of households	Total number of households with children 0-5	Percent of households with children 0-5	Percent of married- couple households with children 0-5	with	
Northwest Maricopa Region	189,991	29,193	15%	68%	10%	22%
Aguila	228	13	6%	100%	0%	0%
El Mirage	8,124	1,775	22%	62%	12%	25%
Glendale	67,188	13,031	19%	59%	12%	29%
Morristown	505	14	3%	57%	0%	43%
Peoria	44,486	7,652	17%	78%	8%	13%
Sun City	13,802	594	4%	78%	2%	20%
Sun City West	10,031	95	1%	88%	0%	12%
Surprise	36,906	4,907	13%	78%	7%	15%
Waddell	3,199	471	15%	82%	0%	18%
Wickenburg	2,413	164	7%	56%	6%	38%
Wittmann	1,709	132	8%	54%	11%	36%
Youngtown	1,400	347	25%	53%	12%	35%
Maricopa County	1,018,723	188,572	19%	70%	9%	21%
ARIZONA	1,679,198	291,242	17%	68%	10%	22%



Grandparents are an important presence in the lives of some young children. In both Northwest Maricopa and Maricopa County, 12% of young children (ages 0-5) live in the same household as a grandparent (Exhibit 1.17). About a quarter of young children in the Sun City West sub-region (24%) and the Wittmann sub-region (25%) live in the same household as a grandparent.



Within the Northwest Maricopa Region, of children under 18 who live in the same household as a grandparent, 49% are primarily cared for by a grandparent and for 14% the child's parent is not present in the household (Exhibit 1.18). A particularly high percentage of children ages 0-17 living with their grandparents do not have a parent present in the Sun City West (100%), Youngtown (39%), and Aguila (39%) sub-regions. There can be several advantages to living in a mutigenerational household, including an increase in emotional well-being and additional adults serving as role models in the socialization of children. However, while some families choose multigenerational living, others may do so out of financial necessity if either the parent or grandparent generation lacks the resources to live on their own. Given particularly high percentages of grandparents involved in the care of grandchildren in several communities, additional financial and parenting supports for grandparents raising grandchildren may be needed. Specifically, grandparents raising grandchildren may face challenges related to a nontraditional family structure, changes in parenting practices over time, and limited finances due to fixed incomes.

Exhibit 1.18. Children (ages 0-17) living in a grandparent's household

	Number of children (ages 0- 17) living in a grandparent's household	Percent of children (ages 0-17) living in a grandparent's household, and the grandparent is responsible for the child	Percent of children (ages 0- 17) living in a grandparent's household, and the grandparent is responsible for the child (with no parent present)
Northwest Maricopa Region	16,266	49%	14%
Aguila	49	100%	39%
El Mirage	977	41%	20%
Glendale	8,463	54%	17%
Morristown	24	46%	17%
Peoria	3,561	34%	7%
Sun City	143	45%	5%
Sun City West	38	100%	100%
Surprise	2,214	49%	9%
Waddell	424	45%	0%
Wickenburg	23	0%	0%
Wittmann	230	85%	0%
Youngtown	120	83%	39%
Maricopa County	84,051	48%	15%
ARIZONA	155,821	50%	16%

# POPULATION CHARACTERISTICS **HIGHLIGHTS**

The Northwest Maricopa Region consists of 28 regions within the Maricopa County with a growing population of children under the age of six. The ethnic profile of the region is slightly different from the profile of the State of Arizona with a higher percentage of the adult population identifying as white (72%) and 40% of children under five who identify as Hispanic or Latino. The majority of households speak English as their primary language and 15% primarily speak Spanish. The majority of households with children under six are led by married couples, though this varies widely between the different cities. Only six percent of children under six in the region live with relatives or nonrelatives. Twelve percent live in the same household as their grandparents and about half of those are primarily cared for by a grandparent.

Below are key findings that highlight the demographic assets, needs and data-driven considerations for the region. The considerations provided below do not represent comprehensive approaches and methods for tackling the needs and assets in the region. Instead, the considerations represent possible approaches that early childhood system partners, including FTF, could take to address needs and assets in the region, as conceptualized by the authors of this report.

Assets	Considerations
The population of children under age six is projected to grow at a modest and steady rate, allowing the region to foresee and prepare for the growing needs	Discuss tactics for planning ahead for the projected slow, but steady, growth of the under six population and the needs that accompany that growth, such as
of their youngest residents.	healthcare and child care for young children.

Needs	Considerations
According to the American Community Survey, most of the children under six living in single-parent households or cared for by grandparents, both of which face additional barriers and difficulties when compared to two parent households, are in Wittmann and Glendale.	Support services specifically designed for single- parent and grandparent-led households and targeted in the Wittmann and Glendale sub-regions, to help them support the young children in their homes.



**ECONOMIC CIRCUMSTANCES** 

## **ECONOMIC CIRCUMSTANCES**

## **Why it Matters**

The economic situation of children and their families has a large impact on their ability to access opportunities and services that can contribute to their well-being and healthy development. As children are growing and developing, outcomes such as school achievement, physical health, and emotional well-being are all impacted by a child's economic situation. <sup>14</sup> Additionally, being unemployed or living below the federal poverty level indicates that parents and caregivers have fewer resources to be able to meet their families' basic needs, such as adequate, nutritious food and good quality, stable housing.

Economic stability is critical to supporting young children and families to maintain a household where children can thrive. Recent research has shown that physical housing quality, neighborhood environment and housing stability play an important role in children's development and well-being. <sup>15, 16, 17</sup> Housing instability, which includes frequent moves, difficulty paying rent, being evicted or being homeless, is associated with worse health, academic, and social outcomes. <sup>18</sup> Children without housing stability often experience negative outcomes such as higher grade retention, higher high school dropout rates, and lower educational attainment as adults. <sup>19,20</sup> Unemployment of parents can also affect the psychological well-being of children in the long-term due to negative experiences and stressful events. <sup>21</sup> Lack of access to healthy food and general food insecurity can also lead to numerous issues for children and mothers, including birth complications, delayed development, learning difficulties, and chronic health conditions. <sup>22, 23</sup> Thus, housing, families' employment and food security are important components to consider when evaluating the conditions that affect a child's development and well-being during their first five years of life.

<sup>&</sup>lt;sup>14</sup> Brooks-Gunn, J., & Duncan, G. J. (1997). The effects of poverty on children. The future of children, 55-71.

<sup>&</sup>lt;sup>15</sup> Blau, D. M., Haskell, N. L., & Haurin, D. R. (2019). Are housing characteristics experienced by children associated with their outcomes as young adults? Journal of Housing Economics, 46, 101631.

<sup>&</sup>lt;sup>16</sup>http://www.pewtrusts.org/~/media/legacy/uploadedfiles/wwwpewtrustsorg/reports/partnership\_for\_americas\_economic\_success/paeshou singreportfinal1pdf.pdf

<sup>&</sup>lt;sup>17</sup> Clair, A. (2019). Housing: An under-explored influence on children's well-being and becoming. Child Indicators Research, 12(2), 609-626.

<sup>&</sup>lt;sup>18</sup> Sandstrom, H. & Huerta, S. (September 2013). The Negative Effects of Instability on Child Development: A Research Synthesis. Urban Institute. Retrieved from http://www.urban.org/research/publication/negative-effects-instability-child-development-research-synthesis/view/full report

<sup>&</sup>lt;sup>19</sup> http://www.urban.org/research/publication/negative-effects-instability-child-development-research-synthesis/view/full\_report <sup>20</sup> http://onlinelibrary.wiley.com/doi/10.1111/j.1525-1497.2005.00278.x/full

<sup>&</sup>lt;sup>21</sup> Nikolova, M., Nikolaev, B. (2018) How having unemployed parents affects children's future well-being. Brookings. https://www.brookings.edu/blog/up-front/2018/07/13/how-having-unemployed-parents-affects-childrens-future-well-being/
<sup>22</sup> http://www.feedingamerica.org/hunger-in-america/impact-of-hunger/child-hunger/child-development.html

<sup>&</sup>lt;sup>23</sup> Ke, Janice, and Elizabeth Lee Ford-Jones. "Food Insecurity and Hunger: A Review of the Effects on Children's Health and Behaviour." Paediatrics & Child Health 20.2 (2015): 89–91. Print.

## What the Data Tell Us

## **Employment Indicators**

In Maricopa County the unemployment rate increased between 2016 and 2021 but has consistently been lower than the unemployment rate for Arizona as a whole (Exhibit 2.1). Starting in 2020 due to the COVID-19 pandemic, unemployment rates for both Maricopa County and Arizona increased. During the COVID-19 pandemic, those who tended to be affected by unemployment included those with jobs in services, restaurants, transportation, and other fields that typically do not offer long-term contracts, decent wages, and health benefits. <sup>24</sup> The monthly unemployment rate in Maricopa County reached a peak at 14% in March 2020 and started to decline to seven percent in August 2020 (not shown). The yearly unemployment rate in Maricopa County decreased from seven percent in 2020 to six percent in 2021 (Exhibit 2.1). This decrease indicates that more people started to re-enter the labor force as pandemic-related restrictions eased. The number of people in the labor force has consistently increased in Maricopa County from 2016 through 2019 (Exhibit 2.2). In 2020, the number of people in the labor force and total employment slightly decreased but increased in 2021.

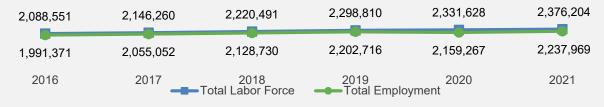
Exhibit 2.1. Average unemployment rates from 2016 to 2021



U.S. Department of Labor, Bureau of Labor Statistics (2021). Local Area Unemployment Statistics (LAUS), Arizona Office of Employment.

Note: The data for 2021 goes up to September 2021.

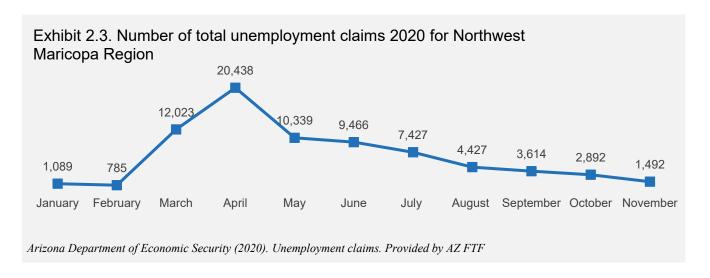
Exhibit 2.2. Number of people in the labor force and employed in Maricopa County



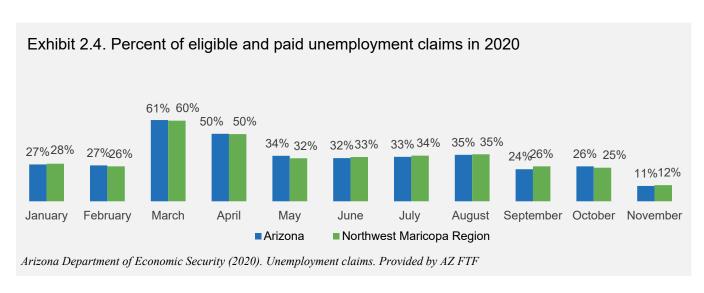
U.S. Department of Labor, Bureau of Labor Statistics (2021). Local Area Unemployment Statistics (LAUS), Arizona Office of Employment.

<sup>&</sup>lt;sup>24</sup> Blustein, David L., and Paige A. Guarino. "Work and unemployment in the time of COVID-19: the existential experience of loss and fear." Journal of Humanistic Psychology 60.5 (2020): 702-709.

Unemployment claims provide temporary payments to individuals who are unemployed through no fault of their own and meet the other eligibility requirements. In order to receive these benefits, an individual that has lost their job must complete an application to determine eligibility for unemployment benefits. In the Northwest Maricopa Region, the total number of unemployment claims started to dramatically increase in March 2020 as national lockdowns started to take place (Exhibit 2.3). In April 2020, the number of total unemployment claims peaked at 20,438 and gradually started to decrease starting in May 2020 to 10,339 then to 4,427 in August 2020. By the end of 2020, the total claims were 1,492.



In addition to the number of claims increasing in March and April 2020, the percentage of unemployment claims were determined to be eligible also increased in the Northwest Maricopa Region and in Arizona (Exhibit 2.4). At the beginning of 2020, fewer than 30% of unemployment claims were determined to be eligible for benefits in the Northwest Maricopa Region and this increased to over 50% in March and April 2020. As the number of total claims started to decrease in September 2020, the percentage of eligible claims also started to decrease. By November 2020, only 12% of claims were found eligible, which was the lowest percentage in 2020.



In the Northwest Maricopa Region, 91% of children under age six live in a household where at least one adult is in the labor force (Exhibit 2.5), which is similar to the percentage for Arizona (89%). Though having neither parent in the workforce is rare regionwide (9%), over 40% of children 0-5 in the Morristown (45%) and Wittmann (44%) sub-regions live in a household with no parent in the workforce. About 64% of children under age six have either both parents in the labor force or a single parent in the labor force, indicating they have some need for child care.

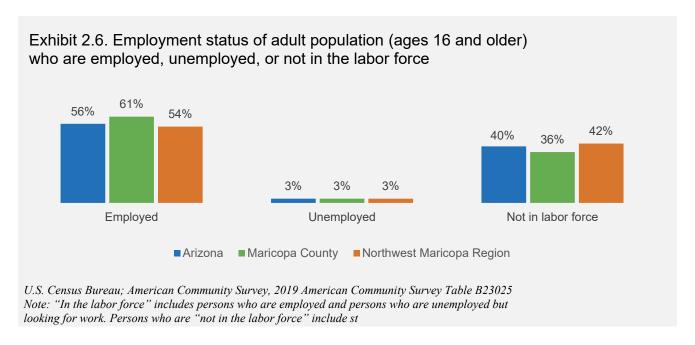
Exhibit 2.5. Employment status of parents with children 0-5

	Estimated number of children (ages 0-5) living with one or two parents		Children (ages 0-5) living with two parents, one in the labor force, and one not	Children (ages 0-5) living with two parents, neither in the labor force	Children (ages 0-5) living with a single parent who is in the labor force	
Northwest Maricopa Region	51,584	34%	27%	1%	30%	8%
Aguila	43	0%	77%	0%	23%	0%
El Mirage	3,192	36%	24%	1%	30%	8%
Glendale	23,873	27%	24%	2%	36%	12%
Morristown	28	0%	31%	0%	24%	45%
Peoria	12,789	45%	27%	1%	22%	5%
Sun City	1,069	50%	28%	0%	13%	8%
Sun City West	213	55%	39%	0%	6%	0%
Surprise	8,274	36%	32%	1%	28%	3%
Waddell	935	49%	33%	0%	8%	10%
Wickenburg	344	12%	59%	0%	29%	0%
Wittmann	333	2%	41%	0%	14%	44%
Youngtown	491	18%	34%	0%	35%	13%
Maricopa County	319,099	34%	28%	1%	29%	8%
ARIZONA	494,590	32%	28%	1%	29%	9%

U.S. Census Bureau (2019). American Community Survey, 5-year estimates (2015-2019), Table B23008

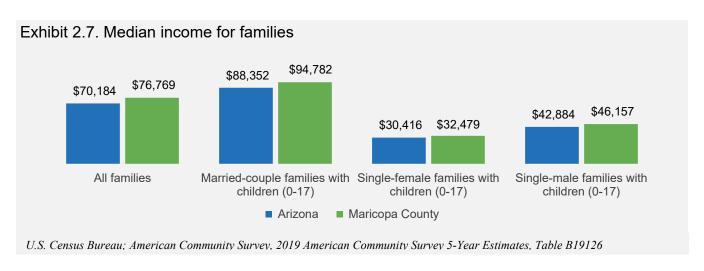
Note: "In the labor force" includes persons who are employed and persons who are unemployed but looking for work. Persons who are "not in the labor force" include stay-at-home parents, students, retirees, and others who are not working or looking for work.

The overall percentage of adults who are employed in the Northwest Maricopa Region is 54%, which is lower than the proportion in Arizona (56%) and Maricopa County (61%, Exhibit 2.6).



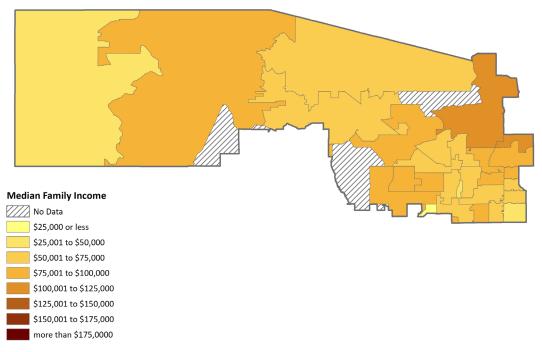
### **Median Income and Poverty**

The median income of families with children under age eighteen in Maricopa County is \$76,769, which is higher than the median income statewide. The median income for single-parent families, which comprise about 33% of households with children under age six, is significantly less than for marriedcouple families. For single-parent households, those headed by females make on average about \$14,000 less than those headed by males. Exhibit 2.7 shows the difference in median income for married-couple families, single-female families, and single-male families.



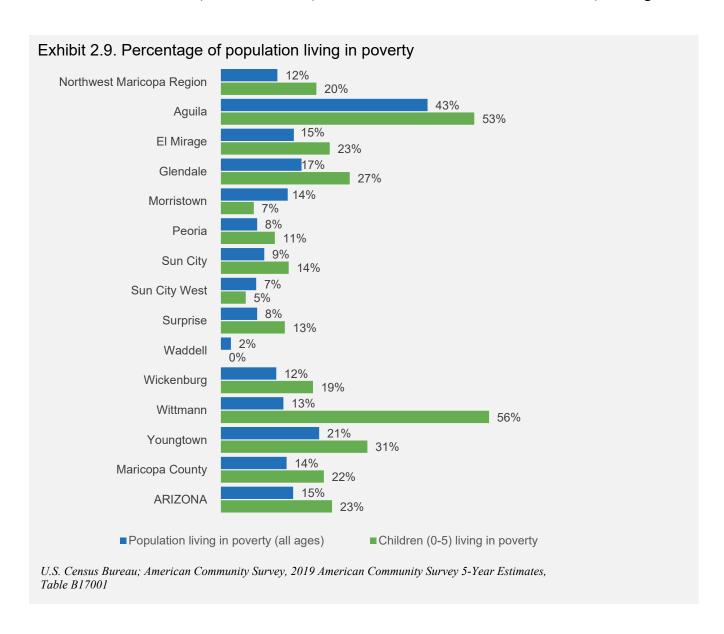
The map in Exhibit 2.8 shows how family incomes vary across the region with low median income in the Aguila sub-region and higher median incomes in the Waddell and Peoria sub-regions.

Exhibit 2.8. Median Family Income in the Northwest Maricopa Region



Source: U.S. Census Bureau, American Community Survey, 5-year estimates (2015-2019). Table B19126.

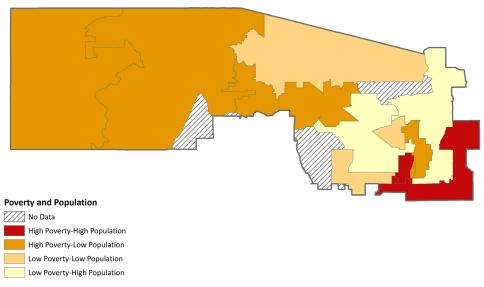
The large number of single-parent families combined with their low median income contributes to a sizable portion of the population in the Northwest Maricopa Region living in poverty. <sup>25</sup> In the Northwest Maricopa Region, 12% of the population and 20% of children under age six are living in poverty (Exhibit 2.9). Although these proportions are lower than Maricopa County and Arizona, more poverty can be found in the Aguila (43% overall and 53% for children under six), Youngtown (21% overall and 31% for children under six), and Wittmann (13% overall and 56% for children under six) sub-regions.



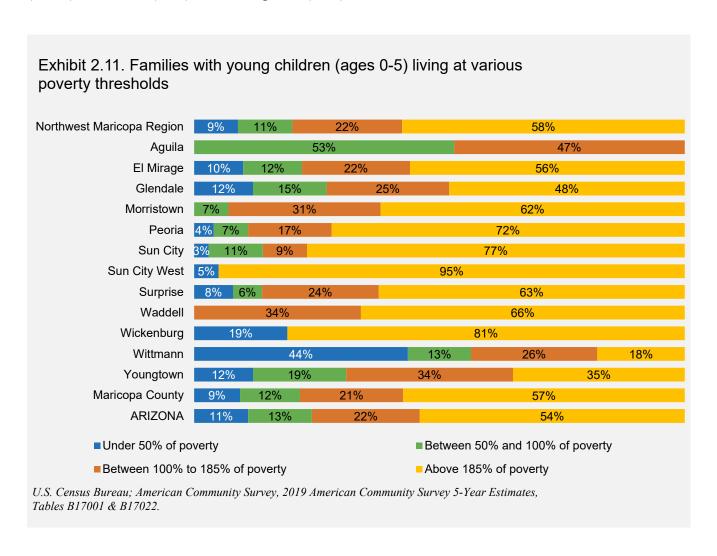
<sup>&</sup>lt;sup>25</sup> To define poverty, the Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation using the Consumer Price Index (CPI-U).

The relative population and poverty of areas for young children within the Northwest Maricopa Region are mapped in Exhibit 2.10. The Glendale and El Mirage sub-regions have a high rate of poverty and high population, while the Peoria and Surprise subregions have low rates of poverty with high population.

Exhibit 2.10. Poverty in the Northwest Maricopa Region



Federal poverty levels (FPL) are used to determine eligibility or certain programs and benefits, including SNAP and Arizona Health Care Cost Containment System (AHCCCS). The federal poverty level changes every year and is based on family size. For example, in 2021, the FPL was \$26,500 for a family of four. In other words, a family of four that makes less than or equal to \$26,500 was considered to be in poverty. In the Northwest Maricopa Region, 42% of families with children under age six live below 185% of the FPL, which is slightly less than the 42% in the county and 46% across the state (Exhibit 2.11). A large percentage of families with children ages 0 to 5 earn less than 185% FPL in Aguila (100%), Wittmann (82%), and Youngtown (65%).



In Maricopa County individuals who identify as white or Asian are the least likely to be living in poverty. In contrast, people who identify as Hispanic or Latino, American Indian or Alaskan Native, or some other race have poverty rates above 20% (Exhibit 2.12). Compared to the general population, higher proportions of children under five years old are living below the federal level (Exhibit 2.13). In Maricopa County, children under five years old who identify as Black or African-American, American Indian or Alaskan Native, Hispanic or Latino, or some other race have poverty rates over 30%. This trend is similar to the proportions in Arizona indicating that children of color experience high rates of poverty.

Exhibit 2.12. Percentage of population below the federal poverty level by race/ethnicity\*

	Arizona	Maricopa County
Black or African-American	20%	19%
American Indian or Alaskan Native	33%	23%
Asian	12%	11%
Native Hawaiian and Other Pacific Islander	16%	12%
Other Race	23%	24%
Two or More Races	17%	15%
White, not Hispanic	10%	9%
Hispanic or Latino	22%	22%

U.S. Census Bureau; American Community Survey, 2019 American Community Survey 5-Year Estimates, Tables B17001B, Table B17001C, Table B17001D, Table B17001E, Table B17001F, Table B17001H, Table B17001I.

Exhibit 2.13. Percentage of children under 5 years old below the federal poverty level by race/ethnicity\*

	Arizona	Maricopa County
Black or African-American	34%	33%
American Indian or Alaskan Native	44%	37%
Asian	11%	11%
Native Hawaiian and Other Pacific Islander	31%	24%
Other Race	53%	52%
Two or More Races	13%	10%
White, not Hispanic	12%	11%
Hispanic or Latino	31%	31%

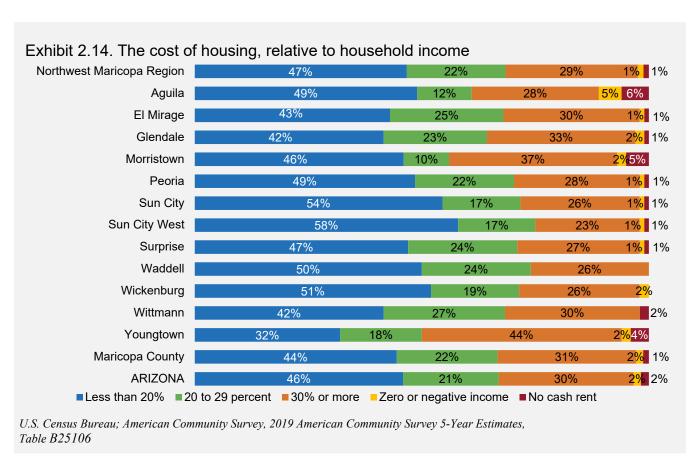
U.S. Census Bureau; American Community Survey, 2019 American Community Survey 5-Year Estimates, Tables B17001B, Table B17001C, Table B17001D, Table B17001E, Table B17001F, Table B17001H, Table B17001I.

<sup>\*</sup>Estimates for city and subregional breakdowns are not presented due to the limited sample size for these indicators

<sup>\*</sup>Estimates for city and subregional breakdowns are not presented due to the limited sample size for these indicators

### Housing

The United States Department of Housing and Urban Development (HUD) define "rent burdened" as spending more than 30 percent of income on housing. Residents of the Northwest Maricopa Region have a similar housing cost burden to residents of the state as a whole: 29% of the region's housing units require their residents to contribute more than 30% of their household income toward housing (Exhibit 2.14). Housing costs are somewhat more burdensome in the Youngtown (44%) and Morristown (37%) sub-regions with over a third of households spending 30% or more of their income on housing.



Children that are homeless qualify for rights and services under the McKinney-Vento Act. The McKinney-Vento Act defines homeless children "individuals who lack a fixed, regular, and adequate nighttime residence." The number of homeless children in kindergarten through third grade from 2018 to 2020 is displayed in Exhibit 2.15. From 2018 to 2020, many districts within the Northwest Maricopa Region had fewer than 11 students that were homeless. Districts with 40 or more homeless students in 2020 were Glendale Elementary District and Peoria Unified School District. Across all districts in the

<sup>&</sup>lt;sup>26</sup> PD&R Edge (n.d.) Rental Burdens: Rethinking Affordability Measures. Retrieved from https://www.huduser.gov/portal/pdredge/pdr\_edge\_featd\_article\_092214.html

<sup>&</sup>lt;sup>27</sup>Arizona Department of Education. Welcome to Homeless Education Program. Retrieved from https://www.azed.gov/homeless

Northwest Maricopa Region, the number of homeless students decreased or remained fairly steady from 2018 to 2020, which is a similar trend compared to Arizona and Maricopa County.

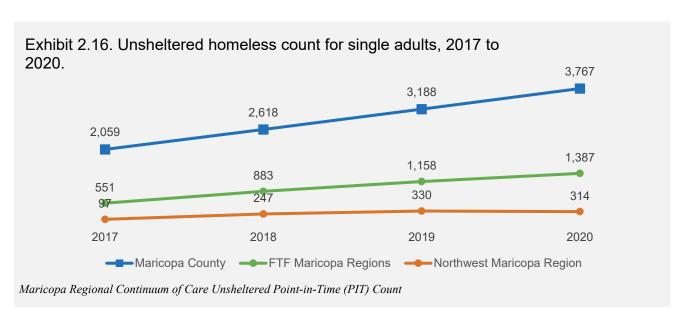
Exhibit 2.15. Number of homeless students in kindergarten through third grade, 2018 to 2020

	2018	2019	2020
Northwest Maricopa Region Schools	258	228	212
Aguila Elementary District	<11	<11	<11
Alhambra Elementary District	16	21	17
Archway Classical Academy Glendale	<11	<11	<11
BASIS Schools, Inc.	<11	<11	<11
Calibre Academy	<11	<11	<11
Camelback Education, Inc	<11	<11	<11
Candeo Schools, Inc.	<11	<11	<11
Challenge School, Inc.	<11	<11	<11
Cholla Academy	<11	<11	<11
Crown Charter School, Inc	<11	<11	<11
Daisy Education Corporation dba. Sonoran Science Academy Peoria	<11	<11	<11
Deer Valley Unified District	28	44	38
Desert Heights Charter Schools	<11	<11	<11
Dysart Unified District	17	<11	18
Edison Project	NA	<11	<11
Ethos Academy - A Challenge Foundation Academy	<11	<11	<11
Glendale Elementary District	55	47	49
Happy Valley School, Inc.	<11	<11	<11
Heritage Elementary School	12	<11	<11
Kaizen Education Foundation dba Discover U Elementary School	<11	<11	<11
Legacy Traditional School - Glendale	<11	<11	<11
Legacy Traditional School - Peoria	<11	<11	<11
Legacy Traditional School - Surprise	<11	<11	<11
Morristown Elementary District	<11	<11	<11
Nadaburg Unified School District	11	<11	<11
Paragon Management, Inc.	<11	<11	<11
Paramount Education Studies Inc	<11	<11	<11
Pendergast Elementary District	<11	<11	<11
Peoria Unified School District	86	60	48
Pointe Educational Services	<11	<11	<11
Rosefield Charter Elementary School, Inc.	<11	<11	<11
Success School	<11	<11	<11
Washington Elementary School District	<11	<11	<11
Maricopa County Schools	2,637	2,051	1,841
All Arizona Schools	4,565	3,676	3,191

Arizona Department of Education (2020). [homeless students]. Unpublished data.

Note: The school-district data in this table include only the schools that are located within the Northwest Maricopa Region.

Every year the Maricopa Regional Continuum of Care conducts the Point in Time (PIT) Homeless Count, a street and shelter count that determines the number of people experiencing homelessness in Maricopa County at a given point in time. 28 This is the primary source of the count of homeless people in the county and helps inform the community on the number of people who need services such as Emergency Shelters or Transitional Housing. The number of people experiencing homeless and are unsheltered (i.e., on the streets or other place not meant for human habitation) has increased from 2017 to 2020 across Maricopa County, FTF Maricopa Regions and Northwest Maricopa Region (Exhibit 2.16). As the number of unsheltered homeless people increases, Northwest Maricopa Region and the county need to strategize about how to provide support for the homeless population and those who are experiencing financial hardship.



<sup>&</sup>lt;sup>28</sup> AZMAG. (n.d.). Retrieved May 25, 2022, from https://www.azmag.gov/Portals/0/Documents/MagContent/PIT-Count-Report-2020.pdf?ver=2020-07-27-155257-657

Three of four of households (75%) have both a smartphone and computer within the Northwest Maricopa Region, which is slightly higher than the proportion in Arizona (73%) but lower than the proportion in Maricopa County (77%, Exhibit 2.17). Households with neither a smartphone or computer are most common in the Aguila (19%) and Wickenburg (14%) sub-regions.

Exhibit 2.17. Households with and without computers and smartphones

	Total number of households	Percent with computer but no smartphone	Percent with smartphone but no computer	Percent with both smartphone and computer	Percent with neither smartphone nor computer
Northwest Maricopa Region	277,096	8%	10%	75%	7%
Aguila	307	1%	25%	55%	19%
El Mirage	10,538	4%	12%	76%	7%
Glendale	98,668	6%	15%	72%	8%
Morristown	805	7%	11%	70%	12%
Peoria	61,646	6%	6%	83%	5%
Sun City	26,199	16%	8%	63%	13%
Sun City West	16,966	16%	5%	68%	12%
Surprise	49,445	8%	6%	81%	5%
Waddell	3,616	5%	3%	91%	1%
Wickenburg	4,203	10%	18%	58%	14%
Wittmann	2,213	5%	11%	79%	5%
Youngtown	2,491	10%	14%	63%	12%
Maricopa County	1,552,096	6%	11%	77%	7%
ARIZONA	2,571,268	7%	12%	73%	8%

U.S. Census Bureau; American Community Survey, 2019 American Community Survey 5-Year Estimates, Table B25106 Note: In this table, "computer" includes both desktops and laptops.

Nearly nine of ten (89%) residents in Northwest Maricopa Region live in households with a computer and internet. The Aguila subregion is notable in its lower percentage of households with a computer and internet (59%, Exhibit 2.18).

Exhibit 2.18. Persons (all ages) in households with and without computers and internet

connectivity\*

•	Number of	Percent in	Percent in	Doroont in
	person (all ages) living in	households with computer	households with computer but no	Percent in households
	households	and internet	internet	without computer
Northwest Maricopa Region	752,343	89%	7%	5%
Aguila	959	59%	24%	17%
El Mirage	35,322	88%	7%	4%
Glendale	291,630	85%	10%	5%
Morristown	1,582	81%	10%	10%
Peoria	174,794	94%	4%	3%
Sun City	47,531	85%	6%	9%
Sun City West	29,182	87%	4%	9%
Surprise	137,052	94%	3%	3%
Waddell	12,974	95%	4%	0%
Wickenburg	8,367	81%	8%	11%
Wittmann	6,352	80%	17%	3%
Youngtown	6,598	89%	4%	7%
Maricopa County	4,274,725	88%	7%	5%
ARIZONA	6,892,175	87%	7%	6%

U.S. Census Bureau; American Community Survey, 2019 American Community Survey 5-Year Estimates, Table B28005 Note: In this table, "computer" includes both desktops and laptops.

<sup>\*</sup>Internet includes a dial-up internet subscription or a broadband internet subscription.

Among households with children under 18 years old, 90% have a computer and internet in the region (Exhibit 2.19). During the nationwide closures of elementary and secondary schools due to the COVID-19 pandemic, increased reliance on computers and reliable internet for children to engage in schooling from home underscored the digital divide. Households that were most impacted by the digital divide included those in rural communities, people living in poverty, and people of color. Similar to the trends across all households, households with children (ages 0-17) in Aguila (48%) were the least likely to have access to computer(s) and internet. In contrast, high percentages of households with children under 18 years old that have a computer and internet in the region can be found in Morristown (98%), Sun City West (100%), and Youngtown (99%).

Exhibit 2.19. Children (ages 0-17) in households with and without computers and internet connectivity\*

	Number of children (ages 0- 17) living in households	Percent in households with computer and internet	Percent in households with computer but no internet	Percent in households without computer
Northwest Maricopa Region	173,331	90%	7%	2%
Aguila	236	48%	28%	24%
El Mirage	10,923	89%	9%	2%
Glendale	74,623	84%	12%	3%
Morristown	123	98%	2%	0%
Peoria	42,644	96%	3%	1%
Sun City	3,055	96%	4%	0%
Sun City West	662	100%	0%	0%
Surprise	33,168	96%	3%	1%
Waddell	3,880	97%	3%	0%
Wickenburg	895	79%	0%	21%
Wittmann	1,368	82%	18%	0%
Youngtown	1,754	99%	1%	0%
Maricopa County	1,044,531	89%	8%	4%
ARIZONA	1,632,019	88%	8%	4%

U.S. Census Bureau; American Community Survey, 2019 American Community Survey 5-Year Estimates, Table B28005 Note: In this table, "computer" includes both desktops and laptops.

<sup>\*</sup>Internet includes a dial-up internet subscription or a broadband internet subscription.

Of the people living in households with a computer and internet, 71% have fixed broadband and a cellular data plan as their internet. Sub-regions with less than two-thirds of households with fixed broadband with cellular data plan include Sun City (61%) and Sun City West (62%, Exhibit 2.20).

Exhibit 2.20. Households with computer & internet by type (dial-up, broadband, satellite, other)

	People living in households with computer and internet (all ages)	Percent with fixed broadband and cellular data plan	Percent with fixed broadband without cellular data plan	Percent with cellular data plan without fixed broadband	Percent with dial-up internet only
Northwest Maricopa Region	668,168	71%	19%	10%	0%
Aguila	566	80%	3%	17%	0%
El Mirage	31,229	69%	22%	8%	0%
Glendale	246,723	71%	16%	12%	0%
Morristown	1,274	71%	9%	20%	0%
Peoria	163,628	76%	16%	8%	0%
Sun City	40,177	61%	27%	11%	1%
Sun City West	25,491	62%	27%	10%	1%
Surprise	128,981	67%	23%	9%	0%
Waddell	12,368	80%	11%	9%	0%
Wickenburg	6,809	68%	16%	15%	1%
Wittmann	5,063	69%	11%	20%	0%
Youngtown	5,860	67%	23%	9%	1%
Maricopa County	3,773,777	71%	17%	12%	0%
ARIZONA	5,968,639	69%	18%	12%	0%

U.S. Census Bureau; American Community Survey, 2019 American Community Survey 5-Year Estimates, Table B2808.

# **ECONOMIC CIRCUMSTANCES HIGHLIGHTS**

The unemployment rate in Maricopa County peaked in 2020 (7%) due to the COVID-19 pandemic but started to decline in 2021 (6%). Single-parent families who are working earn significantly less, on average, than dual-parent households. Additionally, 20% of children under age six in the region live in poverty. About three of ten (29%) residents pay 30% or more of their household income towards housing.

Below are key findings that highlight the economic assets, needs, and data-driven considerations for the region. The considerations provided below do not represent comprehensive approaches and methods for tackling the needs and assets in the region. Instead, the considerations represent possible approaches that early childhood system partners, including FTF, could take to address needs and assets in the region, as conceptualized by the authors of this report.

Assets	Considerations
The Northwest Maricopa Region has lower poverty rates than the state as a whole (20% vs 23% for young children, and 12% vs 15% for all ages).	Focus on outreach, social service resources, and efforts to address root causes of poverty on communities and populations experiencing higher rates of poverty, including the rural sub-regions.
About nine of ten children (91%) under six years old live in a household where at least one adult is in the labor force.	Target job training and employment programs to subregions with higher unemployment to help increase stability and median incomes.

Needs	Considerations
Although the poverty rate in the Northwest Marcipa	Focus on outreach, social service resources, and
Region is lower than the state, the majority of families	efforts to address root causes of poverty on
in Aguila (100%), Wittmann (82%), and Youngtown	communities and populations experiencing higher rates
(65%) live below the FPL.	of poverty, including the rural sub-regions.
Although nine of ten of children (0-17) in households have at least one computer with internet, fewer children in Aguila (48%) and Wickenburg (79%) have computer(s) and internet.	Partner with local agencies, businesses and stakeholders that could support technological needs for low-income families. For example, Cox has a package, Connect2Complete, that provides low-cost internet for families with K to 12 students.



**EDUCATIONAL INDICATORS** 

# **EDUCATIONAL INDICATORS**

## **Why it Matters**

Early care and education helps children thrive in school. Research shows that children who participate in early care and education programs are more likely to perform better on educational indicators such as math and reading tests, attendance rates, and discipline referrals than children who do not.<sup>29, 30</sup> Educational indicators that affect student outcomes and are likely related to participation in early care and education include, but are not limited to, school attendance, proficiency exams, grades, graduation and dropout rates, and educational attainment. For example, poor attendance in school affects student outcomes because it limits children from gaining knowledge and thriving in an academic setting. Research indicates an association between high school dropout rates and poor attendance as early as kindergarten; on average, dropouts have missed 124 days of school by the time they reach 8<sup>th</sup> grade.<sup>31</sup> In addition, irregular attendance influences school budgets and could potentially lead to fewer funds for essential classroom needs.<sup>32</sup>

Notably, children's participation in quality early care and education can also yield lifelong benefits. Improved performance on standardized tests and lower drop out rates in turn increases children's likelihood of graduating from high school, earning higher monthly earnings, and owning a home. Research shows that high-quality early care and education programs can reduce disparities in college graduation, educational attainment, and wages. Research has also shown that students dropping out of high school have an increased likelihood of earning less than high school graduates, being unemployed, receiving public assistance, and a higher chance of being incarcerated. This can likely to confront more barriers while raising a family. Essentially, a child's enrollment in early learning provides short-term and long-term benefits that will contribute to the child successfully transitioning into and prospering in adulthood.

<sup>&</sup>lt;sup>29</sup> Bakken, L., Brown, N., Downing, B. (2017) Early Childhood Education: The Long-Term Benefits. Journal of Research in Childhood Education. Volume 31. Issue 2. Retrieved from: <a href="https://doi.org/10.1080/02568543.2016.1273285">https://doi.org/10.1080/02568543.2016.1273285</a>

<sup>&</sup>lt;sup>30</sup> Campbell, F., Pungello, E., Kainz, K., Burchinal, M., Pan, Y., Wasik, B., Barbarin, O., Sparling, J., Ramey, C., (2012) Adult outcomes as a function of an early childhood educational program: an abecedarian project follow-up. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3989926/

<sup>&</sup>lt;sup>31</sup> Why attendance matters. (2016, June 9). Retrieved from http://www.greatschools.org/gk/articles/school-attendance-issues/

<sup>&</sup>lt;sup>32</sup> Every school day counts: The forum guide to collecting and using attendance data. (2009, February). Retrieved December 06, 2016, from https://nces.ed.gov/pubs2009/attendancedata/chapter1a.asp

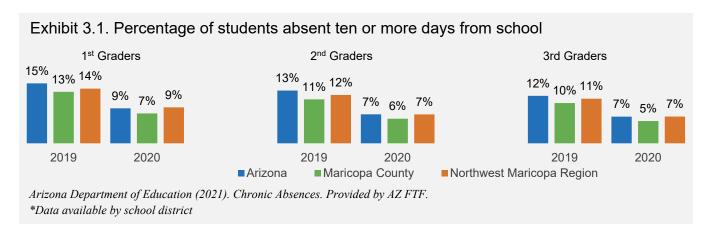
<sup>&</sup>lt;sup>33</sup> Bustamante, A., Dearing, E., Zachrisson, H., Vandell, D. (2021) Adult outcomes of sustained high-quality early child care and education: Do they vary by family income? <a href="https://doi.org/10.1111/cdev.13696">https://doi.org/10.1111/cdev.13696</a>

<sup>&</sup>lt;sup>34</sup> Christle, C. A., Jolivette, K., Nelson, M. C. (2007). School characteristics related to high school dropout rates. Journal of Remedial and Special Education, 28, 15. www.eric.ed.gov/ERICWebPortal/recordDetail?accno=EJ785964

### What the Data Tell Us

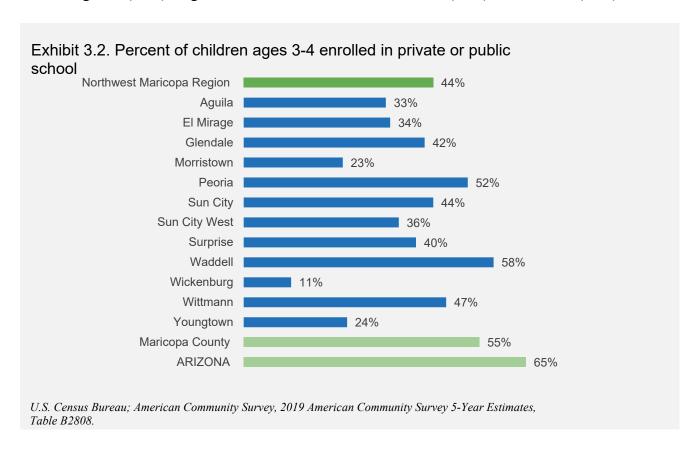
#### **Student Attendance**

Between 2019 and 2020, the state, Maricopa County, and the Northwest Maricopa Region experienced a decrease in the percentage of students missing ten or more days of school (Exhibit 3.1). A lower percentage of students in the region missed ten or more days of school than in the county or state as a whole. In addition, the percentage of absences decreased from 2019 to 2020 across all grade levels. It can be observed that the higher the grade level, the lower the rate of absences. There are many potential explanations for such findings, including that younger children may get sick more frequently than older children, parents may be more willing to let their children miss school in earlier years, or that the perception of the value of education changes as children grow. Across all grade levels, the decrease in absences from 2019 to 2020 is likely related to shifts to virtual learning during the COVID-19 pandemic.

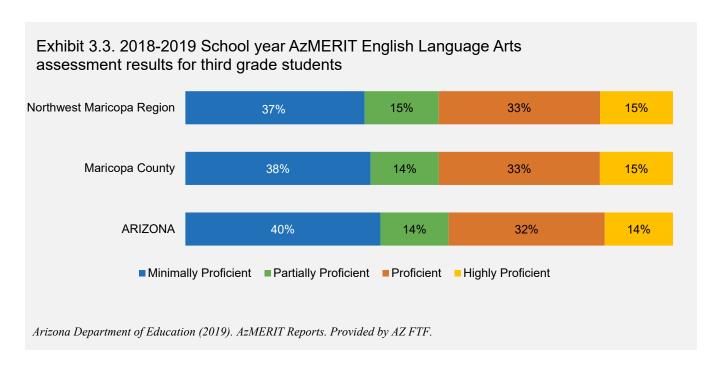


### **Early Achievement**

Fewer than half of preschool-aged children in the Northwest Maricopa Region (44%) are enrolled in private or public school (i.e., nursery school, preschool, or kindergarten), which is significantly lower than preschool enrollment in Arizona (65%) and Maricopa County (55%, Exhibit 3.2). Sub-regions with less than a third of children ages 3-4 enrolled in school include Morristown (23%), Wickenburg (11%), and Youngtown (24%). Higher rates of enrollment occur in Peoria (52%) and Waddell (58%).



Research shows that preschool attendance influences future academic performance, specifically English and math scores. 35 The English Language Arts (ELA) assessment results of the AzMERIT demonstrated that 48% of all third graders in the Northwest Maricopa Region scored "proficient" or "highly proficient", which was equal to the countywide proficiency rate (Exhibit 3.3). Arizona Progress Meter's goal for proficiency is 72% by 2030, 24 percentage points higher than the current status in Northwest Maricopa.<sup>36</sup> Within the region, there were some differences in ELA proficiency by district (Exhibit 3.4). For example, some districts (e.g., BASIS Schools, Inc., Legacy Traditional School – Surprise) achieved 75% or higher levels of proficiency, while other districts (e.g., Glendale Elementary District, Aguila Elementary District) had less than a third of students reaching proficiency. These differences may be affected in part by the type of school (charter versus public) and the number of students that took the assessment.



35 Andrews, R. J., Jargowsky, P., & Kuhne, K. (2012). The effects of Texas's targeted pre-kindergarten program on academic performance (No. w18598). National Bureau of Economic Research.

<sup>&</sup>lt;sup>36</sup> Center for the Future of Arizona (n.d.) Third Grade Reading. Retrieved from https://www.arizonafuture.org/progressmeters/education/third-grade-reading/

Exhibit 3.4. AzMERIT English Language Arts test results for third-graders in 2018-19, by school district

	Minimally	Partially		Highly	Passing English Language
	proficient in	proficient in	Proficient in	proficient in	Arts
	English	English	English	English	(proficient or
	Language Arts	Language Arts	Language Arts	Language Arts	highly proficient)
Northwest Maricopa Region Schools	37%	15%	33%	15%	48%
Aguila Elementary District	57%	14%	29%	DS	29%
Alhambra Elementary District	62%	14%	19%	5%	24%
Archway Classical Academy Glendale	12%	18%	48%	22%	70%
BASIS Schools, Inc.	9%	15%	37%	39%	76%
Calibre Academy	22%	20%	46%	12%	58%
Camelback Education, Inc	49%	14%	29%	8%	37%
Candeo Schools, Inc.	18%	14%	42%	26%	68%
Challenge School, Inc.	26%	14%	36%	24%	60%
Cholla Academy	50%	18%	32%	DS	32%
Daisy Education Corporation dba. Sonoran Science Academy Peoria	35%	32%	24%	8%	32%
Deer Valley Unified District	21%	13%	41%	25%	66%
Desert Heights Charter Schools	26%	16%	47%	11%	58%
Dysart Unified District	43%	15%	30%	12%	42%
Edison Project	30%	25%	25%	20%	45%
Ethos Academy - A Challenge Foundation Academy	53%	11%	28%	9%	36%
Glendale Elementary District	61%	15%	19%	5%	24%
Happy Valley School, Inc.	21%	19%	49%	12%	60%
Heritage Elementary School	31%	13%	39%	17%	56%
Kaizen Education Foundation dba Discover U Elementary School	43%	30%	26%	DS	26%
Legacy Traditional School - Glendale	18%	18%	47%	18%	64%
Legacy Traditional School - Peoria	25%	19%	42%	14%	56%
Legacy Traditional School - Surprise	14%	11%	49%	26%	75%
Morristown Elementary District	33%	27%	40%	0%	40%
Nadaburg Unified School District	35%	17%	43%	5%	48%
Paragon Management, Inc.	18%	10%	40%	32%	72%
Paramount Education Studies Inc	17%	9%	51%	23%	74%
Pendergast Elementary District	56%	9%	30%	5%	34%
Peoria Unified School District	35%	17%	34%	14%	48%
Pointe Educational Services	57%	9%	20%	14%	34%
Rosefield Charter Elementary School, Inc.	24%	14%	32%	30%	62%
Success School	49%	18%	27%	6%	33%
Washington Elementary School District	39%	13%	28%	20%	48%

	Minimally proficient in English Language Arts	Partially proficient in English Language Arts	in	Highly proficient in English Language Arts	Passing English Language Arts (proficient or highly proficient)
Maricopa County Schools	38%	14%	33%	15%	48%
All Arizona Schools	40%	14%	32%	14%	46%

Arizona Department of Education (2019). AzMERIT Reports. Provided by AZ FTF.

Note: The school-district data in this table include only the schools that are located within the Northwest Maricopa Region

On the AzMERIT Math Assessment, 52%, of third graders scored "proficient" or highly proficient" in the Northwest Maricopa Region, similar to Arizona (51%) and Maricopa County (53%, Exhibit 3.5). Within the region, there were some differences in proficiency by district (Exhibit 3.6). For example, some districts (e.g., BASIS Schools, Inc., Desert Heights Charter Schools, Archway Classical Academy Glendale) were able to have 75% or higher in math proficiency, while other districts (e.g., Kaizen Education Foundation dba Discover U Elementary School, Alhambra Elementary District) had less than a third of students reaching proficiency. Although ELA assessment results are slightly higher than the math assessment results overall, about half of all third graders are not meeting the proficiency standard for the two subjects.

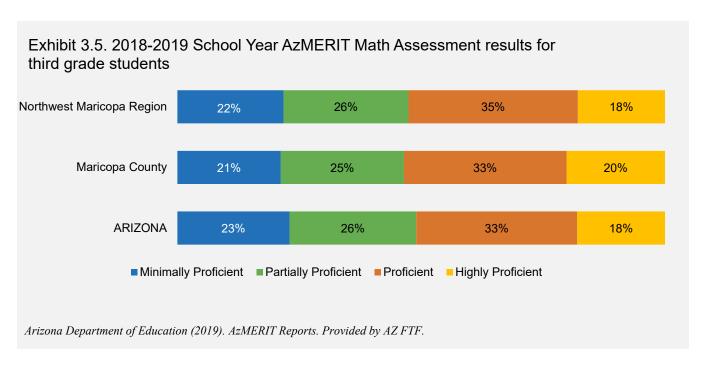


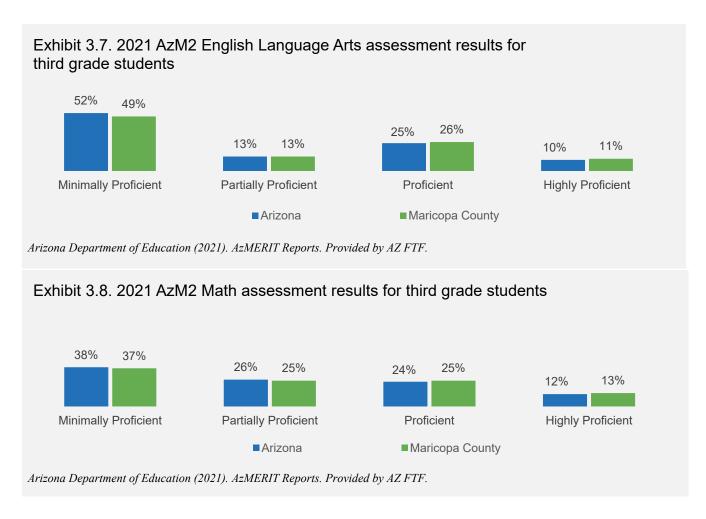
Exhibit 3.6. AzMERIT Math assessment results for third-graders in 2018-19, by school district

	Minimally proficient in Math	Partially proficient in Math	Proficient in Math	Highly proficient in Math	Passing Math (proficient or highly proficient)
Northwest Maricopa Region Schools	22%	26%	35%	18%	52%
Aguila Elementary District	33%	10%	48%	10%	57%
Alhambra Elementary District	47%	26%	24%	4%	28%
Archway Classical Academy Glendale	5%	17%	37%	40%	77%
BASIS Schools, Inc.	3%	11%	44%	42%	85%
Calibre Academy	24%	37%	34%	5%	39%
Camelback Education, Inc	32%	31%	32%	5%	37%
Candeo Schools, Inc.	3%	26%	37%	34%	71%
Challenge School, Inc.	20%	26%	36%	19%	54%
Cholla Academy	39%	32%	29%	0%	29%
Crown Charter School, Inc	17%	56%	22%	6%	28%
Daisy Education Corporation dba. Sonoran Science Academy Peoria	30%	19%	38%	14%	51%
Deer Valley Unified District	10%	20%	41%	29%	70%
Desert Heights Charter Schools	8%	15%	53%	23%	77%
Dysart Unified District	26%	27%	31%	16%	47%
Edison Project	0%	30%	60%	10%	70%
Ethos Academy - A Challenge Foundation Academy	49%	17%	32%	2%	34%
Glendale Elementary District	35%	30%	26%	9%	35%
Happy Valley School, Inc.	15%	24%	38%	22%	60%
Heritage Elementary School	18%	25%	42%	15%	57%
Kaizen Education Foundation dba Discover U	35%	43%	22%	DS	22%
Legacy Traditional School - Glendale	16%	26%	49%	10%	58%
Legacy Traditional School - Peoria	6%	31%	43%	21%	64%
Legacy Traditional School - Surprise	7%	26%	41%	26%	67%
Morristown Elementary District	27%	40%	27%	7%	33%
Nadaburg Unified School District	18%	34%	31%	17%	48%
Paragon Management, Inc.	5%	17%	44%	34%	78%
Paramount Education Studies Inc	14%	20%	51%	14%	66%
Pendergast Elementary District	38%	31%	25%	6%	31%
Peoria Unified School District	22%	26%	36%	16%	52%
Pointe Educational Services	35%	35%	20%	11%	30%
Rosefield Charter Elementary School, Inc.	9%	27%	37%	27%	64%
Success School	29%	29%	33%	10%	43%
Washington Elementary School District	32%	27%	32%	8%	41%
Maricopa County Schools	21%	25%	33%	20%	53%
All Arizona Schools	23%	26%	33%	18%	51%

Arizona Department of Education (2019). AzMERIT Reports. Provided by AZ FTF.

Note: The school-district data in this table include only the schools that are located within the Northwest Maricopa Region.

Arizona students in grades third to eighth and tenth grade were not assessed in the 2019-2020 school year due to the COVID-19 pandemic. For the 2020-21 school year, the AZMERIT changed the name to AzM2. For the third grade assessment, the content areas and design were similar to the AZMERIT. In the 2021 school year, fewer students participated in the state assessments (88% to 90% of students). On the ELA assessment, about 37% of all third graders in Maricopa County scored "proficient" or "highly proficient", which is about two percentage points higher than in Arizona overall (Exhibit 3.7). Similarly, 38% of third graders scored "proficient" or highly proficient" on the math assessment test in Maricopa County, again two percentage points higher than statewide results (Exhibit 3.8). The COVID-19 pandemic and its effects on schooling and learning are a likely cause behind the decrease in assessed ELA and math proficiency from 2019 to 2021. Learning disruptions due to the pandemic may have included limited technology access, online learning fatigue, losing family members, caregivers losing jobs, social isolation, and mental health challenges.<sup>38</sup>

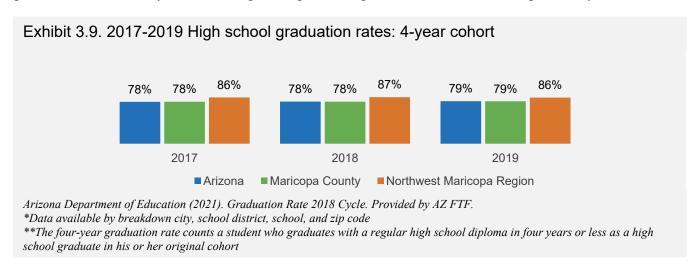


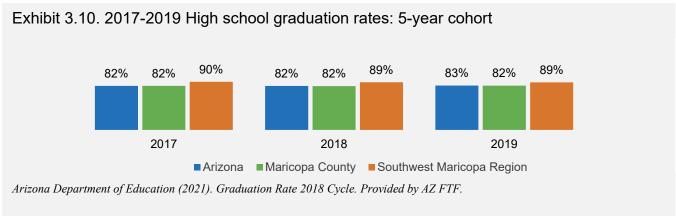
<sup>&</sup>lt;sup>37</sup> 2020-21 data was not available at the regional level.

<sup>&</sup>lt;sup>38</sup> Dorn, E., Hancock, B., Sarakatsannis, J., Viruleg, E. (2021) McKinsey & Company. COVID-19 and education: The lingering effects of unfinished learning. Retrieved from: https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-education-the-lingering-effects-of-unfinished-learning

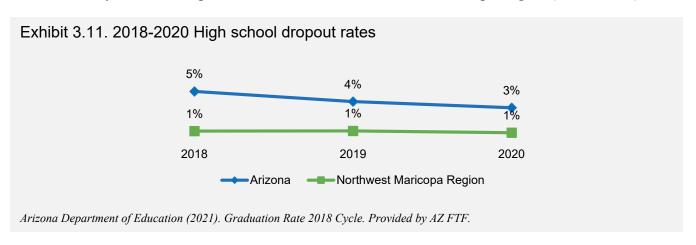
### **High School Graduation & Dropout Rates**

Between 2017 and 2019, high school graduation rates remained steady for the Northwest Maricopa Region, Maricopa County, and Arizona (Exhibits 3.9 and Exhibit 3.10). In 2019, 86% of students graduated within four-years in the region, higher than graduation rates in Maricopa County and Arizona.





From 2018-2020, the percentage of students dropping out of high school declined across Arizona but remained steady at a low one percent of students in the Northwest Maricopa Region (Exhibit 3.11).



#### **Educational Attainment**

In the Northwest Maricopa Region, 62% of adults ages 25 and older have attained education beyond high school, which is a similar percentage to the county and state (Exhibit 3.12). Sub-regions where higher percentages of adults have attained education beyond high school include Sun City West (71%) and Waddell (71%), while in Aguila, less than a quarter (22%) have attained more than a high school education. About a quarter (26%) of Northwest Maricopa Region residents have a bachelors' degree or higher, which is lower than the proportion in Maricopa County (33%) and Arizona (29%). People who complete more education typically earn more and have lower rates of unemployment compared to those with lower education.<sup>39</sup>

Exhibit 3.12. Level of education for the adult population (ages 25 and Older)

	Estimated population (ages 25 and older)	Percent less than high school	Percent high school or GED	Percent some college or professional education	Percent bachelor's degree or more
Northwest Maricopa Region	525,021	11%	27%	36%	26%
Aguila	778	56%	23%	16%	6%
El Mirage	20,998	18%	34%	33%	15%
Glendale	189,983	16%	27%	34%	23%
Morristown	1,399	7%	37%	40%	16%
Peoria	119,794	8%	24%	36%	33%
Sun City	44,078	6%	32%	37%	25%
Sun City West	28,629	4%	25%	36%	35%
Surprise	94,751	8%	26%	38%	28%
Waddell	8,330	7%	22%	48%	23%
Wickenburg	7,289	8%	26%	35%	31%
Wittmann	4,384	13%	35%	37%	15%
Youngtown	4,608	21%	32%	34%	14%
Maricopa County	2,878,815	12%	22%	33%	33%
ARIZONA	4,732,532	13%	24%	34%	29%

U.S. Census Bureau; American Community Survey, 2019 American Community Survey 5-Year Estimates, Table B15002

<sup>&</sup>lt;sup>39</sup> Torpey, E. (2021) U.S. Bureau of Labor Statistics. Education pays, 2020. Retrieved from https://www.bls.gov/careeroutlook/2021/dataon-display/education-pays.htm

# **EDUCATIONAL INDICATORS HIGHLIGHTS**

A child's development during their first five years of life makes an impact on their performance in future educational endeavors. Less than 50% of preschool-age children are enrolled in early education, which is lower than Arizona and Maricopa County. Student absences for students in grades first to third are higher in the region than in Arizona. Additionally, about 50% of third-grade students in the Northwest Maricopa Region are scoring proficiently on the math and English Language Arts (ELA) assessments. The region experienced a higher rate of students graduating from high school compared to the state and county. About 11% of adults 25 and older in the region do not have a high school education and 26% have a bachelor's degree or more.

Below are key findings that highlight the demographic assets, needs and data-driven considerations for the region. The considerations provided below do not represent comprehensive approaches and methods for tackling the needs and assets in the region. Instead, the considerations represent possible approaches that early childhood system partners, including FTF, could take to address needs and assets in the region, as conceptualized by the authors of this report.

Assets	Considerations		
	Build on strong graduation rates by strengthening schools'		
In 2019, more students (86%) in the Northwest	abilities to intervene early with students struggling with		
Maricopa Region graduated from high school within	absences, grades, or discipline. Increase supportive resources		
four years than in the county (79%) and state (79%).	for vulnerable adolescents to engage in learning and		
	overcome social and academic challenges.		

Needs	Considerations
AzMERIT reports from the Arizona Department of Education show that about half of third graders are not meeting proficiency standards for English Language Arts (52%) and Math (48%), especially in Glendale Elementary District and Aguila Elementary District.	Increase parent outreach, awareness, and access to high quality early education programs to support learning and school readiness.



**EARLY LEARNING** 

## **EARLY LEARNING**

## **Why it Matters**

Early learning fosters children's development and well-being at a critical time in their lives. Early learning is supported by early care and education (ECE), a constellation of all formal and informal educational programs and strategies designed to contribute to the growth and development of children from birth through age five. <sup>40</sup> Research suggests that the first five years of life are considered to be the most crucial stage in children's development, as they undergo the most rapid phase of growth during that period. <sup>41</sup> Research also shows that when children participate in high-quality learning environments, they learn and develop important skills and abilities such as motivation, self-control, focus and self-esteem. These skills prepare them for educational achievement later in life and reduce the need for special education programs. <sup>42</sup> In addition, research shows that investments in ECE have long-term health effects, helping to prevent disease and promote health. <sup>43</sup> <sup>44</sup> For disadvantaged families, early childhood programs have benefits on health, future wages, crime reduction, and education. <sup>45</sup> Children who participate in early care and education programs are better prepared for kindergarten, have greater success in elementary school, and are more likely to graduate from high school and prosper well into adulthood. <sup>46</sup>, <sup>47</sup>

Key indicators of early learning that help identify the needs of children include, but are not limited to, the availability of ECE centers and homes; enrollment in ECE programs; compensation and retention of ECE professionals; costs of child care and availability of child care subsidies or scholarships; and capacity to serve children with special needs.

<sup>&</sup>lt;sup>40</sup> What is the purpose of early childhood education? Why it's so important (2021) University of Massachusetts Global. Retrieved from: https://www.umassglobal.edu/news-and-events/blog/what-is-purpose-of-early-childhood-education

<sup>&</sup>lt;sup>41</sup> Early Childhood Education. (n.d.). Retrieved from https://teach.com/where/levels-of-schooling/early-childhood-education/

<sup>&</sup>lt;sup>42</sup> McCoy, C., Yoshikawa, H., Ziol-Guest, K. (2017) Impacts of early childhood education on medium- and long-term educational outcomes. https://journals.sagepub.com/doi/abs/10.3102/0013189X17737739

<sup>&</sup>lt;sup>43</sup> Garcia, J., Heckman, J., Ziff, A. (2019) Early Childhood education and crime. https://doi.org/10.1002/imhj.21759

<sup>&</sup>lt;sup>44</sup> Campbell, F., Conti, G., Heckman, J. J., Moon, S. H., Pinto, R., Pungello, E., & Pan, Y. (2014). Early childhood investments substantially boost adult health. Science, 343(6178), 1478-1485.

<sup>&</sup>lt;sup>45</sup> Garcia, J., Heckman, J., Leaf, D., Prados, M. (2016) The life-cycle benefits of an influential early childhood program. National Bureau of Economic Research. https://www.nber.org/papers/w22993

<sup>&</sup>lt;sup>46</sup>Reynolds, A. J., Temple, J. A., Ou, S. R., Robertson, D. L., Mersky, J. P., Topitzes, J. W., & Niles, M. D. (2007). Effects of a school-based, early childhood intervention on adult health and well-being: A 19-year follow-up of low-income families. Archives of Pediatrics & Adolescent Medicine. 161(8), 730-739.

<sup>&</sup>lt;sup>47</sup> Weiland, C., & Yoshikawa, H. (2013). Impacts of a prekindergarten program on children's mathematics, language, literacy, executive function, and emotional skills. Child Development, 84(6), 2112-2130.

### What the Data Tell Us

### **Early Care and Education**

There are 484 ECE centers and homes with a capacity of 49,009 children in the Northwest Maricopa Region (Exhibit 4.1).<sup>48</sup> Although the total licensed capacity may be high, the actual facility may choose not to enroll the total number of children they are licensed to serve. The number of children served mainly depends on the center's ability to meet the adult to child ratio, which varies by child's age and must comply with licensing requirements.

Exhibit 4.1. Childcare capacity

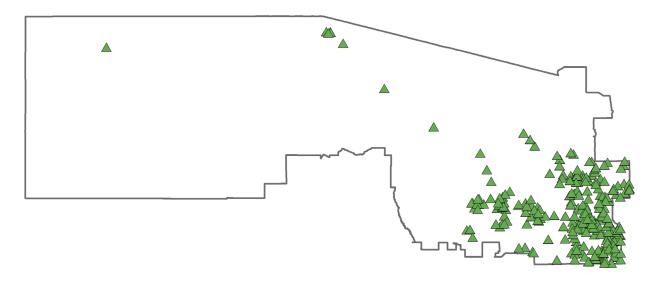
	Number of ECE facilities	Capacity
Northwest Maricopa Region	484	49,009
Aguila	2	40
El Mirage	22	1,656
Glendale	215	21,138
Morristown	1	10
Peoria	142	15,352
Sun City	4	911
Sun City West*		
Surprise	78	8,811
Waddell	5	276
Wickenburg	11	445
Wittmann	2	252
Youngtown	2	118
Maricopa County	2,595	285,959
ARIZONA	4,307	395,787

<sup>\*</sup>Data not available for the sub-region.

Arizona Department of Economic Security (2020) and Arizona Department of Health Services. Provided by AZ FTF.

<sup>&</sup>lt;sup>48</sup> Arizona Department of Economic Security (2019). Childcare Providers and Capacity. Provided by AZ FTF.

Exhibit 4.2. Child care locations in the Northwest Maricopa Region



### Legend

▲ CCRNR

Source: Arizona Department of Economic Security (2019-2020) and Arizona Department of Health Services (2020). Provided by AZ FTF.

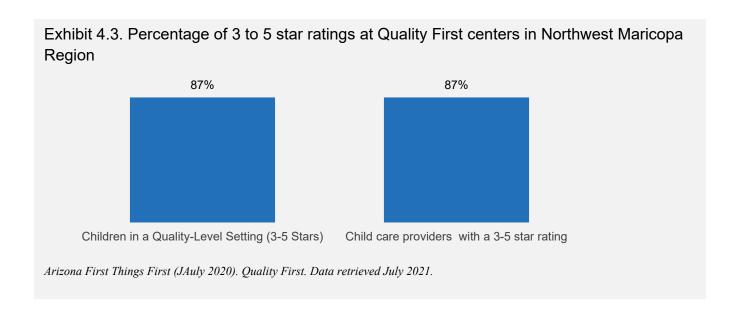
As previously mentioned, 44% of children ages three and four are enrolled in ECE programs in the Northwest Maricopa Region (Exhibit 3.2). This is lower than the 64% estimated to need child care since all adults in the household are employed (Exhibit 2.5). Parents who do not have access to stable child care may find themselves missing work to care for their children. In addition, research has consistently demonstrated that lack of access to child care has negative effects on families and decreases parents' chances of sustaining employment.49

<sup>&</sup>lt;sup>49</sup> Greenberg, M. (2007). Next steps for federal child care policy. The Next Generation of Antipoverty Policies, 17, 2 http://www.futureofchildren.org/publications/journals/article/index.xml?journalid=33&articleid=67&sectionid=353

### **Quality of Early Care and Education**

Quality First (QF) is a signature program of FTF that is designed to improve the quality of early learning for children birth to age five. Quality First partners with ECE providers across Arizona to provide coaching and funding that is meant to improve the quality of their services. Quality First implemented a statewide standard of quality for ECE programs along with associated star ratings. The star ratings allow parents to easily take quality into consideration when deciding on care providers. The star ratings range from one to five indicating the level of quality and attainment of quality standards. 50 In the Northwest Maricopa Region, out of the 6,853 children enrolled in a Quality First site, 5,929 (87%) are enrolled in three-to-five-star centers or homes (Exhibit 4.3). Moreover, 85 out of 98 childcare providers (87%) in Quality First have received a three-to-five-star rating.





<sup>&</sup>lt;sup>50</sup> Arizona First Things First (October 2021). Quality First.

#### **Costs of Child Care & Access**

In addition to supporting improvements in the quality of child care, FTF provides scholarships for low income children to attend quality ECE programs. Previous research has shown that low-income mothers receiving child care subsidies, a form of financial assistance, are more likely than other low-income mothers to work, sustain employment, and work longer hours. <sup>49</sup> Further, the negative effects of not accessing child care include the possibility of incurring financial debt, choosing child care that is lower quality and less stable, and losing time from work.

Across the Northwest Maricopa Region, state and Maricopa County, licensed centers have the highest cost per day, certified group homes have the second highest cost per day, and approved family homes have the lowest cost per day (Exhibit 4.4). The median costs per day of licensed centers, approved family homes and certified group homes in Northwest Maricopa Region are in some cases greater than the average across the state and Maricopa County. High child care prices likely place a financial strain on families who already report barely making ends meet and having difficulty affording housing and food.

Based on the median cost per day, the median cost of child care per year for one infant in Northwest Maricopa Region totals to approximately \$11,500 a year for licensed centers and approximately \$6,250 a year for approved family homes and \$7,250 per a year for certified group homes. Compared against the median income of families in Maricopa County with children under 18 (Exhibit 2.7), licensed centers comprise approximately 12% and approved family homes and certified group homes comprise about seven to eight percent of the regional median income.

The median cost per year of child care comprises an even higher amount of the median income for single parent led families with children under 18 in Maricopa County and is considerably higher for single-female families compared to single-male families. Based on the median income of single-female families (Exhibit 2.7), licensed centers make up 35% of their median income and approved family homes and certified group homes make up 15% to 23% of their median income. High costs can be a barrier in affording quality child care especially for single-female families.

Exhibit 4.4. 2018 Median cost per day of early childhood care

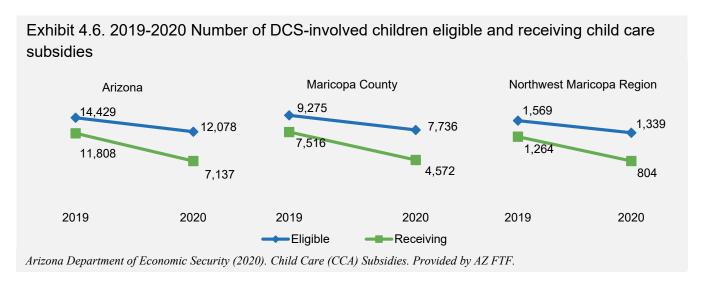
	Northwest Maricopa Region	Maricopa County	Arizona
Cost for one infant Licensed Centers	\$46.00	\$44.99	\$43.03
Cost for one infant Approved Family Homes	\$25.00	\$20.00	\$20.00
Cost for one infant Certified Group Homes	\$29.00	\$30.00	\$30.00
Cost for one child (1 to 2 years old) Licensed Centers	\$38.00	\$40.00	\$38.00
Cost for one child (1 to 2 years old) Approved Family Homes	\$25.50	\$20.00	\$20.00
Cost for one child (1 to 2 years old) Certified Group Homes	\$28.00	\$28.50	\$28.00
Cost for one child (3 to 5 years old) Licensed Centers	\$33.00	\$34.00	\$33.00
Cost for one child (3 to 5 years old) Approved Family Homes	\$25.00	\$20.00	\$20.00
Cost for one child (3 to 5 years old) Certified Groups	\$27.50	\$28.00	\$30.00

Arizona Department of Economic Security (2018). Child Care Market Rate Survey. Provided by AZ FTF.

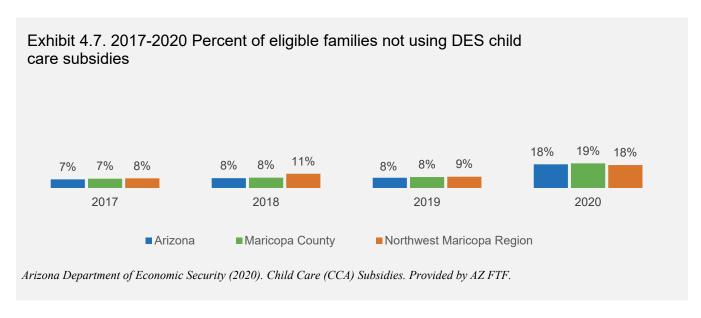
From 2019-2020, the Northwest Maricopa Region experienced a slight increase in the number of children eligible for Department of Economic Security (DES) child care subsidies, in contrast to slight decreases across the county and state (Exhibit 4.5). During the same time period, the state, Maricopa County, and the Northwest Maricopa Region experienced a decrease in the percentage of eligible children receiving child care subsidies. For example, in 2019 in the Northwest Maricopa Region, 92% of children eligible for child care subsidies received subsidies compared to 79% of children in 2020. The decrease in the number of children eligible and receiving child care subsidies in 2020 may be due to COVID-19 pandemic as centers were closed.

Exhibit 4.5. 2019-2020 Number of children eligible and receiving child care subsidies Arizona Maricopa County Northwest Maricopa Region 25.269 24,935 2,666 15,782 2,512 15,695 14,355 2,305 12,391 2,103 2019 2020 2019 2020 2019 2020 **—**Eligible Receiving Arizona Department of Economic Security (2020). Child Care (CCA) Subsidies. Provided by AZ FTF.

Department of Child (DCS)-involved children had similar trends of a decrease in the percentage of eligible children receiving child care subsidies across the state, county and region (Exhibit 4.6). For example, in 2019 in the Northwest Maricopa Region, 81% of DCS-involved children that were eligible for child care subsidies received subsidies compared to 60% of children in 2020. This proportion is also lower than non-DCS children.



The proportion of eligible families not using DES child care subsides remained fairly steady between 2017 to 2019, but increased in 2020 across the state, county and region. In 2020, 18% of families in the Northwest Maricopa Region did not use their child care subsidies compared to eight percent of families in 2017 (Exhibit 4.7). The decrease in families using child care subsidies may have been due to the closure of child care sites in Spring 2020 due to the COVID-19 pandemic.



### **Developmental Delays and Special Needs**

Issues in teaching young children with special needs reflect significant changes in public policy and professional philosophy across the nation. There are diverse perspectives on how to effectively teach young children with developmental delays and special needs.<sup>51</sup> The Individuals with Disabilities Education Act (IDEA) is a law ensuring services to children with disabilities throughout the nation. IDEA governs how states and public agencies provide early intervention, special education, and related services to more than 6.5 million eligible infants, toddlers, children, and youth with disabilities. Infants and toddlers with disabilities (ages zero to two) and their families receive early intervention services under IDEA Part C. Children and youth (ages three to 21) receive special education and related services under IDEA Part B.52

AzEIP is a statewide system that offers services and assistance to families and their children with disabilities or developmental delays under the age of three. The purpose of the program is to intervene at an early stage to help children develop to their highest potential.<sup>53</sup> Research shows that children and youth with mild intellectual disabilities are behind in academic skills compared to their peers.<sup>54</sup> Without proper intervention, this can lead to delays in learning to read and perform basic math and to further difficulties in other academic areas that require use of those skills. A child is eligible for AzEIP if he/she is between birth and 36 months of age and is developmentally delayed or has an established condition with a high probability of resulting in a developmental delay, as defined by the state.<sup>55</sup> A child is considered to be developmentally delayed when s/he has not reached 50% of the milestones expected at her/his chronological age in one or more of the areas of development: cognitive, physical, communication, social or emotional, or adaptive.

From 2018-2020, Northwest Maricopa Region, Maricopa County and Arizona experienced a decrease in the number of children receiving AzEIP referrals and services (Exhibit 4.8). Compared to 2018, the number of children receiving referrals in the Northwest Maricopa Region in 2020 decreased by six percent. In the Northwest Maricopa Region, of those who received referrals to AzEIP, about a third received services. One reason why all referred children do not receive services may be because of the high eligibility threshold of having a 50% or greater delay in development.

https://www2.ed.gov/about/offices/list/osers/osep/osep-idea.html

<sup>51</sup> Dyson, A. (2001). Special needs education as the way to equity: an alternative approach? Suport for Learning, 16, 3.

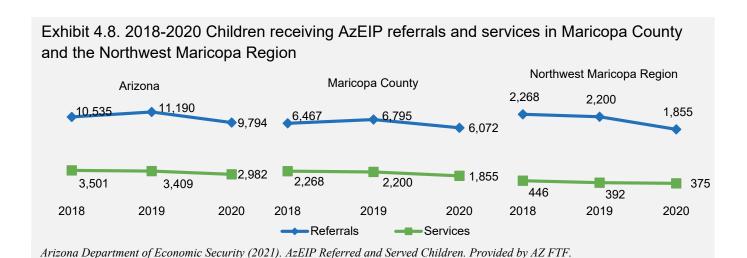
<sup>&</sup>lt;sup>52</sup> US Department of Education: Office of Special Education and Rehabilitative Services.

<sup>&</sup>lt;sup>3</sup> Arizona Department of Economic Security (n.d.). Arizona Early Intervention Program. Retrieved from:

https://des.az.gov/services/disabilities/developmental-infant

4 Rosenberg, L., Bart, O., Ratzon, N., Jarus, T. (2013) Personal and Environmental Factors predict participation of children with and without mild developmental disabilities. Retrieved from: https://link.springer.com/article/10.1007/s10826-012-9619-8

<sup>&</sup>lt;sup>55</sup>Arizona Department of Economic Security (n.d.) Eligibility for the Arizona Early Intervention Program. Retrieved from: https://des.az.gov/services/disabilities/early-intervention/arizona-early-intervention-program-azeip-eligibility

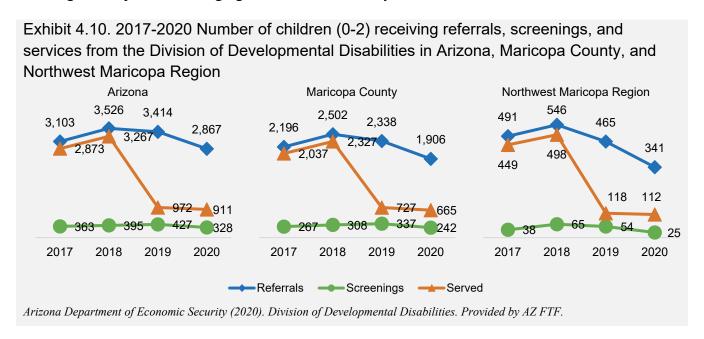


To qualify for Division of Developmental Disabilities (DDD) services an individual must have a cognitive disability, cerebral palsy, autism, epilepsy, or be at risk for a developmental disability. Children under the age of six are eligible if they show significant delays and a strong potential that they will have a developmental disability in one or more of these areas of development: physical, cognitive, communication, social-emotional, or self-help.

Data show that DDD services for children who were referred dropped substantially in 2019. From 2017 to 2020, the patterns of children ages 0-5 receiving referrals and services through the DDD were similar for Arizona, Maricopa County, and the Northwest Maricopa Region (Exhibit 4.9). Overall, across Arizona, Maricopa County, and the Northwest Maricopa Region, the number of referrals increased from 2017 to 2018. In addition, the number of children receiving services peaked in 2018 across the state, county and region but sharply declined in 2019. In the Northwest Maricopa Region in 2018, 95% of children who received referrals also received services, but in 2019 only 60% of those referred received services. This decline may be due to changes in agencies' service capacity over time.

Exhibit 4.9. 2017-2020 Number of children (0-5) receiving referrals, screenings, and services from the Division of Developmental Disabilities in Arizona, Maricopa County, and Northwest Maricopa Region Arizona Maricopa County Northwest Maricopa Region 6,163 6,261 4.362 4,381 901 834 5,700 820 5.478 3,935 3,871 715 6,123 4,357 854 790 5,520 3,909 3,003 2,926 4,005 4,078 516 498 1,411 1,908 1,723 1,257 1,607 1,673 1,154 1,200 244 234 189 183 2017 2018 2019 2020 2017 2018 2019 2020 2017 2018 2019 2020 ----Screenings Referrals Served Arizona Department of Economic Security (2020). Division of Developmental Disabilities. Provided by AZ FTF.

Limiting the analysis to children ages zero to two shows an even sharper decline in services (Exhibit 4.10). In the Northwest Maricopa Region in 2018, 91% of children ages zero to two who received referrals were served, but in 2019, just 25% of those referred received services. This decline may also be due to agencies' practices changing over time on who they are able to serve.



#### **Special Education**

In 2020, the most common types of disabilities for preschool children were Developmental Delay and Speech/Language Impairment (Exhibit 4.11). Across Northwest Maricopa districts, there were districts with high concentrations of preschool students with developmental delays or speech/language impairment.<sup>56</sup> In the Pendergast Elementary District (54%) and Nadaburg Unified School District (53%), more than half of preschool students in special education had a developmental delay. At Heritage Elementary School, two-thirds (67%) of preschool students in special education had a speech/language impairment.

For students in grades K to 3 within the region in 2020, 13% were enrolled in special education. This percentage was similar to those of the county (11%) and state (12%). Similar to the disabilities of preschool children, the most common disabilities for students in grades K to 3 were developmental delay and speech/language impairment.

Exhibit 4.11. Types of disabilities among preschoolers in special education, 2020

o annong proo		200iai 0440411011, 2020			
Developmental Delay	Hearing Impairment	Other	Preschool Severe Delay	Speech /Language Impairment	
46%	<2%	<2%	21%	32%	
50%	<2%	<2%	15%	34%	
44%	<2%	<2%	28%	27%	
51%	<2%	<2%	26%	23%	
33%	<2%	<2%	<2%	67%	
53%	<2%	<2%	13%	33%	
54%	3%	<2%	40%	3%	
44%	<2%	<2%	15%	40%	
44%	<2%	<2%	28%	28%	
45%	<2%	<2%	21%	32%	
43%	<2%	<2%	20%	34%	
	Developmental Delay 46% 50% 44% 51% 33% 53% 54% 44% 44% 45%	Developmental Delay         Hearing Impairment           46%         <2%	Developmental Delay         Hearing Impairment         Other           46%         <2%	Developmental Delay         Hearing Impairment         Other Delay           46%         <2%	

Arizona Department of Education (2020). [Special education]. Unpublished data.

Note: The school-district data in this table include only the schools that are located within the Northwest Maricopa Region. Note: The data presented in this table are unduplicated (i.e., children diagnosed with multiple disabilities are counted only one time in the Federal Primary Need (FPN) category

<sup>&</sup>lt;sup>56</sup> Examples of developmental delays for preschoolers include, but not limited to, cognitive, motor, social/emotional/behavioral or speech.

# **EARLY LEARNING HIGHLIGHTS**

Northwest Maricopa Region has 484 centers with a capacity of 49,009. Only 44% of preschoolaged children in the region are enrolled in ECE programs, which is less than the 64% assumed to need child care based on their parents' employment status. A contributing factor may be the high cost of child care. With respect to child care subsidies, fewer children are becoming eligible for, receiving, and remaining on the waitlist for the subsidies. The most common disabilities for preschoolers are Developmental Delays and Speech/Language Impairment.

Below are key findings that highlight the early learning assets, needs, and data-driven considerations for the Northwest Maricopa Region. The considerations provided below do not represent comprehensive approaches and methods for tackling the needs and assets in the region. Instead, the considerations represent possible approaches that early childhood system partners, including FTF, could take to address needs and assets in the region, as conceptualized by the authors of this report.

Assets	Considerations
Quality First has been increasing the quality of child care programs in the region. For the children enrolled in a Quality First program, 87% are enrolled in a program with a three to five star rating.	Support Quality First efforts in the region to increase the opportunities for children to receive quality early care and education.

Needs	Considerations
The percentage of eligible families not using DES child care subsidies has increased from 2017 (8%) to 2020 (18%).	Spread awareness about the availability of scholarships and subsidies for child care, especially for low-income families. Support structural improvements that expand the supply of high quality, affordable child care opportunities.
In some sub-regions, such as Aguila, Morristown, Wittman and Youngtown, there are two or fewer Early Care and Education centers and homes in the area.	Provide early learning resources to parents/guardians in areas with fewer Early Care and Education centers and home to help young children. Support structural improvements that expand the supply of high quality, affordable child care opportunities.



**CHILD HEALTH** 

## CHILD HEALTH

## **Why It Matters**

Ensuring healthy development through early identification and treatment of children's health issues helps families understand healthy developmental pathways and how health issues affect children and their school readiness. <sup>57</sup> There are many health factors that impact the well-being of young children and their families. Research has shown that high quality prenatal care improves maternal health and health behaviors during pregnancy and after childbirth. <sup>58</sup> For example, during prenatal care visits, expectant people are provided with information and resources to promote a healthy pregnancy and increase the healthy development of their child. At routine prenatal visits, physicians often remind expectant people of the importance of abstaining from substance use, maintaining a healthy diet, and the benefits of breastfeeding, all of which influence a baby's development. For example, maternal overweight and obesity have been associated with risks of gestational diabetes mellitus, caesarean delivery, large for gestational age, pre-eclampsia, preterm birth, and admission to special care nursery or intensive care unit. <sup>59</sup>

Engaging in healthy preventative practices, such as breastfeeding and vaccinating children during early childhood, may help protect children from negative health outcomes and developmental delays. Breastfeeding provides children with the nutrition they need early in life. <sup>60</sup> Children who have not been vaccinated are at a higher risk of contracting diseases and tend to have more health issues later in life. Research has found that it is important for children to receive their immunizations early in life. Children under the age of five are at the highest risk of contracting severe illnesses because their bodies have not built a strong immune system yet. <sup>61</sup> Another factor that may impact health outcomes and may be deemed less important by parents is early screening for hearing loss. According to the Center for Disease Control and Prevention (CDC), hearing loss can impact a child's ability to develop communication, language, and social skills. <sup>62</sup> Fortunately, early screening for hearing loss can connect

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<sup>&</sup>lt;sup>57</sup> Schools & Health (2016). Impact of Health on Education. Retrieved from http://www.schoolsandhealth.org/pages/Anthropometricstatusgrowth.aspx

<sup>&</sup>lt;sup>58</sup> Yan, J. (2016) The effects of prenatal care utilization on maternal health and health behaviors. Health Economics. Volume 26 Issue 8. https://doi.org/10.1002/hec.3380

<sup>&</sup>lt;sup>59</sup> Yang, Z., Phung, H., Freebairn, L., Sexton, R., Raulli, A., Kelly, P. (2018) Contribution of maternal overweight and obesity to the occurrence of adverse pregnancy outcomes. ANZJOG. Volume 59 Issue 3. <a href="https://doi.org/10.1111/ajo.12866">https://doi.org/10.1111/ajo.12866</a>

<sup>&</sup>lt;sup>60</sup> Office on Women's Health (2014). Why breastfeeding is important. Retrieved from https://www.womenshealth.gov/breastfeeding/breastfeeding-benefits.html

<sup>&</sup>lt;sup>61</sup> Centers for Disease Control and Prevention (2016). Infant Immunizations. Retrieved from http://www.cdc.gov/vaccines/parents/parent-questions.html

<sup>&</sup>lt;sup>62</sup> Center for Disease Control and Prevention Division (2020). Hearing Loss. Retrieved from https://www.cdc.gov/ncbddd/hearingloss/index.html.

children with services that can increase the likelihood of the child reaching their full potential.<sup>63</sup>

This chapter provides an overview of the health indicators for this region that highlight the well-being of children under age six and their families. Healthy People 2030 (HP 2030) set 10-year national objectives for improving the health of all Americans. Healthy People established these benchmarks to encourage collaborations across communities and sectors, empower individuals to make informed health decisions, and measure the impact of prevention activities. When appropriate, these benchmarks will be presented throughout this chapter as comparison points for local indicators.

### What the Data Tell Us

#### **Access to Health Services**

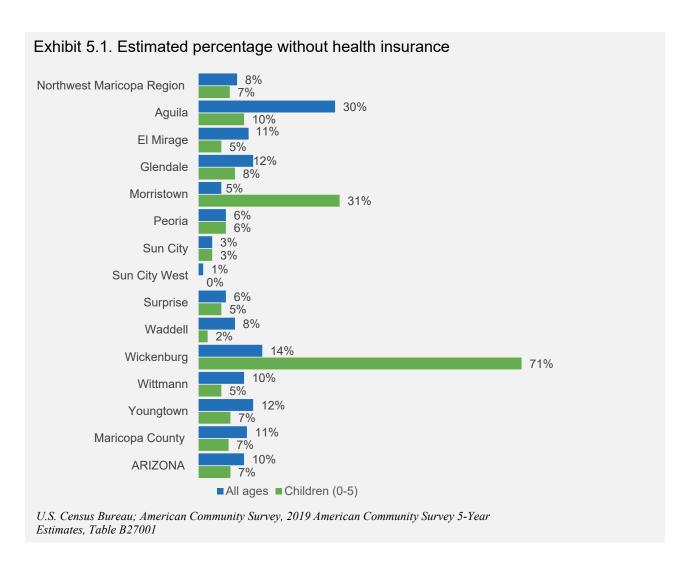
One indication of people's access to health services is whether they have health insurance coverage that helps make health care affordable. When children lack health insurance, they are at risk of poor health outcomes and long-term complications if their families avoid or delay medical care because of cost. The HP 2030 target is for 92.1% of Americans to have medical insurance by 2030.<sup>65</sup> In 2019, 91.5% of the population in Northwest Maricopa Region had health insurance, which is only 0.6% below the HP 2030's targeted goal.

In 2019, seven percent of children under age six in the Northwest Maricopa Region did not have any health insurance (Exhibit 5.1). The highest proportions of children without health insurance were in the Wickenburg (71%) and Morristown (31%), while Sun City West (0%) and Waddell (2%) had the lowest proportion of those without health insurance.

<sup>&</sup>lt;sup>63</sup> Though hearing loss screenings and oral health screenings is part of healthy preventative practices for children, this data was not available for the 2022 RNA report.

<sup>&</sup>lt;sup>64</sup> Healthy People 2030. U.S. Department of Health and Human Services. ODPHP Office of Disease Prevention and Health Promotion. https://health.gov/healthypeople

<sup>&</sup>lt;sup>65</sup> Healthy People 2030. About Health People Retrieved from https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-care-access-and-quality/increase-proportion-people-health-insurance-ahs-01



#### **Hospitalizations**

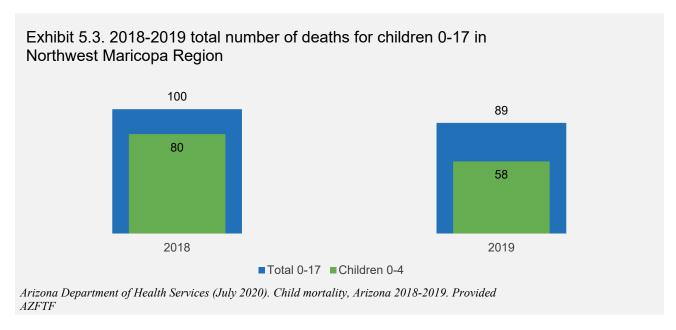
In the Northwest Maricopa Region, there were 244 non-fatal inpatient hospitalizations and 19,818 non-fatal emergency department visits for children from 2016-2020 (Exhibit 5.2). Among children zero to four years old, the most common reasons for non-fatal emergency department visits are for falling, being struck or against an object, or poisoning. In addition, children that had non-fatal emergency department visits or emergency department visits were more likely to identify as male (54% to 56%) and white (50% to 52%, not shown). Accidents such as these further emphasize the importance of health insurance coverage for families and their children, as early care can prevent long term or more severe health complications later in life.

Exhibit 5.2. Injury hospitalizations and ED visits for children 0-4, ADHS (2016-2020)

Indicator	Arizona	Maricopa County	Northwest Maricopa Region
Number of Non-Fatal Hospitalizations	2,890	1,790	244
Number of ED Visits	181,035	116,180	19,818

Arizona Department of Health Services (July 2020). Unintentional Injuries in Children 0-5, Arizona 2016-2020. Provided AZFTF

From 2018 to 2019 in the Northwest Maricopa Region, the total number of child deaths among children 0 to 17 years old decreased from 100 to 89 (Exhibit 5.3). - Most deaths across both years occurred among young children 0 to 4 years, comprising 80% of child deaths in 2018 and 65% in 2019 (Exhibit 5.3). In Arizona, the most common causes of child death include accidents, congenital malformations, premature birth, and low birth weight.



From 2016 to 2020 in the Northwest Maricopa Region, there were a total of 572 inpatient hospitalizations and 4,441 emergency visits for asthma among children 0 to 14 years old. Children 0 to 14 that were hospitalized for asthma were most likely to identify as male (67%) and white, Non-Hispanic (42%) or Hispanic or Latino/a (31%, not shown). Throughout the Northwest Maricopa Region, 33% of child inpatient hospitalizations were among children 0 to 4 years old (Exhibit 5.4).

Exhibit 5.4. Inpatient hospitalizations for asthma for children 0-14 compared to children 0-4 (2016-2020)

		#Inpatient hospitalization of children 0-14	Percent of children inpatient hospitalization that were 0-4
Northwest Maricopa Region	187	572	33%
Maricopa County	1,339	3,700	36%
ARIZONA	2,214	5,672	39%

Arizona Department of Health Services (July 2020). Asthma, Arizona 2016-2020. Provided AZFTF

<sup>\*</sup>cell suppressed due to small size (less than 6)

From 2016 to 2020, there were a total of eight inpatient hospitalizations and 119 emergency visits for diabetes among children 0 to 17 years old in Northwest Maricopa (Exhibit 5.5). The Northwest Maricopa Region accounted for 11% of the inpatient hospitalizations and 19% of the emergency room visits in Maricopa County (not shown). The average length of stay for the hospitalization for diabetes in the Northwest Maricopa Region was 3.4 days, which was slightly higher than the averages for Maricopa County (3.2 days) and Arizona (3.0 days, Exhibit 5.5).

Exhibit 5.5. Inpatient hospitalizations for diabetes for children 0-17 (2016-2020)

	#Inpatient hospitalizations	Average length of stay (days) for hospitalization	#Emergency room visits
Northwest Maricopa Region	8	3.4	119
Maricopa County	72	3.2	618
ARIZONA	150	3.0	1,002

Arizona Department of Health Services (July 2020). Asthma, Arizona 2016-2020. Provided AZFTF

#### **Pregnancies and Birth**

During 2019, Northwest Maricopa Region residents gave birth to 8,055 babies, which was 16% of all babies born in Maricopa County and ten percent of all births in the state (Exhibit 5.6).

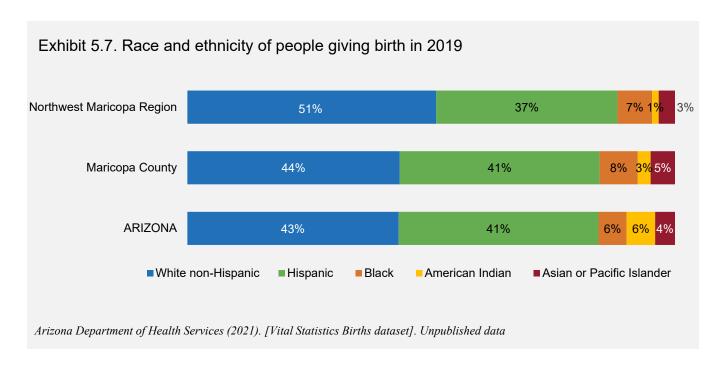
Exhibit 5.6. Live births during calendar year 2019, by resident's place of Residence

	Total number of births to Arizona-residents in 2019
Northwest Maricopa Region	8,055
Maricopa County	50,998
ARIZONA	79,183

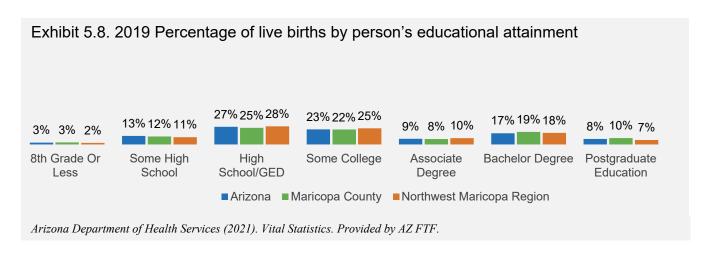
Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data

#### **Characteristics of People Giving Birth**

Of more than 8,000 people who gave birth in the Northwest Maricopa Region in 2019, 51% were non-Hispanic white, 37% were Hispanic or Latina, seven percent were Black or African American, three percent were Asian or Pacific Islander, and one percent were American Indian or Alaska Native (Exhibit 5.7). Compared to those giving birth across Maricopa County and the state as a whole, people in the Northwest Maricopa Region were more likely to be white, non-Hispanic, and less likely to be Hispanic or Latina or Native American.



Those who gave birth in the Northwest Maricopa Region had a slightly higher level of educational attainment (60% had some education beyond high school) than their counterparts in the state (57% posthigh school, Exhibit 5.8).



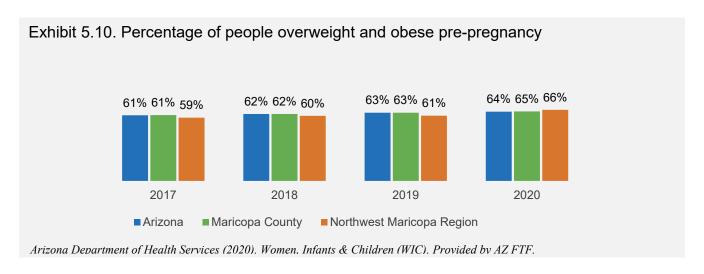
The population of those who gave birth in the Northwest Maricopa Region was similar to their counterparts across the county and state on other attributes. About five percent were in their teens (5% county, 6% statewide, Exhibit 5.9). In the Northwest Maricopa Region, just less than half of births (49%) were to people relying on AHCCCS or Indian Health Service (IHS) coverage, which was similar to the county (46%) and statewide (50%) percentages. In addition, a similar proportion of those who gave birth in Northwest Maricopa Region reported tobacco use during pregnancy (4%) compared to the statewide (4%) and county (3%) proportions (Exhibit 5.9).

Exhibit 5.9. Other characteristics of people giving birth in 2019

	Person was 19 or younger	Person was 17 or younger	Birth was covered by AHCCCS or Indian Health	Tobacco use during pregnancy
Northwest Maricopa Region	5%	1%	49%	4%
Maricopa County	5%	1%	46%	3%
ARIZONA	6%	1%	50%	4%

Arizona Department of Health Services (2021). Vital Statistics. Provided by AZ FTF.

Another aspect of maternal health that is linked to both birth outcomes and a child's subsequent health is maternal obesity. In the Northwest Maricopa Region, and the state as a whole, about 65% of people participating in WIC reported being overweight or obese pre-pregnancy in 2020 (Exhibit 5.10). The rate of people being overweight or obese pre-pregnancy has steadily increased from 59% in 2017 to 66% in 2020. Families participating in WIC are likely opting for less expensive food options which often tend to be less healthy as well.



#### **Prenatal Care**

Research suggests that a lack of prenatal care is associated with many negative health issues for both the parent and the child.<sup>66</sup> Research also shows that children of people who did not obtain prenatal care were three times more likely to have a low birth weight and five times more likely to experience fatal outcomes than those born to people who did receive prenatal care. <sup>67</sup> In addition, studies show that women who are at the highest risk of not receiving prenatal care are people younger than 19 years old and single people. <sup>68,69</sup> Educational attainment has also been associated with people receiving prenatal care, such that the higher a person's educational attainment, the more likely they are to seek prenatal care. 70 It is important that people seek and receive prenatal care at an early stage in their pregnancy so physicians can treat and prevent any health issues that may occur. 71

HP 2030 aims to bring the proportion of pregnant people who receive early and adequate prenatal care to 80.5%. <sup>72</sup> In 2019 in the Northwest Maricopa Region, the percentage of people who began prenatal care in the first trimester was 74%, which is about six percentage points lower than the HP goal but higher than the state proportion (69%, Exhibit 5.11). In 2019, only one percent of people did not receive prenatal care which is lower the proportion in the state (3%) and the county (2%, Exhibit 5.11).

Exhibit 5.11. Live births during calendar year 2019, by number of prenatal visits

	No visits	1 to 4 visits	5 to 8 visits	9 to 12 visits	13 or more visits	Percent of births with fewer than five prenatal care visits	Percent of births with prenatal care begun in first trimester
Northwest Maricopa Region	1%	4%	16%	48%	29%	5%	74%
Maricopa County	2%	4%	16%	45%	31%	6%	72%
ARIZONA	3%	6%	18%	43%	29%	8%	69%

Arizona Department of Health Services (2021). Vital Statistics. Provided by AZ FTF.

<sup>66</sup> Prenatal Care Effects Felt Long After Birth. (n.d.). Retrieved from http://toosmall.org/blog/prenatal-care-effects-felt-long-after-birth <sup>67</sup> Womens Health (n.d.). Prenatal care fact sheet. Retrieved from https://www.womenshealth.gov/publications/our-publications/factsheet/prenatal-care.html#b

<sup>&</sup>lt;sup>68</sup> Center for Disease Control and Prevention (n.d). Vital Statistics Online. Retrieved from http://www.cdc.gov/nchs/data access/vitalstatsonline.htm

<sup>&</sup>lt;sup>69</sup> Institute of Medicine (US) Committee to Study Outreach for Prenatal Care; Brown SS, editor. Prenatal Care: Reaching Mothers, Reaching Infants. Washington (DC): National Academies Press (US); 1988. Chapter 1, Who Obtains Insufficient Prenatal Care? Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK217693/

<sup>&</sup>lt;sup>70</sup> National Center for Health Statistics (1994). Vital and Health Statistics: Data from the National Vital Statistics System. Retrieved from https://books.google.com/books?id=zlFPAQAAIAAJ&pg=RA2-

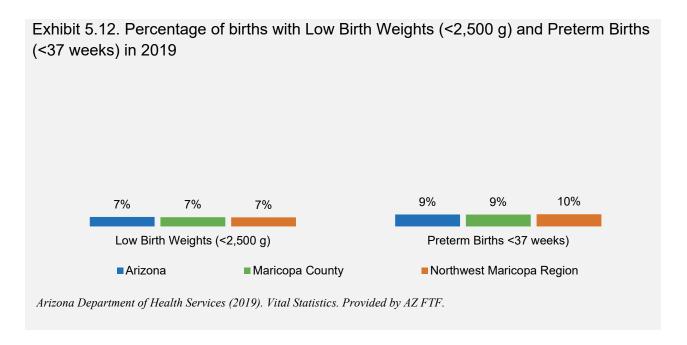
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<sup>71</sup> Womens Health (n.d.). Prenatal care fact sheet. Retrieved from https://www.womenshealth.gov/publications/our-publications/factsheet/prenatal-care.html#b

<sup>&</sup>lt;sup>72</sup> Healthy People 2030. About Health People Retrieved from https://health.gov/healthypeople/objectives-and-data/browseobjectives/pregnancy-and-childbirth/increase-proportion-pregnant-women-who-receive-early-and-adequate-prenatal-care-mich-08

#### **Birth Outcomes**

With regard to perinatal health, babies from the Northwest Maricopa Region fared similarly to babies born statewide. In the region in 2019, seven percent of babies were low birth weight, compared to seven percent across the state. The percent of premature births was also similar to the region and state at ten percent (Exhibit 5.12). Healthy People 2030 sets a goal for fewer than 9.4% of babies born preterm, meaning that the Northwest Maricopa Region has not reached the Healthy People 2030 goal for preterm births.



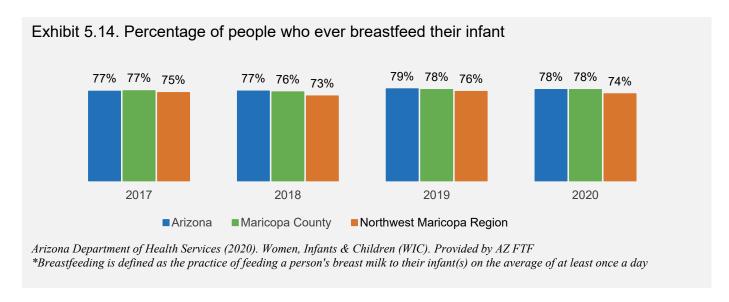
The percentage of newborns admitted to the NICU in the region (7%) was comparable to that across the county or state (7% for county and 8% for state, Exhibit 5.13).

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Exhibit 5.13.	VIII. 1 I V	admicaiana
	13111	4011115510115

	Newborns admitted to intensive care unit
Northwest Maricopa Region	7%
Maricopa County	7%
ARIZONA	8%

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

The American Academy of Pediatrics recommends that people breastfeed for the first six months after giving birth. 73 Breast milk has antibodies that prevent babies from getting ill and it has been shown to decrease the likelihood of babies becoming obese. 74 In the Northwest Maricopa Region, the percentage of people participating in WIC who ever breastfed their infant on average at least once per day decreased from 2017 to 2020 by one percentage point (75% to 74%). In 2020, this percentage was four percentage points lower than the state and county (78% for both, Exhibit 5.14).



### **Obesity**

Obesity has been a concern in the US due to associated health outcomes, such as higher risks for diabetes, cancer, and heart disease. 75 Diabetes has also been associated with many negative health complications such as blindness, kidney failure, and amputation of limbs. <sup>76</sup>

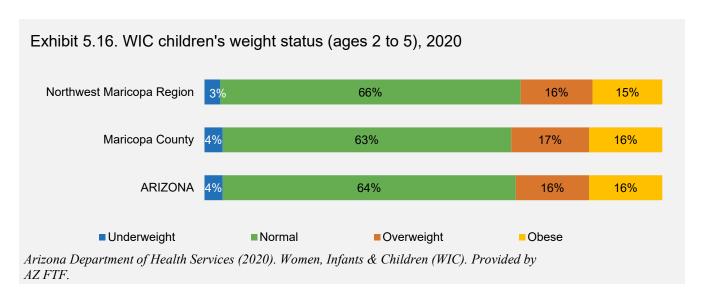
In the Northwest Maricopa Region, the percentage of children ages 2-5 participating in WIC that were obese or overweight was 31% in 2020. This proportion was slightly lower than corresponding proportions in Maricopa County (33%) and Arizona (32%). Across the region, state and county, about two thirds of children ages 2-5 in WIC are considered to be normal weight (Exhibit 5.16).

<sup>&</sup>lt;sup>73</sup> American Academy of Pediatrics (2012). Breastfeeding and the Use of Human Milk. Retrieved from http://pediatrics.aappublications.org/content/129/3/e827.full#content-block

<sup>&</sup>lt;sup>74</sup> Office on Women's Health (2014). Why breastfeeding is important. Retrieved from https://www.womenshealth.gov/breastfeeding/breastfeeding-benefits.html

<sup>&</sup>lt;sup>75</sup> Center for Disease Control and Prevention. (n.d.). Adult Obesity Facts. Retrieved from https://www.cdc.gov/obesity/data/adult.html

<sup>&</sup>lt;sup>76</sup> Chronic Disease Prevention and Health Promotion. (n.d.). Diabetes At A Glance Reports. Retrieved from http://www.cdc.gov/chronicdisease/resources/publications/aag/diabetes.htm



The proportion of children ages 2-5 in WIC that are obese or overweight increased between 2017 and 2020, increasing from 28% in 2017 to 31% in 2020 (Exhibit 5.17). This pattern is similar throughout the county and state.

Exhibit 5.17. WIC children's obesity and overweight rates (ages 2 to 5), 2017 to 2020

	Childhood rate, 2017	Childhood rate, 2018	Childhood rate, 2019	Childhood rate, 2020	Percentage change from 2017 to 2020
Northwest Maricopa Region	28%	30%	29%	31%	+3%
Maricopa County	30%	31%	31%	33%	+3%
ARIZONA	30%	30%	31%	32%	+2%

Arizona Department of Health Services (2020). Women, Infants & Children (WIC). Provided by AZ FTF...

#### **Immunizations**

Routine childhood vaccinations protect children from many illnesses, including measles, mumps, polio, and whooping cough, which are all severe and potentially fatal to young children.<sup>77</sup> Receiving timely vaccinations not only protects the child who receives them, but protects the community by reducing the likelihood of disease spread. <sup>78</sup> In the Northwest Maricopa Region in 2020, high percentages of children in child care (Exhibit 5.18) and kindergarten (Exhibit 5.19) received all childhood vaccines, with six percent or fewer claiming exemptions for religious or medical reasons. In the region, 88% or more children received recommended doses of each vaccine, at rates similar to countywide and statewide rates.

Exhibit 5.18. Vaccination rates and exemption rates for children in childcare

	Students enrolled	Four or more DTAP	Three or more Polio	Two or more MMR	Three or more HIB	Two Hep A	Three or more Hep B	One or more Varicella	Religious exemption	Medical exemption
Northwest Maricopa Region	9,796	90%	92%	91%	92%	88%	91%	93%	6%	0.3%
Maricopa County	57,253	91%	92%	92%	93%	87%	92%	92%	6%	0.5%
ARIZONA	85,805	92%	93%	93%	93%	85%	92%	93%	5%	0.4%

Arizona Department of Health Services (2020). Immunization Data Reports. Provided by AZ FTF.

Exhibit 5.19. Vaccination rates and exemption rates for children in kindergarten

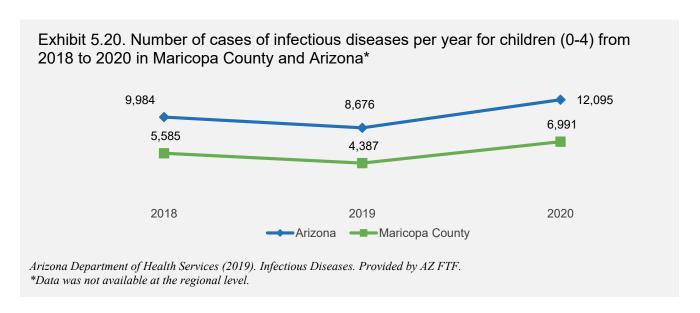
	Students enrolled	Four or more DTAP	DTAP Exempt	Three or more Polio	Polio Exempt	Two or more MMR	MMR Exempt	Three or more Hep B	Hep B Exempt	One or more Varicella	Varicella Exempt
Northwest Maricopa Region	9,233	93%	5%	94%	5%	93%	5%	95%	5%	96%	4%
Maricopa County	54,687	93%	5%	93%	5%	93%	5%	94%	5%	95%	4%
ARIZÓNA	330,412	93%	5%	94%	5%	93%	5%	95%	4%	96%	4%

Arizona Department of Health Services (2020). Immunization Data Reports. Provided by AZ FTF.

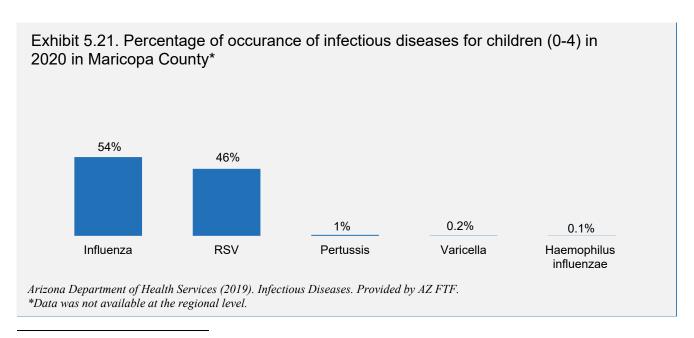
<sup>&</sup>lt;sup>77</sup> Basic Vaccines (2016). Importance of Vaccines. Retrieved from http://www.vaccineinformation.org/vaccines-save-lives/

<sup>&</sup>lt;sup>78</sup> U.S Department of Health and Human Services (2016). Community Immunity. Retrieved from http://www.health.ny.gov/prevention/immunization/vaccine\_safety/

The number of infectious disease cases per year for children less than five years of age in Maricopa County increased from 5,585 cases in 2018 to 6,991 cases in 2020 (Exhibit 5.20). Like Maricopa County, Arizona experienced an increase of infectious diseases from 2018 to 2020.



As seen in Exhibit 5.21, the most common infectious diseases in young children in Maricopa County in 2020 were influenza (3,741 cases; 54%) and respiratory syncytial virus (3,183 cases; 46%). Though influenza cases can be reduced by the flu shot, influenzas cause the most hospitalizations for young children amongst vaccine-preventable diseases.<sup>79</sup>



<sup>&</sup>lt;sup>79</sup> Centers for Disease Control and Prevention (n.d.) Information for Schools & Childcare Providers. Retrieved from: https://www.cdc.gov/flu/school/index.htm#:~:text=Influenza%20causes%20more%20hospitalizations%20among,seasonal%20influenza%20vaccine%20each%20year

# **CHILD HEALTH HIGHLIGHTS**

The diversity of the Northwest Maricopa Region presents both assets and challenges for supporting the health of pregnant women, young children, and their families. The percentage of young children without health insurance is similar to the state and county, though variable by area. Additionally, most women are receiving prenatal care and many begun their care in the first trimester. However, the region, just like the state and county has an increasing percentage of children that are overweight or obese.

Below are key data trends that highlight the health assets, needs, and data-driven considerations for the region. The considerations provided below do not represent comprehensive approaches and methods for tackling the needs and assets in the region. Instead, the considerations represent possible approaches that early childhood system partners, including FTF, could take to address needs and assets in the region, as conceptualized by the authors of this report.

Assets	Considerations
Those who gave birth in 2019 in the Northwest	Consider supporting programs for new parents, such
Maricopa Region had a slightly higher level of	as peer support or mentoring programs, to support
educational attainment (59% had some education	each other and share knowledge and attitudes
beyond high school) than all mothers in the state (57%	around the importance of education, targeting teen
post-high school).	parents or new parents without a high school degree.
According to the Arizona Department of Health	Promote the importance of early prenatal care and
Services, almost all pregnant women (95%) are	provide education on the impact of prenatal care on
receiving some prenatal care.	the parent and child's future well-being.

Needs	Considerations
The percentage of children ages 2 to 5 enrolled in WIC who are overweight or obese increased from 2017 (28%) to 2020 (31%).	Address root causes of obesity in low-income communities by pursuing improved neighborhood safety, opportunities for outdoor activity, and better access to low-cost healthy food options. Seek ideas from and partnership with community members to create culturally meaningful, lasting change.
Within the Northwest Maricopa Region, seven percent of children ages 0 to 5 do not have health insurance. Some sub-regions (i.e., Wickenburg and Morristown) have higher rates of uninsured children.	Provide low-income families with multi-lingual information and support in enrolling in Arizona Health Care Cost Containment System.



**FAMILY SUPPORT** 

## **FAMILY SUPPORT**

## **Why it Matters**

The first five years of life have a significant impact on children's intellectual, social, and emotional development, and research shows that parents have a profound impact on their child's development during this time. 80 Support for young families is an essential piece of the holistic efforts around kindergarten readiness and long-term success for children. First Things First supports families through home visitation and parent outreach and education programs. Evidence-based Parenting Education and supports to improve parenting practices can reduce stressors and lead to enriched child development and reduction of removals of children from their homes.

Given the importance of the first years of life on children's development and the role that parents can play, it is crucial for parents to receive support and access to programs that provide tools and knowledge about their child's needs and effective parenting techniques. Providing more knowledge about parenting and child development supports parents in improving their parenting practices and providing their

children with the experiences they need to succeed in kindergarten and beyond. 81 Public assistance programs in the United States can play an important role in providing adequate socioeconomic conditions for families to raise their children. The Supplemental Nutrition Assistance Program (SNAP) has been associated with helping families move out of poverty, guarantee food security, and improve child health and school performance. Research has also shown that the Temporary Assistance to Needy Families (TANF) could prevent child maltreatment due to increased cash benefits and access that have been associated with decreased physical abuse. The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) has reduced the prevalence of child food insecurity. Further, the revisions made to the WIC food package in October 2009 have been associated with reduced maternal preeclampsia and gestational weight gain, as well as improvements in infant gestational age and birth weight. A4,85

<sup>&</sup>lt;sup>80</sup> Center for the Study of Social Policy (2013). Knowledge of Parenting and Child Development. Retrieved from http://www.cssp.org/reform/strengthening-families/2013/SF\_Knowledge-of-Parenting-and-Child-Development.pdf

<sup>81</sup> Center for the Study of Social Policy (2013). Knowledge of Parenting and Child Development. Retrieved from http://www.cssp.org/reform/strengthening-families/2013/SF Knowledge-of-Parenting-and-Child-Development.pdf

<sup>&</sup>lt;sup>82</sup> Carlson, S. Rosenbaum, D., Keith-Jennings, B., Nchako, C. (2016) SNAP works for America's Children. Center on Budget and Policy Priorities. https://www.cbpp.org/sites/default/files/atoms/files/9-29-16fa.pdf

<sup>&</sup>lt;sup>83</sup> Spencer, R., Livingston, M., Komro, K., Sroczynski, N., Rentmeester, S., Woods-Jaeger, B. (2021) Association between Temporary Assistance for Needy Families (TANF) and child maltreatment among a cohort of fragile families. Child Abuse & Neglect. Volume 120. https://doi.org/10.1016/j.chiabu.2021.105186

<sup>&</sup>lt;sup>84</sup> Kreider, B., Pepper, J., Roy, M. (2016) Identifying the effects of WIC on food insecurity among infants and children. Southern Economic Association. Volume 82 Issue 4. <a href="https://doi.org/10.1002/soej.12078">https://doi.org/10.1002/soej.12078</a>

<sup>&</sup>lt;sup>85</sup> Hamad, R., Collin, D., Baer, R., Jelliffe-Pavlowski, L. (2019) Association of revised WIC food package with perinatal and birth outcomes. https://jamanetwork.com/journals/jamapediatrics/article-abstract/2737097

Promoting a safe home environment for children is another key aspect of family support. The adverse and long-term effects of childhood trauma have become well-documented. For example, children who are exposed to domestic violence or experience abuse or neglect are at increased risk of depression, anxiety, physical aggression, and behavior problems. 6 Children who are exposed to opioid misuse are more likely to experience mental health problems, drug use, accidental opioid poisoning, substance use disorder, family dissolution, foster care placement or the death of a parent due to an opioid overdose. 7 Children in foster care are particularly likely to have had trauma exposure and are more likely than other children to have poor mental and physical health. 88, 89 Understanding the impact of trauma has led to identifying opportunities to both prevent and mitigate its adverse effects. Opportunities include family support services like home visitation and parent education, as well as prioritizing out-of-home placements with family members or foster families before turning to congregate care in a residential facility.

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<sup>&</sup>lt;sup>86</sup> Evans, S. E., Davies, C., & DiLillo, D. (2008). Exposure to domestic violence: A meta-analysis of child and adolescent outcomes. Aggression and violent behavior, 13(2), 131-140.

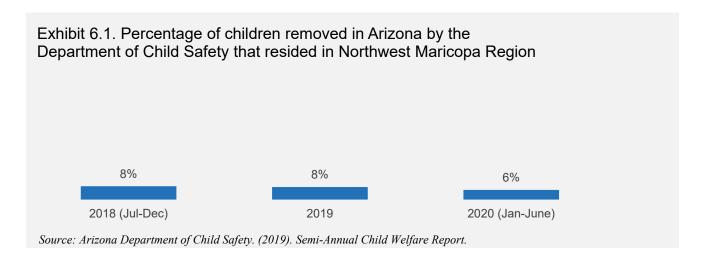
<sup>&</sup>lt;sup>87</sup> Winstanley, E., Stover, A. (2019) The impact of the opioid epidemic on children and adolescents. Clinical Therapeutics. Volume 41 Issue 9. https://doi.org/10.1016/j.clinthera.2019.06.003

 <sup>88</sup> Dorsey S, Burns BJ, Southerland DG, Cox JR, Wagner HR, Farmer EM. Prior Trauma Exposure for Youth in Treatment Foster Care. J Child Fam Stud. 2012 Oct;21(5):816-824. doi: 10.1007/s10826-011-9542-4. PMID: 23730144; PMCID: PMC3667554
 89 Turney K, Wildeman C. Mental and Physical Health of Children in Foster Care. Pediatrics. 2016 Nov;138(5):e20161118. doi: 10.1542/peds.2016-1118. Epub 2016 Oct 17. PMID: 27940775

### What the Data Tell Us

### **Child Safety and Domestic Violence**

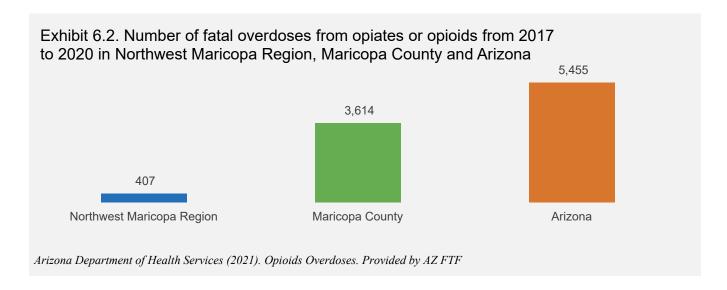
Understanding the scope of child removals in a region can help policy makers and organizations better support this vulnerable group. The percentage of child removals in Northwest Maricopa Region by the Department of Child Safety (DCS) slightly decreased from 2018 to 2020 (Exhibit 6.1). These percentages represent the percentage of removed children in Arizona that were removed in Northwest Maricopa Region.



#### **Substance Use**

In 2017, the U.S. Department of Health and Human Services declared a public health emergency to address the national opioid crisis. <sup>90</sup> While substance abuse is risky for users themselves, parents who misuse substances also expose their children to risks. Specifically, when parents use opiates or opioids, they are more likely to expose their children to maltreatment and neglect. <sup>91</sup> Children in these situations are more likely to suffer later mental health disorders, their own substance abuse, and post-traumatic stress disorder. <sup>92</sup>

From 2017 to 2020, 407 fatal opioid overdoses occurred in the Northwest Maricopa Region, totaling seven percent of opioid-related deaths in Arizona (Exhibit 6.2).



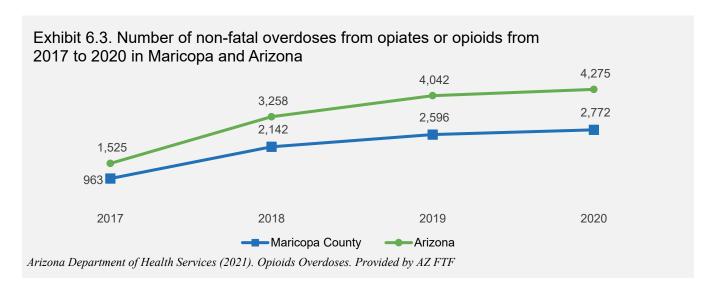
<sup>&</sup>lt;sup>90</sup> U.S. Department of Health and Human Services (2017) HHS Acting Secretary Declares Public Health Emergency to Address National Opioid Crisis. Retrieved from https://public3.pagefreezer.com/browse/HHS.gov/31-12-

<sup>2020</sup>T08:51/https://www.hhs.gov/about/news/2017/10/26/hhs-acting-secretary-declares-public-health-emergency-address-national-opioid-crisis.html

<sup>&</sup>lt;sup>91</sup> Child Welfare Information Gateway (n.d.) The Opioid Crisis. Retrieved from https://www.childwelfare.gov/topics/systemwide/bhw/impact-substance/opioid-crisis/

<sup>&</sup>lt;sup>92</sup> American Society for the Positive Care of Children (n.d.) The Opioid Crisis and the Effect on Children. Retrieved from https://americanspcc.org/the-opioid-crisis-and-the-effect-on-children/

In both Maricopa County and Arizona, the number of non-fatal overdoses from opiates or opioids more than doubled from 2017 to 2020 (Exhibit 6.3). In Maricopa County, the number of non-fatal overdoses drastically increased by 187% from 963 in 2017 to 2,772 in 2020. This trend was similar in Arizona with a 180% increase of non-fatal overdoes from 2017 to 2020.



#### **Services to Help Families**

Numerous federal and local programs and services aim to provide families with food security, including the Supplemental Nutrition Assistance Program (SNAP); Temporary Assistance for Needy Families (TANF); Women, Infants & Children (WIC); National School Lunch Program (NSLP); Child and Adult Care Food Program (CACFP); Summer Food Program (SFP); and free and reduced priced lunch programs for children in schools.

Despite the prevalence of these programs, the number of children and families receiving assistance in recent years has decreased. Federal programs such as SNAP and TANF shrank from 2017 to 2020 despite widespread job loss and increasing number of families living in poverty during the COVID-19 pandemic. 93 Exhibit 6.4 and Exhibit 6.6 show how the number of children and families receiving assistance has decreased in recent years.

For SNAP benefits, the percentage that families and children that received benefits decreased by 17% in Northwest Maricopa Region from 2017 to 2020. As of 2020, the program supported approximately 19,500 children and 13,000 families annually in the Northwest Maricopa Region. In 2020, most young children enrolled in SNAP were white (70%), over a third were Hispanic/Latino (37%), and about one of five were African American (19%, Exhibit 6.5).94

<sup>93</sup> Center on Budget and Policy Priorities (n.d.) Tracking the COVID-19 Economy's Effects on Food, Housing, and Employment Hardships. Retrieved from https://www.cbpp.org/research/poverty-and-inequality/tracking-the-covid-19-economys-effects-on-foodhousing-and

<sup>94</sup> Respondents were allowed to select more than one response; thus, the total is more than 100%.

Exhibit 6.4. Numbers of young children (ages 0 to 5) receiving SNAP benefits, 2017 to 2020

	FY 2017	F7 2018	FY 2019	FY 2020	Change from 2017 to 2020
Northwest Maricopa Region	23,478	21,739	20,135	19,504	-17%
Maricopa County	142,724	131,473	120,427	113,174	-21%
ARIZONA	247,414	229,275	211,814	198,961	-20%

Arizona Department of Economic Security (2020). Supplemental Nutrition Assistance Program (SNAP).

Exhibit 6.5. Young children (0-5) enrolled in SNAP in 2020 by race/ethnicity in Northwest Maricopa Region 70% 37% 19% 11% 2% 1% 1% White Race Other or American Indian Hispanic/Latino African Asian Native Hawaiian American Undetermined Arizona Department of Economic Security (2020). Supplemental Nutrition Assistance Program (SNAP).

Exhibit 6.6. Numbers of families receiving SNAP benefits, 2017 to 2020

	FY 2017	F7 2018	FY 2019	FY 2020	Change from 2017 to 2020
Northwest Maricopa Region	15,494	14,335	13,273	12,839	-17%
Maricopa County	93,992	86,352	78,980	74,572	-21%
ARIZONA	164,092	151,816	140,056	132,466	-19%

Arizona Department of Economic Security (2020). Supplemental Nutrition Assistance Program (SNAP).

Similar to SNAP benefits, the number of children and families receiving TANF benefits decreased from 2017 to 2020 in Northwest Maricopa Region, Maricopa County and Arizona (Exhibits 6.7 and 6.8). In 2020, approximately 900 families and 1,300 young children received TANF benefits. TANF benefits can be the primary cash assistance program for families with low incomes. Some research has raised a criticism that TANF does a poor job in providing enough assistance to Hispanic/Latino and African American families, especially those most impacted by the COVID-19 pandemic. In the Northwest Maricopa Region, in 2020, most of the children that received TANF

<sup>&</sup>lt;sup>95</sup> U.S. Department of Health & Human Services (n.d.) Office of Family Assistance. Temporary Assistance for Needy Families (TANF). Retrieved from: https://www.acf.hhs.gov/ofa/programs/temporary-assistance-needy-families-tanf

<sup>&</sup>lt;sup>96</sup> Safawi, A., Reyes, C., (2021) States must continue recent momentum to further improve TANF benefit levels. Center on Budget and Policy Priorities. Retrieved from https://www.cbpp.org/research/family-income-support/tanf-benefits-still-too-low-to-help-families-especially-black

benefits identified as white (63%), while others identified as Hispanic/Latino (29%) or African American (29%, Exhibit 6.9). 97

Exhibit 6.7. Numbers of families receiving TANF benefits, 2017 to 2020

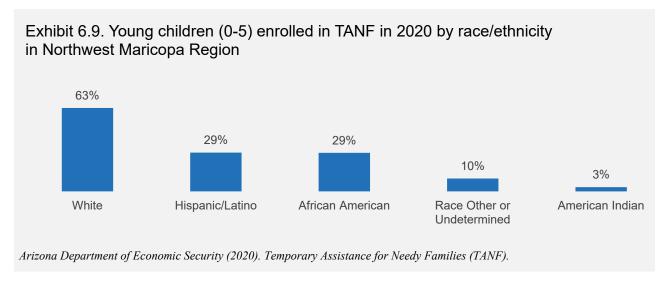
	FY 2017	F7 2018	FY 2019	FY 2020	Change from 2017 to 2020
Northwest Maricopa Region	1,204	1,046	893	917	-24%
Maricopa County	6,873	5,745	5,063	5,300	-23%
ARIZONA	12,315	10,538	9,360	9,947	-19%

Arizona Department of Economic Security (2020). Temporary Assistance for Needy Families (TANF).

Exhibit 6.8. Numbers of young children (ages 0 to 5) receiving TANF benefits, 2017 to 2020

	FY 2017	F7 2018	FY 2019	FY 2020	Change from 2017 to 2020
Northwest Maricopa Region	1,689	1,456	1,247	1,280	-25%
Maricopa County	9,696	8,017	7,103	7,452	-23%
ARIZONA	17,143	14,659	13,029	13,747	-20%

Arizona Department of Economic Security (2020). Temporary Assistance for Needy Families (TANF).



Due to mandatory pandemic-related school closures in 2020, the Arizona Department of Economic Security, the US Department of Agriculture Food and Nutrition Service, and the Arizona Department of Education issued Pandemic Electronic Benefit Transfer (P-EBT) benefits to SNAP households and non-SNAP households with children eligible for free and reduced-price school meals. <sup>98</sup> Enrolled families were given a pre-loaded EBT card to purchase groceries. The number of families with children 0 to 5 years old that were enrolled in P-EBT from March 2021 to May 2021 decreased by about 18% to 19% across the Northwest Maricopa Region, Maricopa County and Arizona. Although the number of enrolled families decreased, in May 2021, P-EBT was able to provide financial relief to 3,060 families with

<sup>&</sup>lt;sup>97</sup> Respondents were allowed to select more than one response; thus, the total is more than 100%.

<sup>&</sup>lt;sup>98</sup> Arizona Department of Economic Security (n.d.) Arizona P-EBT Benefits. Retrieved from <a href="https://des.az.gov/services/basic-needs/food-assistance/other-food-programs/arizona-p-ebt-benefits">https://des.az.gov/services/basic-needs/food-assistance/other-food-programs/arizona-p-ebt-benefits</a>

young children in Northwest Maricopa Region (Exhibit 6.10). Families with young children accounted for eight percent of the families enrolled in P-EBT from March to May 2021.

Exhibit 6.10. Number of families with children 0-5 enrolled in P-EBT, March 2021 to May 2021

	March 2021	April 2021	May 2021	Change from March 2021 to May 2021
Northwest Maricopa Region	3,717	3,378	3,060	-18%
Maricopa County	23,577	21,438	19,422	-18%
Arizona	36,971	33,431	30,066	-19%

Arizona Department of Economic Security (2021). EBT Enrollment.

Through federal grants, WIC provides nutrition, education and breastfeeding support services, supplemental nutritious foods and referrals to health and social services for women, infants, and children under five years old. In 2020 in the Northwest Maricopa Region, WIC served a total of 26345,538 women (n=6,464), infants (n=7,343), and children (n=12,538). Within the Northwest Maricopa Region, many of the WIC enrollees resided in Glendale, Peoria or Surprise (Exhibit 6.11).

Exhibit 6.11. Number of Women, Infants and Children Enrolled in the WIC program during 2020

	Total	Women	Infants	Children
Northwest Maricopa Region	26,345	6,464	7,343	12,538
Aguila	130	30	29	71
El Mirage	2,346	568	638	1,140
Glendale	14,437	3,619	4,041	6,777
Morristown	46	13	15	18
Peoria	4,495	1,088	1,295	2,112
Sun City	195	46	60	89
Sun City West	0	-	-	-
Surprise	3,656	866	994	1,796
Waddell	194	37	44	113
Wickenburg	218	51	58	109
Wittmann	242	57	65	120
Youngtown	376	87	101	188
Maricopa County	155,754	38,545	43,050	74,159
ARIZONA	256,733	63,111	70,242	123,380

Arizona Department of Health Services (2020). Women, Infants & Children (WIC). Provided by AZ FTF.

The WIC enrollment for children under 5 years old decreased from 2017 (40% of children under five) to 2020 (36% of children under five) in the Northwest Maricopa Region (Exhibit 6.12).

Exhibit 6.12. Infants and children (ages 0 to 4) enrolled in the WIC program as a percentage of the population, 2017 to 2020

	Number of children (ages 0-4) in the 2010 US Census	perce childre	nber and ntage of n (0 to 4) ed, 2017	perce childre	nber and entage of n (0 to 4) ed, 2018	perce childre	nber and entage of n (0 to 4) ed, 2019	percen children	per and tage of (0 to 4) d, 2020
Northwest Maricopa Region	55,078	21,834	40%	21,133	38%	20,340	37%	19,881	36%
Maricopa County	339,217	137,050	40%	130,101	38%	122,607	36%	117,209	36%
ARIZONA	546,609	221,387	41%	211,732	39%	201,644	37%	193,622	37%

Arizona Department of Health Services (2020). Women, Infants & Children (WIC). Provided by AZ FTF.

Exhibit 6.13 provides a single month snapshot of participation in the program in November 2020; 89% of women, 94% of infants, and 89% of children who were enrolled in WIC in the region claimed their benefits in the month of November. There are some differences by sub-region on participation rates: the highest rates of participation included those enrolled in Aguila (94%) and Waddell (94%) and lowest in Wickenburg (85%). Those who are enrolled in WIC may not participate due to logistical barriers, such as job conflicts, lack of transportation, not enough time to wait at WIC appointments, and lack of child care. <sup>99</sup> Maricopa County WIC streamlined their services with an electronic portal where participants can make appointments and view their benefits to help enrolled participants claim their benefits. <sup>100</sup> This system may explain the high participation rate within Maricopa County and the Northwest Maricopa Region.

Exhibit 6.13. WIC participation rates during November 2020

	Total	Women	Infants	Children
Northwest Maricopa Region	90%	89%	94%	89%
Aguila	94%	93%	100%	93%
El Mirage	92%	91%	97%	91%
Glendale	89%	89%	93%	88%
Morristown	93%	100%	91%	91%
Peoria	90%	87%	95%	89%
Sun City	88%	85%	92%	88%
Sun City West	-	-	-	-
Surprise	90%	87%	92%	91%

<sup>&</sup>lt;sup>99</sup> Whaley, S. E., Martinez, C. E., Paolicelli, C., Ritchie, L. D., & Weinfield, N. S. (2020). Predictors of WIC participation through 2 years of age. Journal of Nutrition Education and Behavior, 52(7), 672-679.

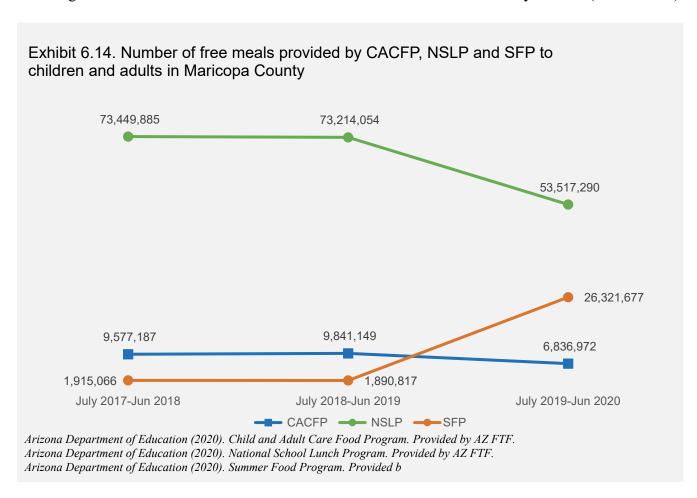
<sup>&</sup>lt;sup>100</sup> Center on Budget and Policy Priorities (2021). WIC Case Study: Maricopa County, Arizona. Retrieved from https://www.cbpp.org/sites/default/files/atoms/files/8-30-19fa-casestudies-maricopa-county.pdf

	Total	Women	Infants	Children
Waddell	94%	88%	94%	96%
Wickenburg	85%	75%	93%	86%
Wittmann	92%	92%	96%	91%
Youngtown	91%	94%	90%	90%
Maricopa County	89%	89%	93%	88%
ARIZONA	89%	89%	93%	88%

Arizona Department of Health Services (2020). Women, Infants & Children (WIC). Provided by AZ FTF.

Note: The participation rate is the number of persons receiving WIC benefits during November 2020, divided by the total number of persons enrolled in the program.

Child and Adult Food Care Program (CACFP), National School Lunch Program (NSLP), Summer Food Program (SFP), and free and reduced priced lunch programs for children in schools provide food assistance to eligible families. From June 2018 to June 2020, the number of children and families receiving assistance decreased for CACFP and NSLP but increased dramatically for SFP (Exhibit 6.14).



Schools are an important part of the nutrition assistance system, especially for children experiencing food insecurity. Almost half of all public and charter school students in the Northwest Maricopa Region were eligible for free or reduced-price lunch from 2018 to 2020 (Exhibit 6.15). This is slightly lower than the statewide percentage, which has hovered about 55% to 57%. Over these three years, the proportion of students receiving free or reduced-price lunch stayed fairly constant in most school districts in the region. The school districts with the lowest rates of eligibility for free or reduced-price lunch in 2020 were Happy Valley School, Inc. (16%) and Paragon Management, Inc. (16%), while Glendale Elementary District (91%), Alhambra Elementary District (90%), and Aguila Elementary District (86%) had the highest rates of eligibility for free or reduced-price lunch. (Note that the data in Exhibit 6.15 refers only to schools located inside the Northwest Maricopa Region boundaries).

Exhibit 6.15. Proportion of students (pre-kindergarten through twelfth grade) eligible for Free or reduced-price lunch, 2018 to 2020

	2018	2019	2020
Northwest Maricopa Region Schools	50%	49%	49%
Academy of Mathematics and Science South, Inc.	NA	NA	67%
Aguila Elementary District	86%	96%	86%
Alhambra Elementary District	95%	90%	90%
Calibre Academy	43%	43%	45%
Camelback Education, Inc	86%	85%	87%
Challenge School, Inc.	21%	28%	24%
Cholla Academy	76%	76%	76%
Daisy Education Corporation dba. Sonoran Science Academy Peoria	55%	53%	52%
Deer Valley Unified District	25%	25%	26%
Desert Heights Charter Schools	30%	38%	32%
Dysart Unified District	49%	48%	46%
Edison Project	NA	46%	46%
Ethos Academy - A Challenge Foundation Academy	93%	76%	84%
Glendale Elementary District	93%	92%	91%
Glendale Union High School	65%	66%	64%
Happy Valley School, Inc.	14%	15%	16%
Heritage Elementary School	58%	56%	61%
Highland Prep	30%	34%	28%
Imagine Middle at Surprise, Inc.	32%	31%	28%
Imagine Prep Surprise, Inc.	30%	35%	34%
Kaizen Education Foundation dba Discover U Elementary School	62%	58%	78%
Legacy Traditional School – Glendale	NA	NA	26%
Morristown Elementary District	72%	72%	72%
Nadaburg Unified School District	48%	47%	47%
Paragon Management, Inc.	16%	15%	16%
Paramount Education Studies Inc	59%	54%	52%

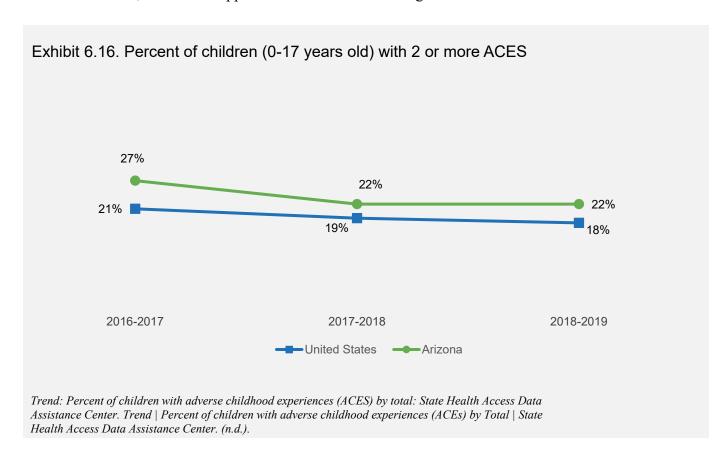
	2018	2019	2020
Pendergast Elementary District	51%	55%	72%
Peoria Unified School District	42%	41%	41%
Rosefield Charter Elementary School, Inc.	25%	23%	24%
Success School	71%	72%	66%
Tolleson Union High School District	70%	67%	73%
Washington Elementary School District	54%	52%	53%
Maricopa County Schools	54%	53%	51%
All Arizona Schools	57%	56%	55%

Arizona Department of Education (2020). [Free and reduced lunch dataset]. Unpublished data.

Note: The school-district data in this table include only the schools that are located within the Northwest Maricopa Region.

#### **Adverse Childhood Experiences**

Unfortunately, not all children are able to begin their lives in positive, stable, nurturing environments. Experiences early in life can have lasting impacts on an individual's mental and physical health. Adverse Childhood Experiences (ACES) are potentially traumatic events (such as physical or emotional abuse, alcohol and/or drug abuse in the household or emotional or physical neglect) that occurs during childhood (0-17 years old). Children who experience ACES are more at risk of later engaging in risky behaviors (such as smoking and drug use), and experiencing chronic health conditions (including diabetes, depression, alcoholism, and obesity), poorer life outcomes (such as lower educational achievement and increased lost work time), and early death. In 2018 to 2019, children (0 to 17 years old) in Arizona were more likely to have experienced two or more ACES (22%) than children nationwide (18%), a trend since at least 2016 (Exhibit 6.16). To help decrease ACES in Arizona, the Arizona ACE Consortium has been working with professionals and agencies to increase awareness around the causes, effects and opportunities around decreasing ACES in Arizona.



<sup>101</sup> Centers for Disease Control and Prevention. (2022, April 6). Fast facts: Preventing adverse childhood experiences |violence prevention|injury Center|CDC. Centers for Disease Control and Prevention. Retrieved May 25, 2022, from https://www.cdc.gov/violenceprevention/aces/fastfact.html?CDC\_AA\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fviolenceprevent ion%2Facestudy%2Ffastfact.html

<sup>102</sup> Overcoming adverse childhood experiences - azaces.org. (n.d.). Retrieved May 25, 2022, from https://azaces.org/wp-content/uploads/2019/01/ACEs.pdf

# **FAMILY SUPPORT HIGHLIGHTS**

In the Northwest Maricopa Region there is opportunity to strengthen parental knowledge about child development and engaging in positive parenting practices. With regard to opioid overdoses, in Northwest Maricopa Region, there were 407 fatal overdoses from opiates and opioids from 2017 to 2020 and the percentage of non-fatal overdoses in Maricopa County increased to 187% from 2017 to 2020. The number of families and young children receiving federal program assistance, such as SNAP, WIC and TANF, decreased from 2017 to 2020.

Below are some data trends that highlight the family support related assets, needs, and data-driven considerations for the region.

Assets	Considerations
About 90% of women, infants, and children enrolled in WIC claimed their benefits.	Continue to support women, infants and children to participate in WIC and claim their benefits, including through an ongoing effort to streamline the participation process and reduce burdens on enrollees.

Needs	Considerations
Despite increasing need for federal program assistance, enrollment in SNAP, WIC, and TANF has decreased.	Encourage grantmaking partners and stakeholders to promote federal program assistance for low-income families. Work with partners to streamline the participation process and reduce logistical burdens on participants.

# CONCLUSION

The FTF Northwest Maricopa Region has both strengths and opportunities for improvement. The region has higher employment, median income and economic resources than other parts of the state and county. Parents in the region are educated but may benefit from more information and awareness of age-appropriate child development and the impact they have on their child's readiness to learn and grow.

The region has many strong providers who are continuing to build a more efficient system of care dedicated to the well-being of the region's youngest children and their families yet could use support to overcome barriers like limited funding and competition for resources. First Things First is an asset in the region, playing a large role in funding and supporting the area's early childhood system. The following tables include the assets, needs and considerations from the eight domains presented in this report. These key findings are intended to provide information to the FTF Northwest Maricopa Regional Partnership Council and the community as a whole around the needs and assets of the region's zero to five population and their families.

Assets	Considerations
Population Characteristics	
The population of children under age six is projected to grow at a modest and steady rate, allowing the region to foresee and prepare for the growing needs of their youngest residents.	Discuss tactics for planning ahead for the projected slow, but steady, growth of the under six population and the needs that accompany that growth, such as healthcare and child care for young children.
Economic Circumstances	
The Northwest Maricopa Region has lower poverty rates than the state as a whole (20% vs 23% for young children, and 12% vs 15% for all ages).	Focus on outreach, social service resources, and efforts to address root causes of poverty on communities and populations experiencing higher rates of poverty, including the rural sub-regions.
About nine of ten children (91%) under six years old live in a household where at least one adult is in the labor force.	Target job training and employment programs to subregions with higher unemployment to help increase stability and median incomes.
Education	
In 2019, more students (86%) in the Northwest Maricopa Region graduated from high school within four years than in the county (79%) and state (79%).	Build on strong graduation rates by strengthening schools' abilities to intervene early with students struggling with absences, grades, or discipline. Increase supportive resources for vulnerable adolescents to engage in learning and overcome social and academic challenges.
Early Learning	
Quality First has been increasing the quality of child care programs in the region. For the children enrolled in a Quality First program, 87% are enrolled in a	Support Quality First efforts in the region to increase the opportunities for children to receive quality early care and

program with a three to five star rating.	education.
Child Health	
Those who gave birth in 2019 in the Northwest Maricopa Region had a slightly higher level of educational attainment (59% had some education beyond high school) than all mothers in the state (57% post-high school).  According to the Arizona Department of Health Services, almost all pregnant women (95%) are receiving some prenatal care.	Consider supporting programs for new parents, such as peer support or mentoring programs, to support each other and share knowledge and attitudes around the importance of education, targeting teen parents or new parents without a high school degree.  Promote the importance of early prenatal care and provide education on the impact of prenatal care on the parent and child's future well-being.
Family Support	o ma o rataro non zomg.
About 90% of women, infants, and children enrolled in WIC claimed their benefits.	Continue to support women, infants and children to participate in WIC and claim their benefits, including through an ongoing effort to streamline the participation process and reduce burdens on enrollees.

Needs	Considerations
Population Characteristics	
According to the American Community Survey, most of the children under six living in single-parent households or cared for by grandparents, both of which face additional barriers and difficulties when compared to two parent households, are in Wittmann and Glendale.	Support services specifically designed for single-parent and grandparent-led households and targeted in the Wittmann and Glendale sub-regions, to help them support the young children in their homes.
Economic Circumstances	
Although the poverty rate in the Northwest Marcipa Region is lower than the state, the majority of families in Aguila (100%), Wittmann (82%), and Youngtown (65%) live below the FPL.	Focus on outreach, social service resources, and efforts to address root causes of poverty on communities and populations experiencing higher rates of poverty, including the rural sub-regions.
Although nine of ten of children (0-17) in households have at least one computer with internet, fewer children in Aguila (48%) and Wickenburg (79%) have computer(s) and internet.	Partner with local agencies, businesses and stakeholders that could support technological needs for low-income families. For example, Cox has a package, Connect2Complete, that provides low-cost internet for families with K to 12 students.
Education	
AzMERIT reports from the Arizona Department of Education show that about half of third graders are not meeting proficiency standards for English Language Arts (52%) and Math (48%), especially in Glendale Elementary District and Aguila Elementary District.	Increase parent outreach, awareness, and access to high quality early education programs to support learning and school readiness.
Early Learning	
The percentage of eligible families not using DES child care subsidies has increased from 2017 (8%) to 2020 (18%).	Spread awareness about the availability of scholarships and subsidies for child care, especially for low-income families. Support structural improvements that expand the supply of high quality, affordable child care opportunities.

In some sub-regions, such as Aguila, Morristown, Wittman and Youngtown, there are two or fewer Early Care and Education centers and homes in the area.	Provide early learning resources to parents/guardians in areas with fewer Early Care and Education centers and home to help young children.Support structural improvements that expand the supply of high quality, affordable child care opportunities.
Child Health	
The percentage of children ages 2 to 5 enrolled in WIC who are overweight or obese increased from 2017 (28%) to 2020 (31%).	Address root causes of obesity in low-income communities by pursuing improved neighborhood safety, opportunities for outdoor activity, and better access to low-cost healthy food options. Seek ideas from and partnership with community members to create culturally meaningful, lasting change.
Within the Northwest Maricopa Region, seven percent of children ages 0 to 5 do not have health insurance. Some sub-regions (i.e., Wickenburg and Morristown) have higher rates of uninsured children.	Provide low-income families with multi-lingual information and support in enrolling in Arizona Health Care Cost Containment System.
Family Support	
Despite increasing need for federal program assistance, enrollment in SNAP, WIC, and TANF has decreased.	Encourage grantmaking partners and stakeholders to promote federal program assistance for low-income families. Work with partners to streamline the participation process and reduce logistical burdens on participants.