FIRST THINGS FIRST

Pima North Region



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

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

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

Acknowledgements

Pima North Regional Council wishes to thank all of the federal, state and local partners whose contributions of data, ongoing support and partnership with First Things First made this report possible. These partners included the Arizona Departments of Administration (Employment and Population Statistics), Child Safety, Economic Security, Education and Health Services; the Arizona Health Care Cost Containment System; Child Care Resource and Referral; and the U.S. Census Bureau. Local partners included Pima County Health Department and all Pima County School Districts. 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 Pima North Region.

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

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EXECUTIVE SUMMARY

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 Pima North Region

The First Things First (FTF) Pima North Region is defined as the northern portion of Pima County, not including the lands belonging to the Pascua Yaqui Tribe and the Tohono O'odham Nation. The border between the Pima North and Pima South Regions is irregular, but it primarily follows Kinney Road, Ajo Way, and Irvington Road. The region includes the city of South Tucson, the towns of Oro Valley and Marana, and the unincorporated communities of Catalina Foothills, Tangue Verde, Picture Rocks, Catalina, Avra Valley, and Nelson.

The Pima North 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:

- Kindergarten readiness;
- Third grade reading and math performance;
- Grandparents caring for grandchildren;
- Professional development of early childhood education providers;
- Prenatal care;
- Immunizations; and
- Oral health.

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 identified for the FTF Pima North Region, potential considerations, and opportunities for further exploration. The considerations provided in this report 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. According to the 2010 Census, the FTF Pima North Region has a total population of 697,919 residents. There are nearly 50,000 children under six years old in the region, accounting for seven percent of the total population in the region. Children ages zero to five make up a slightly lower proportion of the FTF Pima North Region than of the State of Arizona and Pima County. In the FTF Pima North Region, 66% of adults ages 18 and over identify as white and 25% identify as Hispanic or Latino. This compares to 63% and 25%, respectively, for Arizona. In the region, children under five are more likely to identify as Hispanic or Latino than the overall population. A small proportion of young children across the Pima North Region identify as either African American (5%), Asian or Pacific Islander (3%), or American Indian (3%). Approximately three out of four people in the region (76%) speak English as their primary language, while 18% primarily speak Spanish and an additional six percent speak a language other than English or Spanish. Seven percent of the region's population speaks English less than very well which is slightly lower than the proportion of households in Arizona (9%) and Pima County (8%). The percent of kindergarten through third grade students in the region who are English Language Learners (ELL) is eight percent, which is lower than the county and state at ten percent in 2020.

In the FTF Pima North Region, there are 171,803 households and 16% include children under six years old. Although the majority of children under six live in married-couple households, a little over onequarter live in single-female households. In 2019, over half of children under six (59%) in the Pima North Region live in two parent households. Additionally, 12% live in the same household as a grandparent. Of children 0-17 who live in the same household as a grandparent, 49% are primarily cared for by a grandparent, which is slightly less than 50% for Arizona

Population Characteristics Considerations:

- Discuss tactics for continuing to meet the needs of the under six population.
- Provide culturally appropriate services and interpretation and translation assistance for families that are more comfortable speaking in a language other than English.
- Discuss supporting services specifically designed for single-parent and grandparent-led households to help them support the young children in their homes.

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. In Pima County, the unemployment rate remained steady between 2016 and 2019. Then,s there was an increase in unemployment from 2019 to 2020 and a decrease from 2020 to 2021, though not down to pre-2020 levels. These rates are consistent with the unemployment rate for Arizona as a whole. The number of people in the labor force and the number of people employed has remained consistent in Pima County from 2016 through 2021. With the onset of the COVID-19 pandemic in March 2020, the total number of unemployment claims increased in the Pima North Region. In April 2020, the number of total claims peaked at 19,546 and gradually started to decrease. By the end of 2020, the total claims were 1,671. In the FTF Pima North Region, a third of children under age six live in a household with both parents in the labor force (34%). Most other children live in a one- or two-parent household where one parent is in the labor force, in similar percentages to Pima County and Arizona.

The median income of all families in Pima County is \$66,727, which is slightly less than the median income statewide. The median income for single-parent families is significantly less than for married couple families. In the FTF Pima North Region, 17% of the population and 25% of children under age six are living in poverty. Residents of the Pima North Region have a similar housing cost burden to residents of the state as a whole: 32% of the region's housing units require their residents to contribute more than 30% of their household income toward housing.

Economic Considerations:

- Promote supports and resources that can help subsidize child care and other expenses for single parent households.
- Consider encouraging stakeholders to target job training and employment programs to help increase employment and median incomes.
- Ensure social service resources for the Native Hawaiian and Other Pacific Islander populations.

Educational Indicators

Children's participation in early learning experiences is likely to result in higher academic performance in future years.² Almost 50% of preschool-aged children in the FTF Pima North Region (49%) are enrolled in private or public school (i.e., nursery school, preschool, or kindergarten), which is lower than Arizona (65%) and Pima County (57%).

The English Language Arts (ELA) assessment results of the AzMERIT showed that 48% of all third

¹ Brooks-Gunn, J., Duncan, G. (1997). The effects of poverty on children. The future of children, 55-71

² 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

graders in the FTF Pima North Region scored "proficient" or "highly proficient", which is comparable to both Pima County and Arizona. Slightly more third graders scored "proficient" or highly proficient" on the math assessment test in the FTF Pima North Region (52%), which is again comparable to both Pima County and the state.

Between 2017 and 2019, high school graduation rates remained steady for the FTF Pima North Region, Pima County, and Arizona. In 2019, 75% of students graduated within four-years in the region which is similar to both the county and state levels. From 2019-2020, the rate of students dropping out of high school in the Pima North Region dropped from 3.6 to 3.0. In the FTF Pima North Region, 90% of adults ages 25 and older have completed at least a high school education, which is a higher percentage than the county and state.

Educational Considerations:

- Increase awareness for parents to support each other and share knowledge and attitudes around the importance of education.
- Increase parent outreach and awareness of early education programs to support learning and school readiness from an early age.

Early Learning

Participation in early care and education programs plays an important role in preparing children for kindergarten and beyond.³ There are 684 ECE centers and homes with a capacity of 54,842 children in the FTF Pima North Region (Exhibit 4.1). Although the total licensed capacity may be high, the actual facility may not choose to enroll the total number of children they are licensed to serve. In the FTF Pima North Region, a total of 98 child care providers participated in Quality First, 76% of which were qualitylevel settings (public 3-5 stars), and 7,215 children were enrolled at a Quality First provider site in the region. Of all children enrolled at a Quality First provider site in the region, 78% were enrolled at a quality-level setting (public 3-5 stars). In 2020, 645 children received Quality First scholarships. There is a total of 128 Quality First sites across the Pima North Region. Overall, many sites (n=76) have at least a 3-star rating, which is given to programs that "meet quality standards." Moreover, 13 of the sites have a 5-star rating indicating that they are "committed to quality improvement," the highest star rating.

The median cost per day for one infant in Pima County and Pima North is approximately \$43 for licensed centers, approximately \$25 for approved family homes and \$30 for certified group homes. Compared to the median income of families in Pima County with children under 18, licensed centers comprise approximately 13% to 16% and approved family homes and certified group homes comprise about nine to eleven percent of the regional median income.

³ 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

Early Learning Considerations:

- Support Quality First efforts in the region to continue to increase the opportunities for children to receive quality early care and education experiences.
- Work with school districts to refer children identified with special needs to support services.

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.⁴ The HP 2030 target is for 92.1% of Americans to have medical insurance by 2030.5 In 2019, 91% of the population living in poverty in the Pima North Region had health insurance, leaving nine percent without health coverage. Four percent of children under age six living in poverty in this region lacked health insurance.

From 2016-2020, in the FTF Pima North Region, non-fatal unintentional injuries have led to 223 inpatient hospitalizations and 16,195 emergency department visits for children ages 0 to 4. Male children were more likely to be injured than female children, a well-documented pattern among children across the country. In 2018 and 2019 in the Pima North Region, the total number of deaths for children ages 0 to 17 remained consistent. The majority of childhood deaths in both years occurred in young children ages 0 to 4 (66% and 70%, respectively).

In 2019, Pima North Region residents gave birth to 6,919 babies, which was 67% of all babies born in Pima County and nine percent of all births in the state. HP 2030 aims to bring the proportion of pregnant women who receive early and adequate prenatal care to 80.5%. In the FTF Pima North Region, 65% of women began their prenatal care in the first trimester with 25% receiving 13 or more visits. In the region in 2019, eight percent of babies were low birth weight (Exhibit 5.20). Healthy People 2030 aims for fewer than nine percent of births to be born preterm; Pima North is slightly higher at ten percent. The percentage of newborns admitted to the NICU in the region (12%) was comparable to the county and slightly higher than the state (12% for county and 8% for state).

Child Health Considerations:

Continue to provide public education about the benefits of breastfeeding and consider supporting workplace efforts to encourage breastfeeding practices for working mothers.

⁴ Schools & Health (2016). Impact of Health on Education. Retrieved from http://www.schoolsandhealth.org/pages/Anthropometricstatusgrowth.aspx

⁵ Healthy People 2030. About Health People. Retrieved from https://health.gov/healthypeople/objectives-and-data/browseobjectives/health-care-access-and-quality/increase-proportion-people-health-insurance-ahs-01

⁶ 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

- Promote the importance of early prenatal care and provide education on the impact of prenatal care on the mother and child's future well-being.
- Work with partners to ensure access to health care for all children in the region.

Family Support

Support for young families is an essential piece of the holistic efforts around kindergarten readiness and long-term success for children. From 2017 to 2020, 457 deaths from opioid overdose occurred in the Pima North Region, totaling eight percent of opioid-related deaths in Arizona. In both Pima County and Arizona, the number of non-fatal overdoses from opiates or opioids nearly tripled from 2017 to 2020.

Numerous federal and local programs and services are aimed at providing families with food security, including Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), Special Supplemental Nutrition Program for Women, Infants, and 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 has decreased in recent years. Federal programs such as SNAP and TANF have shrunk in recent years due to the expiration of benefit increases instituted during the recession. These decreases come even as the number of families living in poverty has increased nationally. Similar to SNAP benefits, the number of children and families receiving TANF benefits decreased from 2017 to 2020 in the Pima North Region, Pima County and Arizona. In 2020, approximately 700 families and 1,000 young children received TANF benefits.

Family Support Considerations:

- Consider including substance abuse prevention resources and referrals in home visitation and parent education programs.
- Continue to provide public education about the benefits.
- Consider examining alternative strategies to support food security for children and families.

⁷ 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.^{8,9} 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. ¹⁰ 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 Pima North 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:

- Kindergarten readiness;
- Third grade reading and math performance;
- Grandparents caring for grandchildren;
- Professional development of early childhood education providers;
- Prenatal care:
- Immunizations; and
- Oral health.

Methodology

This is the eighth Needs and Assets report conducted on behalf of the FTF Pima North 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 FTF Pima North Council about the needs and

⁸ 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. Retrieved from https://link.springer.com/article/10.1007/s00127-017-1451-4

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

¹⁰ Knitzer, J. (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.

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

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.

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;
- Family support.

A systematic review designed to reveal the needs and assets of the Pima North 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, Pima County, and State of Arizona. Wherever possible, data throughout the report are provided specifically for the FTF Pima North 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 Pima North 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 FTF Pima North Region, such as more detailed data on housing or homelessness, home visiting, oral health, hearing loss 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 communitylevel 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.

In addition, as this year's regional needs and assets report comes amidst the COVID-19 pandemic, the Pima North Regional Partnership Council also solicited Harder+Company to conduct additional assessment activities to understand the effects of COVID-19 on early childhood systems in Pima North and in Pima County overall. These data are summarized in Appendix A.

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, public agencies had limited capacity to support data requests while they focused on their pandemic response, therefore some data sets could not be provided. 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. 12 Understanding how the population is changing and where it is growing allows decision makers to strategically and proactively allocate resources.

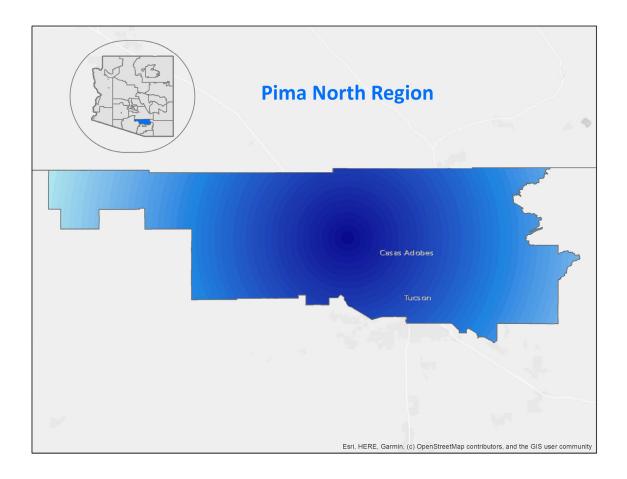
What the Data Tells Us

The First Things First (FTF) Pima North Region is defined as the northern portion of Pima County, not including the lands belonging to the Pascua Yaqui Tribe and the Tohono O'odham Nation. The border between the Pima North and Pima South Regions is irregular, but it primarily follows Kinney Road, Ajo Way, and Irvington Road. The region includes the city of South Tucson, the towns of Oro Valley and Marana, and the unincorporated communities of Catalina Foothills, Tanque Verde, Picture Rocks, Catalina, Avra Valley, and Nelson. The Pima North Region does not include the Redington area in the northeastern corner of Pima County, which is assigned to the Cochise Region. The largest city in the region is Tucson, which is the second largest city in the state and has a population of over 500,000

¹² 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. Retrieved from https://doi.org/10.1016/j.socscimed.2019.112476

residents (Exhibit 1.1). The Pima North Region is also the home of the University of Arizona, Tucson.

Exhibit 1.1. Map of the FTF Pima North Region boundaries



Population Counts and Projections

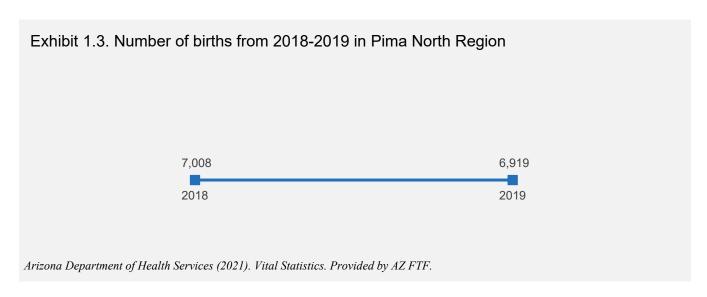
According to the 2010 Census, the FTF Pima North Region has a total population of 697,919 residents. There are nearly 50,000 children under six years old in the region, accounting for seven percent of the total population in the region (Exhibit 1.2). Children ages zero to five make up a slightly lower proportion of the FTF Pima North Region than of the State of Arizona and Pima County.

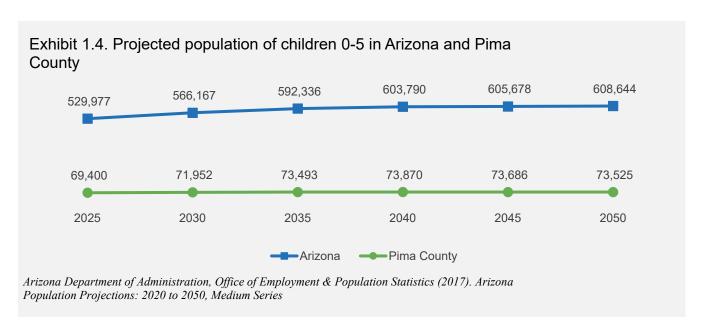
Exhibit 1.2. Population (all ages) in the 2010 Census

	All ages	Ages 0-5	Children (0-5) as a percentage of the total population
Pima North Region	697,919	48,064	6.9%
County	980,263	74,796	7.6%
Arizona	6,392,017	546,609	8.6%

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

The number of births in the FTF Pima North Region was around 7,000 per year in both 2018 and 2019 (Exhibit 1.3), accounting for about nine percent of the births in Arizona (not shown). The number of children under six in Pima County is expected to increase over the next ten years, rising to nearly 73,525 by 2050 (Exhibit 1.4). Over the same time period, the number of children under six is expected to also increase for the state as a whole.





Demographics and Language

In the FTF Pima North Region, 66% of adults ages 18 and over identify as white and 25% identify as Hispanic or Latino. This compares to 63% and 25%, respectively, for Arizona (see Exhibit 1.5). In the region, children under five are more likely to identify as Hispanic or Latino than the overall population (see Exhibit 1.6). A small proportion of young children across the Pima North Region identify as either African American (5%), Asian or Pacific Islander (3%), or American Indian (3%).

Across the region, there is considerable variation in the racial and ethnic composition of young children. For example, the vast majority of children ages 0 to 4 in the South Tucson sub-region (86%) identify as Hispanic or Latino, while 22% identify as Hispanic or Latino in the Tanque Verde-Sabino Canyon subregion.

Exhibit 1.5. Race and ethnicity of the adult population (18+) in the 2010 Census

	Number of persons (18+)	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)
Pima North Region	697,919	25%	66%	1%	3%	3%
Rural Northwest	44,324	18%	74%	1%	2%	3%
Marana	7,790	10%	64%	1%	1%	2%
Urban Northwest	89,139	18%	75%	1%	2%	3%
Catalina Foothills	27,367	10%	82%	0%	2%	5%
Catalina/Oracle Junction	17,848	10%	87%	0%	1%	1%
Central East	106,770	24%	64%	2%	5%	4%
Davis Monthan	3,638	14%	67%	1%	9%	5%
Downtown UofA	48,972	22%	64%	1%	3%	6%
Mount Lemmon	50	7%	81%	7%	0%	5%
Oro Valley	35,834	9%	86%	0%	1%	3%
South Tucson	65,160	67%	24%	3%	4%	1%
Southeast	110,849	18%	71%	1%	5%	3%
Flowing Wells	57,521	37%	53%	2%	4%	3%
Tanque Verde-Sabino Canyon	60,895	10%	83%	1%	2%	3%
West Gate Pass	37,006	45%	46%	2%	3%	3%
Pima County	754,947	29%	61%	2%	3%	3%
ARIZONA	4,763,003	25%	63%	4%	4%	3%

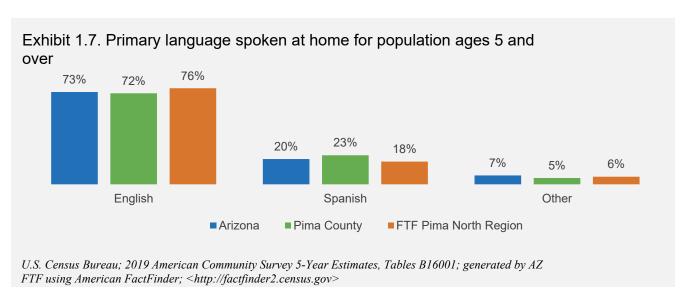
U.S. Census Bureau; 2010 Census Summary File 1; Table P11; generated by Harder+Company using American FactFinder; http://factfinder2.census.gov

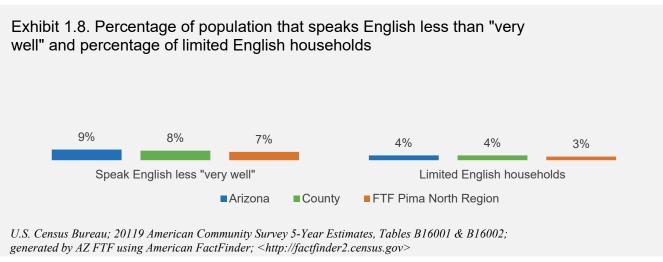
Exhibit 1.6. Race and ethnicity of children (ages 0-4) in the 2010 Census

				Children 0-4		
	Number of persons (ages 0-4)	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)
Pima North Region	40,239	47%	40%	3%	5%	3%
Rural Northwest	3,144	31%	60%	1%	2%	3%
Marana	389	27%	64%	1%	0%	3%
Urban Northwest	4,932	34%	55%	2%	3%	3%
Catalina Foothills	865	22%	60%	2%	2%	10%
Catalina/Oracle Junction	557	37%	57%	1%	3%	1%
Central East	6,966	47%	35%	3%	9%	3%
Davis Monthan	622	23%	58%	1%	8%	1%
Downtown UofA	2,043	50%	34%	4%	7%	3%
Mount Lemmon	2	0%	0%	0%	0%	1%
Oro Valley	1,334	23%	65%	0%	2%	5%
South Tucson	5,148	86%	6%	6%	4%	1%
Southeast	6,463	37%	48%	1%	6%	3%
Flowing Wells	4,113	65%	23%	5%	6%	2%
Tanque Verde-Sabino Canyon	2,189	22%	63%	1%	4%	5%
West Gates Pass	2,163	68%	22%	4%	5%	2%
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; generated by Harder+Company using American FactFinder; http://factfinder2.census.gov

Approximately three out of four (76%) people in the region speak English as their primary language, while 18% primarily speak Spanish and an additional six percent speak a language other than English or Spanish (see Exhibit 1.7). Seven percent of the region's population speaks English less than very well which is slightly lower than the proportion of households in Arizona (9%) and Pima County (8%, Exhibit 1.8). As the young population grows to be Hispanic/Latino, the cultural diversity of the region may change as well, indicating a need for more culturally responsive services.





¹³ The United States Census Bureau defines limited English speaking households as a "household in which no one 14 and over speaks English only or speaks a language other than English at home and speaks English very well."

There are slightly fewer children living with parents born outside the U.S. in the Pima North Region (23%) compared to the county (24%). The highest percentages of children living with parent(s) born outside the U.S. reside in the following sub-regions: South Tucson (40%), Flowing Wells (36%), and Catalina Foothills (35%, Exhibit 1.9).

Exhibit 1.9. Children (ages 0 to 5) living with parents born outside the U.S.

	Children (ages 0-5) living with one or two parents	Children (ages 0-5) living with one or two foreign-born parents
Pima North Region	9,761	23%
Rural Northwest	464	12%
Marana	128	27%
Urban Northwest	1,459	24%
Catalina Foothills	392	35%
Catalina/Oracle Junction	35	6%
Central East	1,861	26%
Davis Monthan	36	4%
Downtown UofA	399	25%
Mount Lemmon	-	-
Oro Valley	423	27%
South Tucson	1,617	40%
Southeast	832	11%
Flowing Wells	1,247	36%
Tanque Verde-Sabino Canyon	449	20%
West Gates Pass	419	19%
Pima County	15,666	24%
ARIZONA	126,082	25%

U.S. Census Bureau (2019). American Community Survey, 5-year estimates (2015-2019), Table B05009.

The number of kindergarten through third grade students in the region that are migrants is less than 11 students (Exhibit 1.10).

The percent of kindergarten through third grade students in the region who are English Language Learners (ELL) is eight percent, which is lower than the county and state at ten percent in 2020 (Exhibit 1.11).

Exhibit 1.10. Children in grades K to 3 that are migrants from 2018 to 2020

	Arizona	Pima County	Pima North Region
2018	662	<11	<11
2019	570	<11	<11
2020	809	<11	<11

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

Exhibit 1.11. Percentage of children in grades K to 3 that are English Language Learners from 2018 to 2020

	Arizona	Pima County	Pima North Region
2018	10%	10%	8%
2019	9%	9%	8%
2020	10%	10%	8%

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

Household Characteristics

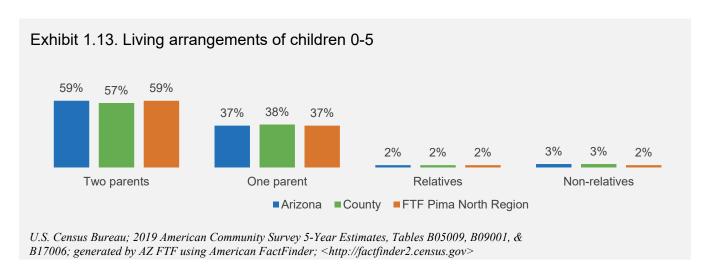
In the FTF Pima North Region, there are 171,803 households and 16% include children under six years old (see Exhibit 1.12). Although the majority of children under six live in married-couple households, a little over one-quarter live in single-female households (Exhibit 1.12).

Exhibit 1.12. Number of households and household characteristics

	Arizona	Pima County	Pima North Region
Total number of households	2,380,990	388,660	171,803
Households with children 0-5	16% (384,441)	14% (53,862)	16% (27,346)
Married-couple households with children 0-5	65% (250,217)	62% (33,220)	65% (17,754)
Single-male households with children 0-5	11% (43,485)	11% (6,119)	9% (2,357)
Single-female households with children 0-5	24% (90,739)	27% (14,523)	26% (7,235)

U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P20

In 2019, over half of children under six (59%) in the Pima North Region live in two parent households (Exhibit 1.13). Additionally, 12% live in the same household as a grandparent. The sub-regions of South Tucson and Catalina Oracle Junction have the highest percentage of children living in a grandparent's household (23% and 16%, Exhibits 1.14 and 1.15).



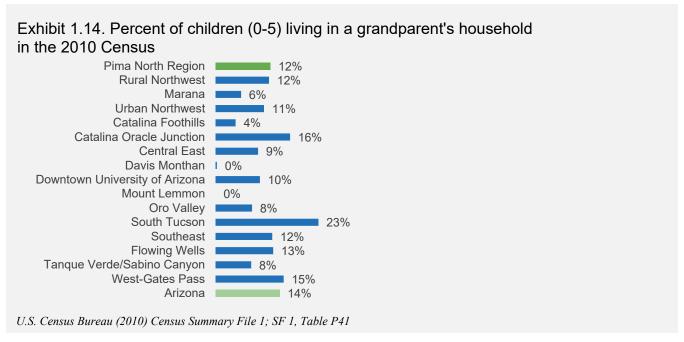
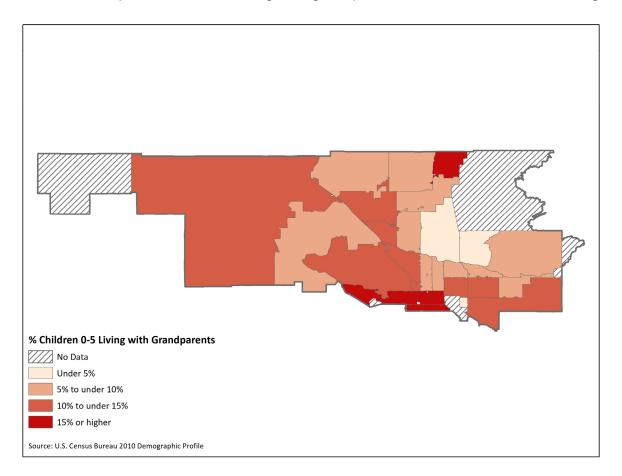


Exhibit 1.15. Map of children 0-5 living with grandparents in the FTF Pima North Region



Of children 0-17 who live in the same household as a grandparent, 49% are primarily cared for by a grandparent, which is slightly less than 50% for Arizona (Exhibit 1.16). There are several advantages to living in a mutigenerational household, including an increase in emotional well-being and grandparents serving as role models in the socialization of children. However, this also indicates that young families may not have the resources to live on their own and may be living with their elderly parents as a result. Grandparents raising their grandchildren may also require additional support due to the nontraditional family structure, changes in parenting practices since grandparents were raising their children, and the fact that many older adults live on fixed incomes and may struggle with caring for dependents.

Exhibit 1.16. 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)
Pima North Region	10,828	49%	17%
Rural Northwest	850	53%	13%
Marana	18	9%	9%
Urban Northwest	591	53%	21%
Catalina Foothills	75	38%	7%
Catalina/Oracle Junction	24	44%	25%
Central East	668	43%	22%
Davis Monthan	-	-	-
Downtown UofA	167	61%	37%
Mount Lemmon	-	-	-
Oro Valley	25	30%	11%
South Tucson	784	46%	12%
Southeast	901	46%	12%
Flowing Wells	929	65%	20%
Tanque Verde-Sabino Canyon	218	35%	29%
West Gates Pass	445	56%	12%
Pima County	20,440	50%	17%
Arizona	155,821	50%	16%

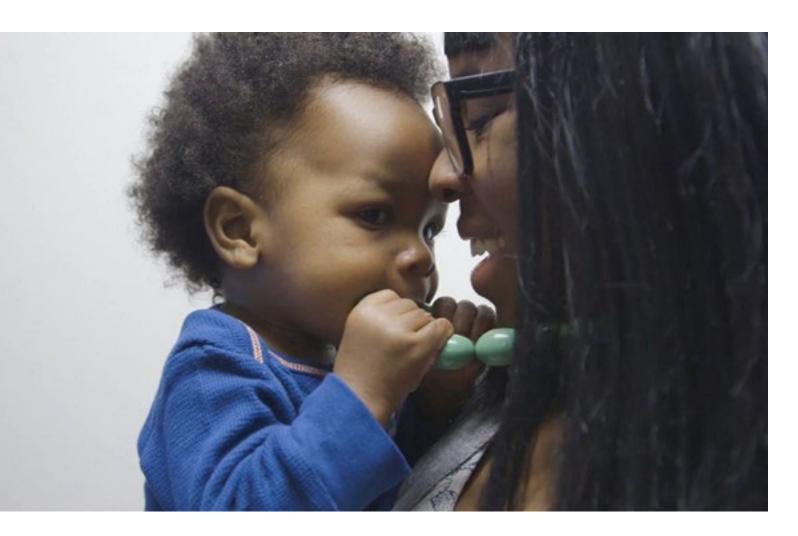
U.S. Census Bureau; 2019 American Community Survey 5-Year Estimates, Table B10002

POPULATION CHARACTERISTICS HIGHLIGHTS

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 the age of six is projected to grow at a modest and steady rate, allowing the region to prepare for the growing demands of their youngest residents.	Discuss tactics for continuing to meet the needs of the under six population.

Needs	Considerations
In the region, more children ages zero to five identify as Hispanic or Latino than adults (47% vs. 25%).	Provide culturally appropriate services and interpretation and translation assistance for families
Seven percent in the region speak English less than very well.	that are more comfortable speaking in a language other than English.
Nearly one-quarter of children under six live in single-	D: 15 15 15
female households. The sub-regions of South Tucson and Catalina Oracle Junction have the highest	Discuss supporting services specifically designed for single-parent and grandparent-led households to help
percentage of children primarily cared for by a	them support the young children in their homes.
grandparent (23% and 16%).	, ,



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 wellbeing are all impacted by a child's economic situation.¹⁴ 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. 15, 16, 17 Housing instability, which includes frequent moves, difficulty paying rent, being evicted or being homeless, is associated with worse health, academic, and social outcomes. 18 Children without housing stability often experience negative outcomes such as higher grade retention, higher high school dropout rates, and lower educational attainment as adults. 19,20 Unemployment of parents can also affect the psychological well-being of children in the long-term due to negative experiences and stressful events.²¹ 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.^{22, 23} 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.

¹⁴ Brooks-Gunn, J., Duncan, G. J. (1997). The effects of poverty on children. The future of children, 55-71.

¹⁵ Blau, D., Haskell, N., Haurin, D. (2019). Are housing characteristics experienced by children associated with their outcomes as young adults? Journal of Housing Economics, 46, 101631.

¹⁶Roy, J., Maynard, M., Weiss, E. (2008) Partnership for America's Economic Success. The Hidden Costs of the Housing Crisis. Retrieved

http://www.pewtrusts.org/~/media/legacy/uploadedfiles/www.pewtrustsorg/reports/partnership for americas economic success/paeshousi ngreportfinal1pdf.pdf

¹⁷ Clair, A. (2019). Housing: An under-explored influence on children's well-being and becoming. Child Indicators Research, 12(2), 609-

¹⁸ Sandstrom, H. & Huerta, S. (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-researchsynthesis/view/full report

²⁰ Kushel, M., Gupta, R., Gee., L., Haas, J. (2006) Housing Instability and Food Insecurity as Barriers to Health Care Among Low-Income Americans. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1525-1497.2005.00278.x/full

²¹ Nikolova, M., Nikolaev, B. (2018) How having unemployed parents affects children's future well-being. Brookings. Retrieved from https://www.brookings.edu/blog/up-front/2018/07/13/how-having-unemployed-parents-affects-childrens-future-well-being/ ²² Feeding America. Retrieved from http://www.feedingamerica.org/hunger-in-america/impact-of-hunger/child-hunger/childdevelopment.html

²³ Ke, J., Lee Ford-Jones, E. (2015) "Food Insecurity and Hunger: A Review of the Effects on Children's Health and Behaviour." Paediatrics & Child Health 20.2.89

What the DataTells Us

Employment Indicators

In Pima County, the unemployment rate remained steady between 2016 and 2019. Then, there was an increase in unemployment from 2019 to 2020 and a decrease from 2020 to 2021, though not down to pre-2020 levels. These rates are consistent with the unemployment rate for Arizona as a whole (see Exhibit 2.1). The number of people in the labor force and the number of people employed has remained consistent in Pima County from 2016 through 2021 (Exhibit 2.2).

Exhibit 2.1. Average unemployment rates from 2016 to 2021



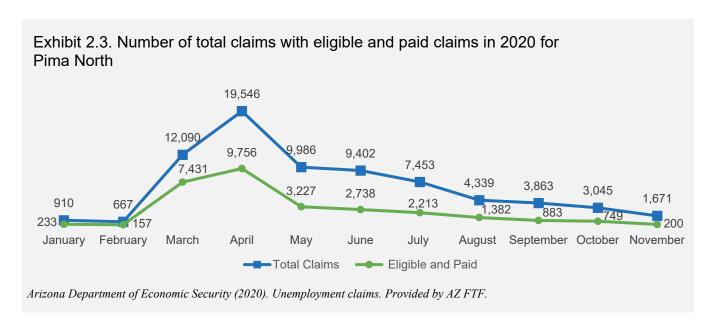
U.S. Department of Labor, Bureau of Labor Statistics (2021). Local Area Unemployment Statistics (LAUS), Arizona Office of Employment. Note: The data for 2021 goes up to September 2021.

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

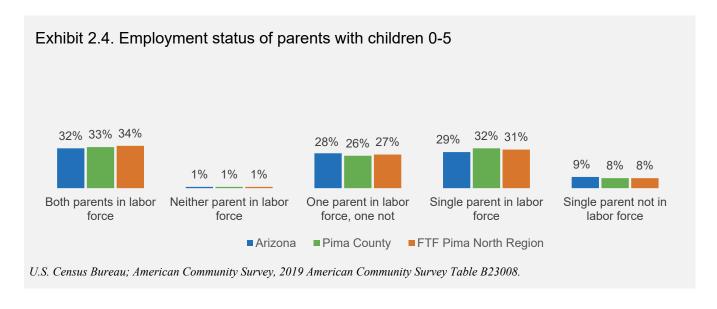


U.S. Department of Labor, Bureau of Labor Statistics (2021). Local Area Unemployment Statistics (LAUS), Arizona Office of *Employment. Note: The data for 2021 goes up to September 2021.*

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 completes and submits an application. With the onset of the COVID-19 pandemic in March 2020, the total number of unemployment claims increased in the Pima North Region. In April 2020, the number of total claims peaked at 19,546 and gradually started to decrease. By the end of 2020, the total claims were 1,671 (Exhibit 2.3).



In the FTF Pima North Region, a third of children under age six live in a household with both parents in the labor force (34%). Most other children live in a one- or two-parent household where one parent is in the labor force, in similar percentages to Pima County and Arizona (Exhibit 2.4). However, eight percent of children live with a single parent who is not in the labor force, and one percent live with two parents, neither of whom is in the labor force.



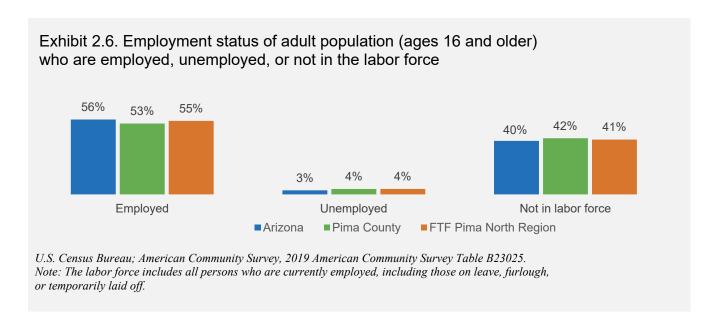
In the subregions of Pima North, Tanque Verde-Sabino Canyon has the most children under age six with both parents in the labor force (49%). In Downtown U of A, 15% of children under age six live with a single parent who is not in the labor force (Exhibit 2.5). The overall percentage of adults who are employed in the Pima North Region is 55%, which is lower than the proportion in Arizona (56%) and higher than Pima County (53%, Exhibit 2.6).

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 who are both in the labor force	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	Children (ages 0-5) living with a single parent who is not in the labor force
Pima North Region	42,451	34%	27%	1%	31%	8%
Rural Northwest	3,897	35%	43%	1%	16%	5%
Marana	515	35%	56%	0%	8%	0%
Urban Northwest	6,077	44%	27%	0%	25%	4%
Catalina Foothills	1,117	47%	33%	1%	16%	3%
Catalina/Oracle Junction	300	39%	46%	0%	15%	0%
Central East	7,188	31%	23%	1%	33%	12%
Davis Monthan	878	44%	47%	1%	8%	0%
Downtown UofA	1,582	35%	23%	0%	27%	15%
Mount Lemmon	-	-	-	-	-	-
Oro Valley	1,561	42%	45%	0%	12%	1%
South Tucson	4,086	27%	19%	0%	40%	14%
Southeast	7,370	31%	21%	1%	38%	9%
Flowing Wells	3,473	17%	24%	0%	50%	9%
Tanque Verde-Sabino Canyon	2,193	49%	28%	1%	20%	4%
West Gates Pass	2,213	37%	15%	0%	45%	2%
Pima County	66,199	33%	26%	1%	32%	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.

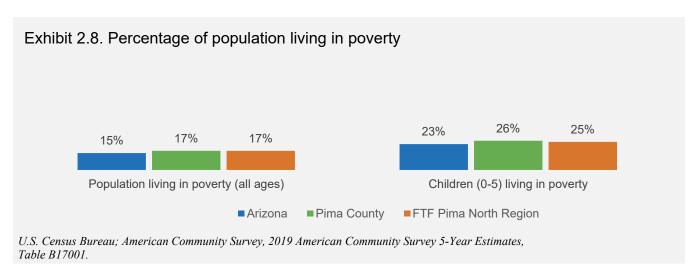


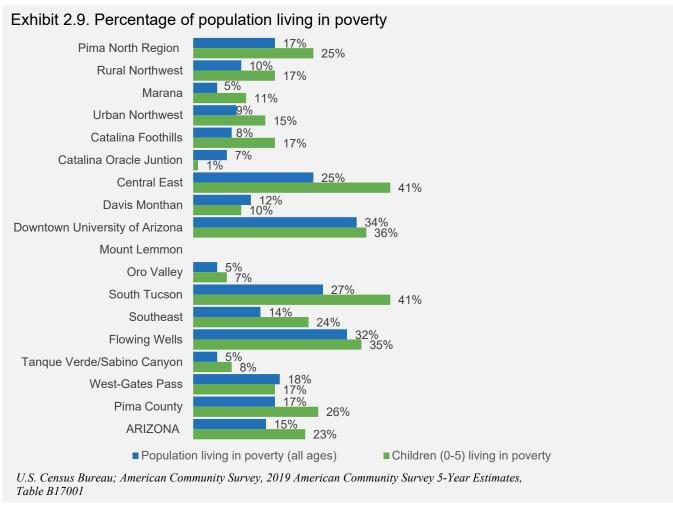
Median Income and Poverty

The median income of all families in Pima County is \$66,727, which is slightly less than the median income statewide. The median income for single-parent families is significantly less than for marriedcouple families (Exhibit 2.7).

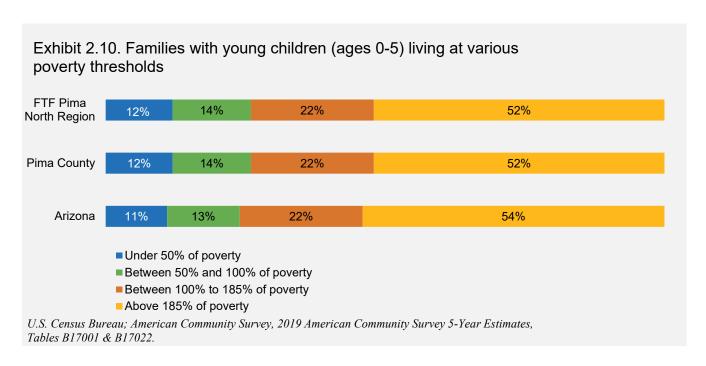


The large number of single-parent families combined with their low median income contributes to a sizable portion of the population in the FTF Pima North Region living in poverty. In the FTF Pima North Region, 17% of the population and 25% of children under age six are living in poverty (Exhibit 2.8). More children 0-5 in Central East and South Tucson live in poverty compared to any other subregion in Pima North (41% each, Exhibit 2.9).



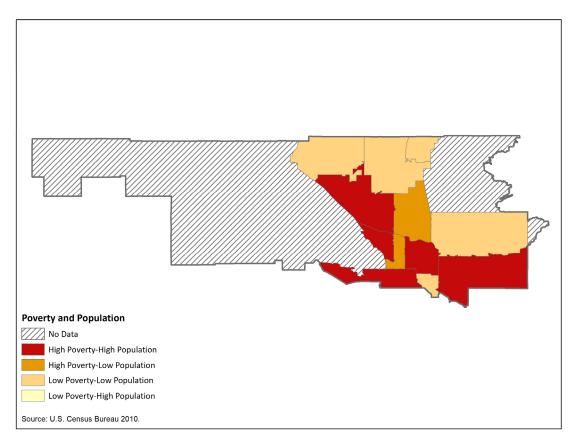


Federal poverty levels (FPL) are used to determine eligibility for certain programs and benefits, including SNAP and Arizona Health Care Cost Containment System (AHCCCS). The federal poverty level changes every year and is based on family size. For example, currently, the FPL is \$26,500 for a family of four. A family of four that makes less than or equal to \$26,500 is considered to be in poverty. In the Pima North Region, 48% of families with children 0-5 live below 185% of the FPL (that is, they earned less than \$26,500 a year for a family of four), which is equal to the county at 48% but higher than the state at 46% (Exhibit 2.10).



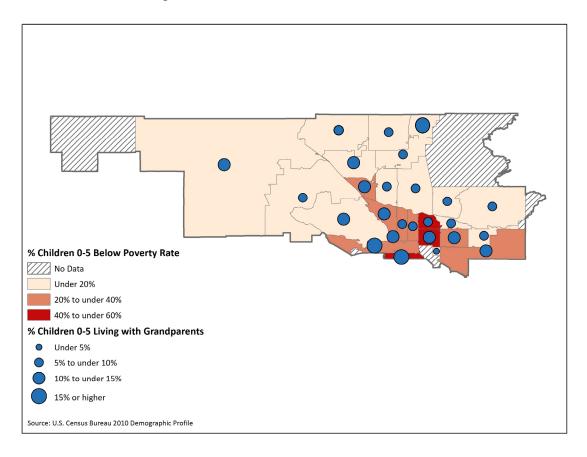
The relative population and poverty of areas within the FTF Pima North Region are mapped in Exhibit 2.11.

Exhibit 2.11. Map of poverty in the FTF Pima North Region



Zip codes with the highest poverty rates also have more grandparents raising their grandchildren (Exhibit 2.12).

Exhibit 2.12. Map of children living with grandparents layered over poverty rates in the FTF Pima North Region



In Pima County, individuals who identify as white or Asian are the least likely to live in poverty. In contrast, people who identify as American Indian or Alaskan Native are most likely to live in poverty at both the county and state levels (Exhibit 2.13).

Exhibit 2.13. Percentage of population below the federal poverty level by race/ethnicity

	Arizona	Pima County
Black or African-American	20%	28%
American Indian or Alaskan Native	33%	35%
Asian	12%	17%
Native Hawaiian and Other Pacific Islander	16%	32%
Other Race	23%	25%
Two or More Races	17%	21%
White, not Hispanic	10%	11%
Hispanic or Latino	22%	22%

U.S. Census Bureau; American Community Survey, 2014 American Community Survey 5-Year Estimates, Table B17001B, Table B17001C, Table B17001D, Table B17001E, Table B17001F, Table B17001H, Table B17001I; generated by Harder+Company; using American FactFinder; http://factfinder2.census.gov.

Native Hawaiian and other Pacific Islander children under five years old are even more likely to live below the federal poverty level. In Pima County, children under five years old who identify as Native Hawaiian and other Pacific Islander, other race, American Indian or Alaskan Native, Black or African-American, or Hispanic or Latino have poverty rates over 30% (Exhibit 2.14). This trend is similar to the proportions in Arizona indicating that children of color experience high rates of poverty.

Exhibit 2.14. Percentage of children under 5 years old below the federal poverty level by race/ethnicity*

, i		
	Arizona	Pima County
Black or African-American	34%	45%
American Indian or Alaskan Native	44%	47%
Asian	11%	10%
Native Hawaiian and Other Pacific Islander	31%	74%
Other Race	53%	53%
Two or More Races	13%	16%
White, not Hispanic	12%	13%
Hispanic or Latino	31%	33%

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.

^{*}Estimates for city and subregional breakdowns are not presented due to the limited sample size for these indicators

Housing

Residents of the Pima North Region have a similar housing cost burden to residents of the state as a whole: 32% of the region's housing units require their residents to contribute more than 30% of their household income toward housing. Housing costs are somewhat more burdensome in the subregions. Almost 50% of residents in the Mount Lemmon, Davis Monthan, and Downtown UofA subregions require their residents to contribute more than 30% of their household income toward housing (Exhibit 2.15).

Exhibit 2.15. The cost of housing, relative to household income

	Number of occupied housing units	Occupied housing units which cost 30% of household income, or more
Pima North Region	299,284	32%
Rural Northwest	17,694	20%
Marana	4,263	19%
Urban Northwest	39,972	29%
Catalina Foothills	12,627	27%
Catalina/Oracle Junction	3,348	24%
Central East	47,741	39%
Davis Monthan	1,206	47%
Downtown UofA	20,064	46%
Mount Lemmon	46	50%
Oro Valley	16,812	22%
South Tucson	20,530	35%
Southeast	48,209	33%
Flowing Wells	23,587	42%
Tanque Verde-Sabino Canyon	27,112	26%
West Gates Pass	16,073	30%
Pima County	404,739	31%
ARIZONA	2,571,268	30%

U.S. Census Bureau; American Community Survey, 2019 American Community Survey 5-Year Estimates, Table B25106.

Children that are homeless qualify for rights and services under the McKinney-Vento Act. The McKinney-Vento Act defines homeless children as "individuals who lack a fixed, regular, and adequate nighttime residence."²⁴ In 2020, 379 children in kindergarten through third grade were homeless, with the highest number of homeless children residing in the Tucson Unified School District (Exhibit 2.16).

Exhibit 2.16. Number of homeless children in kindergarten through third grade, 2018 to 2020

	2018	2019	2020
Pima North Region Schools	533	440	379
Amphitheater Unified District	<11	53	45
Arizona Community Development Corporation	12	<11	<11
Flowing Wells Unified District	16	16	16
Marana Unified District	53	48	35
Tucson International Academy, Inc.	<11	12	<11
Tucson Unified District	430	290	261
Pima County Schools	862	670	510
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 Pima North Region.

In Pima North, almost three in four households (73%) have both a smartphone and computer which is similar to both the state and county (Exhibit 2.17). Eighty-nine percent (89%) of residents in the Pima North Region live in households with a computer and internet (Exhibit 2.18). For households with children under 18 years old, 92% have a computer and internet in the region (Exhibit 2.19). Of the people living in households with a computer and internet, 72% have fixed broadband with a cellular data plan (Exhibit 2.20).

²⁴ Arizona Department of Education. Welcome to Homeless Education Program. Retrieved from https://www.azed.gov/homeless

Exhibit 2.17. Households with and without computers and smartphones

	Total number of households	Percent with computer and no smartphone	Percent with smartphone but no computer		Percent with neither smartphone nor computer
Pima North Region	299,269	7%	12%	73%	8%
County	404,739	7%	13%	72%	8%
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.

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

,	Number of person (all ages) living in households		Percent in households with computer but no internet	Percent in households without computer
Pima North Region	696,347	89%	6%	5%
Pima County	996,875	89%	6%	5%
Arizona	6,892,175	87%	7%	6%

U.S. Census Bureau; American Community Survey, 2019 American Community Survey 5-Year Estimates, Table B28005.

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	
Pima North Region	135,848	92%	6%	2%
County	216,164	92%	5%	2%
Arizona	1,632,019	88%	8%	4%

U.S. Census Bureau; American Community Survey, 2019 American Community Survey 5-Year Estimates, Table B28005.

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

otrier)					
	People living in	Percent with	Percent with fixed	Percent with	Percent with
	households with computer and internet (all ages)	fixed broadband with cellular data plan	broadband without cellular data plan	cellular data plan without fixed broadband	dial-up internet only
Pima North Region	620,283	72%	15%	13%	0%
Pima County	889,998	71%	15%	14%	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

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
Almost all households in Pima North have computer	Consider engaging families using technology-based
and internet.	and online engagement tools.

Needs	Considerations
Pima North has slightly more children 0-5 living with a single parent in the labor force than the State.	Promote supports and resources that can help subsidize child care and other expenses for single parent households.
Median income for families is slightly lower in Pima County than in the State with a higher percent of the population living in poverty.	Consider encouraging stakeholders to target job training and employment programs to help increase employment and median incomes.
In Pima County, almost double the percent of Native Hawaiian and Other Pacific Islanders live below the federal poverty level compared to the State. This percentage gap is even larger for children under 5.	Ensure social service resources for the Native Hawaiian and Other Pacific Islander populations.



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.^{25, 26} 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 8th grade.²⁷ In addition, irregular attendance influences school budgets and could potentially lead to fewer funds for essential classroom needs.²⁸

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.²⁹ 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, therefore likely to confront more barriers while raising a family.³⁰ 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.

²⁵ 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

²⁶ 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. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3989926/

 ²⁷ GreatSchools staff. Why attendance matters. (2011). Retrieved from http://www.greatschools.org/gk/articles/school-attendance-issues/
 28 National Center for Education Statistics (2009). Every school day counts: The forum guide to collecting and using attendance data..
 Retrieved from https://nces.ed.gov/pubs2009/attendancedata/chapter1a.asp

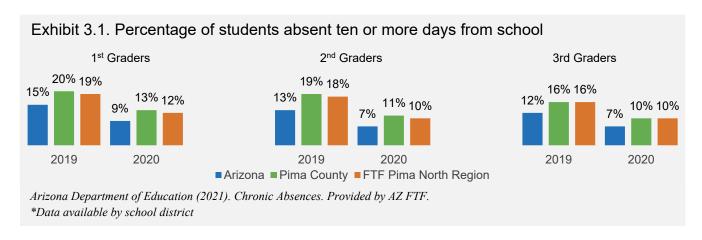
²⁹ Bustamante, A., Dearing, E., Zachrisson, H., Vandell, D. (2021) Adult outcomes of sustained high-quality early child care and education: Do they vary by family income? Retrieved from https://doi.org/10.1111/cdev.13696

³⁰ 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. Retrieved from www.eric.ed.gov/ERICWebPortal/recordDetail?accno=EJ785964

What the Data Tells Us

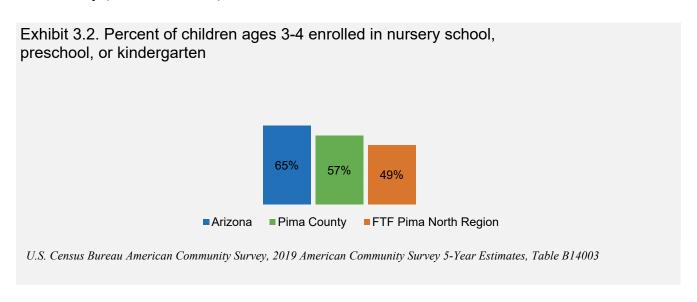
Student Attendance

Between 2019 and 2020, across 1st through 3rd grades, the state, Pima County, and the FTF Pima North Region experienced a decrease in the percentage of students missing ten or more days of school (Exhibit 3.1). The higher the grade level, the lower the rate of absences, suggesting that parents may be more willing to let their children miss school in earlier years. 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. As for the percentage change from 2019 to 2020, it is possible that it was easier for students to attend virtual learning than attending in-person learning.

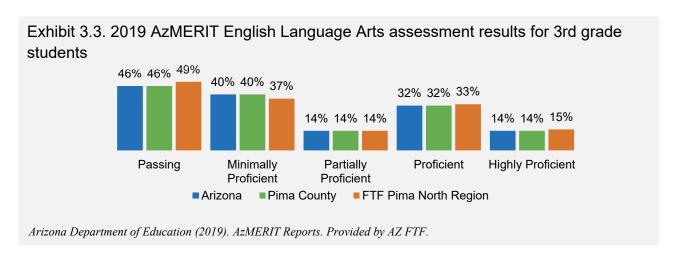


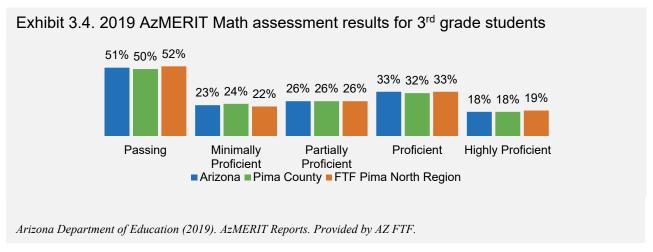
Early Achievement

Almost 50% of preschool-aged children in the FTF Pima North Region (49%) are enrolled in private or public school (i.e., nursery school, preschool, or kindergarten), which is lower than Arizona (65%) and Pima County (57%, Exhibit 3.2).



Research shows that preschool attendance has an effect on future academic performance, specifically English and math scores.³¹ The English Language Arts (ELA) assessment results of the AzMERIT showed that 48% of all third graders in the FTF Pima North Region scored "proficient" or "highly proficient", which is comparable to both Pima County and Arizona (Exhibit 3.3). Slightly more third graders scored "proficient" or highly proficient" on the math assessment test in the FTF Pima North Region (52%), which is again comparable to both Pima County and the state (Exhibit 3.4). Although math assessment results are slightly higher than the ELA assessment results, more than half of all third graders are not meeting the proficiency standard for the two subjects.





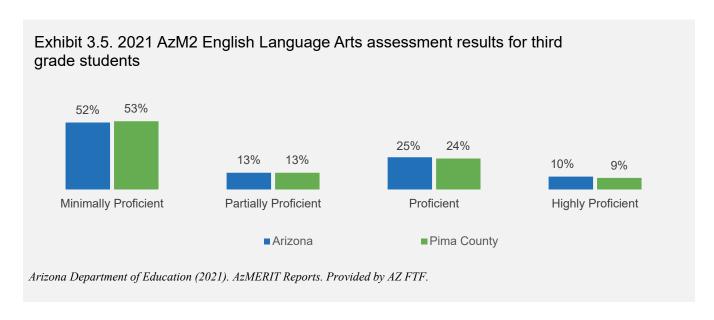
For the 2020-21 school year, the AZMERIT changed the name to AzM2.³² For the third grade assessment, the content areas and design were similar to the AZMERIT. In the 2021 school year, fewer students participated in the state assessments (88% to 90% of students) so it is impossible to know how the students that did not participate would perform. The ELA assessment results of the AzM2

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³¹ Andrews, R., Jargowsky, P., Kuhne, K. (2012). The effects of Texas's targeted pre-kindergarten program on academic performance (No. w18598). National Bureau of Economic Research.

³² No statewide assessments were given in the 2019-2020 school year.

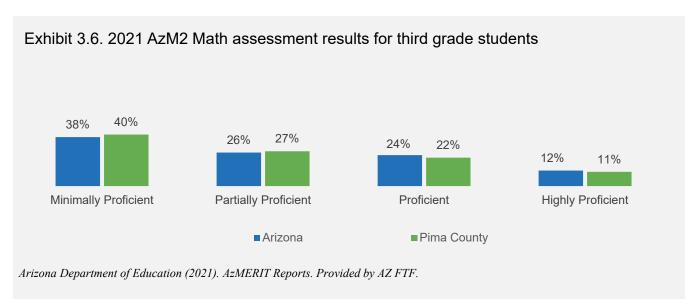
demonstrated that about 33% of all third graders in Pima County scored "proficient" or "highly proficient", which is about two percentage points lower than Arizona (Exhibit 3.5).³³ An equal percentage (33%) of third graders scored "proficient" or highly proficient" on the math assessment test in Pima County, three percentage points lower than the statewide results (Exhibit 3.6). The COVID-19 pandemic-related school disruptions were most likely a key reason for the decrease in statewide assessments from 2019. There were numerous learning disruptions from the pandemic that may have impacted students' learning, such as technology access, Zoom fatigue, losing family members, caregivers losing jobs, social isolation, and mental health.³⁴



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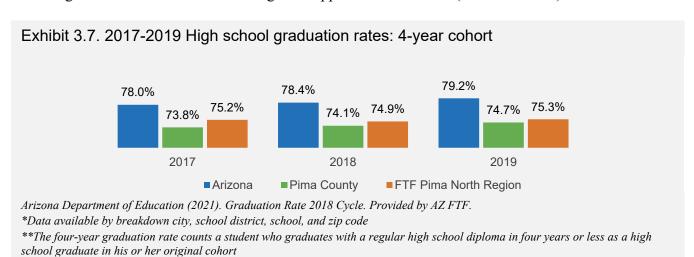
³³ 2020-21 data was not available at the regional level.

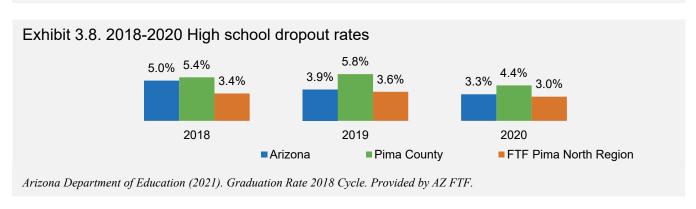
³⁴ Dorn, E., Hancock, B., Sarakatsannis, J., Viruleg, E. (2021) McKinsey & Company. COVID-19 and education: The lingering effects of unfinished learning. Retrieved from: https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-education-the-lingering-effects-of-unfinished-learning



High School Graduation & Dropout Rates

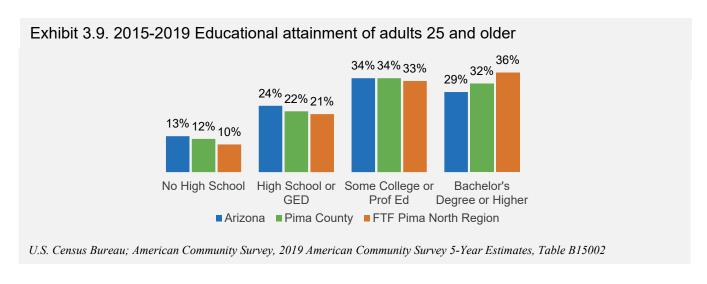
Between 2017 and 2019, high school graduation rates remained steady for the FTF Pima North Region, Pima County, and Arizona. In 2019, 75% of students graduated within four-years in the region which is similar to both the county and state levels (Exhibit 3.7). From 2019-2020, the rate of students dropping out of high school in the Pima North Region dropped from 3.6 to 3.0 (see Exhibit 3.8).

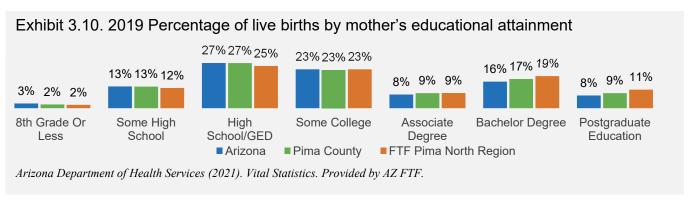




Educational Attainment

In the FTF Pima North Region, 90% of adults ages 25 and older have completed at least a high school education, which is a higher percentage than the county and state (Exhibit 3.9). In 2019, approximately 15% of infants were born to mothers who did not complete a high school education (Exhibit 3.10). Those with higher levels of education typically earn more and have lower rates of unemployment compared to those with lower education.





EDUCATIONAL INDICATORS HIGHLIGHTS

Below are key findings that highlight the educational 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
In the FTF Pima North Region, 90% of adults age 25	
and older have completed at least a high school	Increase awareness for parents to support each other and share
education, which is a higher percentage than the county	knowledge and attitudes around the importance of education.
and state.	,

Needs	Considerations
AzMERIT reports show that more than half of third graders are not meeting proficiency standards for English Language Arts and Math.	Increase parent outreach and awareness of early education programs to support learning and school readiness from an early age.



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.³⁵ 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.³⁶ 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.³⁷ In addition, research shows that investments in ECE have long-term health effects, helping to prevent disease and promote health.^{38, 39} For disadvantaged families, early childhood programs have benefits on health, future wages, crime reduction, and education.⁴⁰ 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.^{41, 42}

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.

³⁵ 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

³⁶ Teach.com powered by 2U (n.d.). Early Childhood Education. Retrieved from https://teach.com/where/levels-of-schooling/early-childhood-education/

³⁷ McCoy, C., Yoshikawa, H., Ziol-Guest, K. (2017) Impacts of early childhood education on medium- and long-term educational outcomes. Retrieved from https://journals.sagepub.com/doi/abs/10.3102/0013189X17737739

³⁸ Garcia, J., Heckman, J., Ziff, A. (2019) Early Childhood education and crime. Retrieved from https://doi.org/10.1002/imhj.21759
³⁹ Campbell, F., Conti, G., Heckman, J., Moon, S., Pinto, R., Pungello, E., Pan, Y. (2014). Early childhood investments substantially boost adult health. Science, 343(6178), 1478-1485.

⁴⁰ Garcia, J., Heckman, J., Leaf, D., Prados, M. (2016) The life-cycle benefits of an influential early childhood program. National Bureau of Economic Research. Retrieved from https://www.nber.org/papers/w22993

⁴¹ Reynolds, A., Temple, J., Ou, S., Robertson, D., Mersky, J., Topitzes, J., Niles, M. (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.

⁴² 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 DataTells Us

Early Care and Education

There are 684 ECE centers and homes with a capacity of 54,842 children in the FTF Pima North Region (Exhibit 4.1). Although the total licensed capacity may be high, the actual facility may not choose 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
Pima North Region	684	54,842
Catalina Foothills	19	3,996
Catalina Oracle	3	177
Central East	118	8,803
Davis Monthan	4	759
Downtown	50	4,510
Flowing Wells	63	4,091
Marana	2	350
Oro Valley	18	1,729
Rural Northwest	40	3,306
South Tucson	97	3,547
Southeast	100	9,149
Tanque Verde	35	3,110
Urban Northwest	88	9,488
West Gate Pass	47	1,827
Pima County	978	69,372
ARIZONA	4,307	395,787

^{*}Data not available for the sub-region.

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

As previously mentioned, 49% of children between the ages of three and four are enrolled in ECE programs in the FTF Pima North Region (Exhibit 3.2). This is much lower than what is presumably needed to meet the demand for child care since 65% of children live in a household where all adults are employed (Exhibit 2.4). 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.⁴³

Quality of Early Care and Education

Quality First 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. In the FTF Pima North Region, a total of 98 child care providers participated in Quality First, 76% of which were quality-level settings (public 3-5 stars), and 7,215 children were enrolled at a Quality First provider site in the region. Of all children enrolled at a Quality First provider site in the region, 78% were enrolled at a quality-level setting (public 3-5 stars, Exhibit 4.2). In 2020, 645 children received Quality First scholarships (not shown).

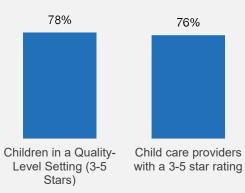


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⁴³ Greenberg, M. (2007). Next steps for federal child care policy. The Next Generation of Antipoverty Policies, 17, 2. Retrieved from http://www.futureofchildren.org/publications/journals/article/index.xml?journalid=33&articleid=67§ionid=353

⁴⁴ Arizona First Things First (October 2021). Quality First. Retrieved from: https://www.firstthingsfirst.org/resources/quality-first/

Exhibit 4.2. Percentage of 3 to 5 star ratings at Quality First centers in Pima North Region



Arizona First Things First (July 2020). Quality First. Data retrieved July 2021.

There is a total of 128 Quality First sites across the Pima North Region. Overall, many sites (n=76) have at least a 3-star rating, which is given to programs that "meet quality standards." Moreover, 13 of the sites have a 5-star rating indicating that they "exceed quality standards" (Exhibit 4.3).

Exhibit 4.3. Numbers and capacities of Quality First sites, 2020, by star rating

	cap of 1	mber and acity -star sites	ca	nber and pacity of star QF sites	ca	nber and pacity of star QF sites	ca	nber and pacity of -star QF sites	сар	Number and acity of star QF sites	cap QF si	Number and acity of ites not oublicly rated	capac	number and total city of all QF sites
Pima North Region	0	0	24	1,272	52	2,660	23	1,562	13	939	16	797	128	7,230
Pima County	0	0	32	1,718	79	4,200	42	2,297	16	961	29	1,083	198	10,259
ARIZONA	0	0	161	10,800	360	21,393	296	17,229	85	3,659	173	8,812	1,075	61,893

Arizona First Things First (July 2020). Quality First. Data retrieved July 2021.

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. Error! Bookmark not defined. 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 state, Pima County and the Pima North Region, 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 and certified group homes in the Pima North Region are very similar to those across the county and state. 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.

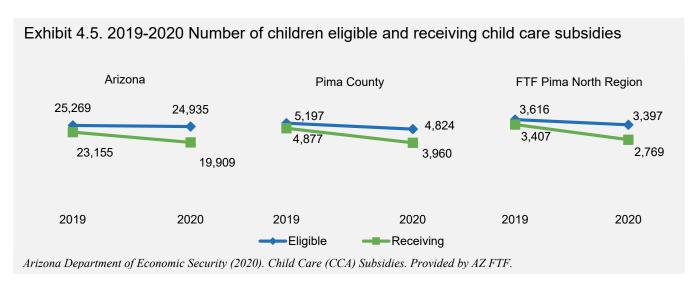
The median cost per day for one infant in Pima County and Pima North is approximately \$43 for licensed centers, approximately \$25 for approved family homes and \$30 for certified group homes (Exhibit 4.4). Compared to the median income of families in Pima County with children under 18 (see Exhibit 2.7), licensed centers comprise approximately 13% to 16% and approved family homes and certified group homes comprise about nine to eleven percent of the regional median income.

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

	Arizona	Pima County	Pima North Region
Cost for one infant Licensed Centers	\$43.03	\$43.03	\$43.03
Cost for one infant Approved Family Homes	\$20.00	\$25.00	\$22.86
Cost for one infant Certified Group Homes	\$30.00	\$30.00	\$30.50
Cost for one child (1-2) Licensed Centers	\$38.00	\$38.25	\$38.25
Cost for one child (1-2) Approved Family Homes	\$20.00	\$25.00	\$25.00
Cost for one child (1-2) Certified Group Homes	\$28.00	\$28.00	\$30.00
Cost for one child (3-5) Licensed Centers	\$33.00	\$33.47	\$33.47
Cost for one child (3-5) Approved Family Homes	\$20.00	\$25.00	\$25.00
Cost for one child (3-5) Certified Group	\$28.00	\$28.00	\$30.00

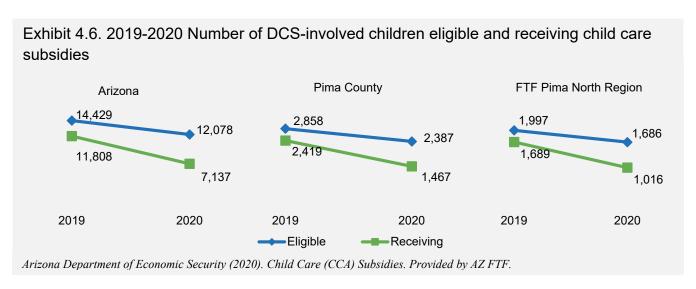
Arizona Department of Economic Security (2018). Child Care Market Rate Survey. Provided by AZ FTF.

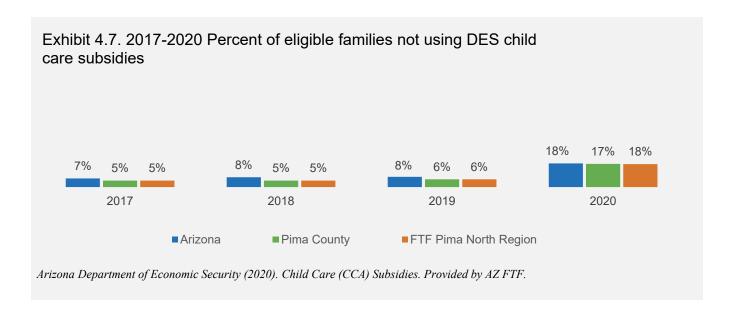
From 2019-2020, Arizona, Pima County and the FTF Pima North Region both experienced a slight decrease in the number of children eligible for child care subsidies (Exhibit 4.5). During the same time period, the state, Pima County, and the FTF Pima North Region experienced a decrease in the percentage of eligible children receiving child care subsidies. For example, in the Pima North Region in 2019, 94% of children that were eligible for child care subsidies received subsidies compared to 82% of children in 2020 (Exhibit 4.5).



Department of Child Safety (DCS)-involved children had similar trends and saw a decrease in the number of children eligible and receiving child care subsidies across the state, county and region (Exhibit 4.6). In 2019, in the Pima North Region, 85% 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 child care subsidies remained steady between 2017 to 2019, but increased in 2020 across the state, county and region. In 2020, 18% of families in the Pima North Region did not use their child care subsidies compared to five percent of families in 2017 (Exhibit 4.7).





Developmental Delays and Special Needs

Advances 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. 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. Part

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.⁴⁷ Research shows that children and youth with mild intellectual disabilities are behind in academic skills compared to their peers.⁴⁸ 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 that has a high probability of resulting in a developmental delay, as defined by the State.⁴⁹ A child is

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⁴⁵ Dyson, A. (2001). Special needs education as the way to equity: an alternative approach? Suport for Learning, 16, 3.

⁴⁶ US Department of Education: Office of Special Education and Rehabilitative Services. Retrieved from https://www2.ed.gov/about/offices/list/osers/osep-idea.html

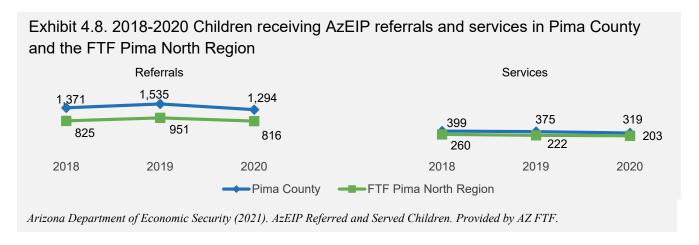
⁴⁷ Arizona Department of Economic Security (n.d.). Arizona Early Intervention Program. Retrieved from: https://des.az.gov/services/disabilities/developmental-infant

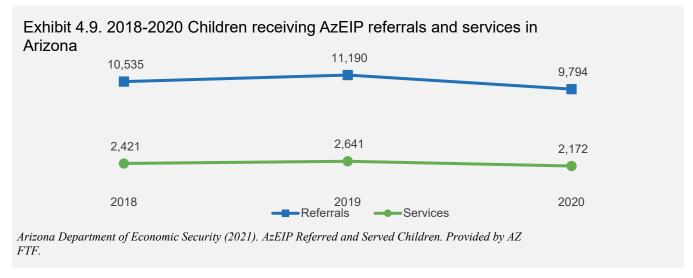
⁴⁸ Rosenberg, L., Bart, O., Ratzon, N., Jarus, T. (2013) Personal and Environmental Factors predict participation of children with and without mild developmental disabilities. Retrieved from: https://link.springer.com/article/10.1007/s10826-012-9619-8

⁴⁹Arizona 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

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.

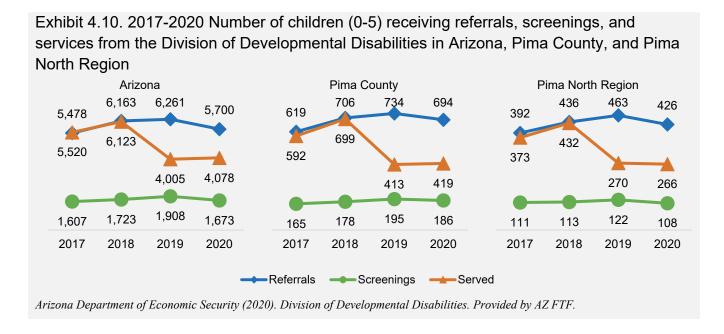
From 2019-2020, Pima County, the FTF Pima North Region, and Arizona experienced a decrease in the number of children receiving AzEIP referrals and services (see Exhibit 4.8 and 4.9). In the FTF Pima North Region, of those who received referrals to AzEIP in 2020, less than 25% received services.





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 in one or more of these areas of development: physical, cognitive, communication, social-emotional, or self-help. Between 2017 to 2020, the rates of children receiving referrals and services through the DDD were similar for Arizona, Pima County, and the FTF Pima North Region (see Exhibit 4.10). Overall, from 2019 to 2020, across Arizona, Pima County, and the FTF Pima North Region, the number of screenings and referrals decreased. However, the number of children receiving services increased for Arizona and Pima County but

decreased for the FTF Pima North Region.



Special Education

In 2020, the most common types of disabilities for preschool children were developmental delay and speech/language impairment. Across Pima North, some districts had high concentrations of preschool students with special needs. In the Tanque Verde Unified District, 46% or more preschool students in special education had a speech or language impairment. Moreover, a high percentage of preschool students in special education had a developmental delay at Marana Unified (64%) and Amphitheater Unified District (63%, Exhibit 4.11).

For students in kindergarten to 3rd grade within Pima County in 2020, 13% were enrolled in special education. This percentage was consistent with the state (12%). Similar to the disabilities of preschool children, the most common disabilities for students in grades kindergarten to 3rd grade were developmental delay and speech/language impairment (not shown).

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

	Developmental Delay	Hearing Impairment	Other	Preschool Severe Delay	Speech/Language Impairment
Pima North Region Schools	48%	<2%	<2%	14%	37%
Amphitheater Unified District	63%	<2%	<2%	7%	31%
Catalina Foothills Unified District	43%	<2%	<2%	14%	43%
Flowing Wells Unified District	56%	<2%	<2%	26%	19%
Marana Unified District	64%	<2%	<2%	6%	28%
Tanque Verde Unified District	31%	<2%	<2%	23%	46%
Tucson Unified District	38%	<2%	<2%	17%	44%
Pima County Schools	39%	2%	4%	17%	38%
All Arizona Schools	43%	<2%	<2%	20%	34%

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 Pima North 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)

EARLY LEARNING HIGHLIGHTS

Below are key findings that highlight the early learning assets, needs, and data-driven considerations for the FTF Pima North 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. Seventy-six percent are quality-level settings (public 3-5 stars).	Support Quality First efforts in the region to continue to increase the opportunities for children to receive quality early care and education experiences.

Needs	Considerations
In the Pima North Region in 2019, 94% of children that were eligible for child care subsidies received subsidies compared to 82% of children in 2020.	Identify gaps in child care subsidies to ensure that children in need are receiving these subsidies
Across Pima North districts, there were districts with high concentrations of preschool students with special needs. In the Tanque Verde Unified District, 43% or more preschool students in special education had a speech or language impairment. Moreover, a high percentage of preschool students in special education had a developmental delay at Marana Unified (64%) and Amphitheater Unified District (63%).	Work with school districts to refer children identified with special needs to support services.



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. 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. For example, during prenatal care visits, expectant mothers 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 mothers 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. Provided the second s

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. So 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. 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. Fortunately, early screening for hearing loss can connect children with services that can increase the likelihood of the child reaching their full potential.

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https://www.womenshealth.gov/breastfeeding/breastfeeding-benefits.html

⁵⁰ Schools & Health (2016). Impact of Health on Education. Retrieved from http://www.schoolsandhealth.org/pages/Anthropometricstatusgrowth.aspx

⁵¹ Yan, J. (2016) The effects of prenatal care utilization on maternal health and health behaviors. Health Economics. Volume 26 Issue 8. Retrieved from https://doi.org/10.1002/hec.3380

⁵² 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. Retrieved from https://doi.org/10.1111/ajo.12866
⁵³ Office on Women's Health (2014). Why breastfeeding is important. Retrieved from

⁵⁴ Centers for Disease Control and Prevention (2016). Infant Immunizations. Retrieved from http://www.cdc.gov/vaccines/parents/parent-questions.html

⁵⁵ Center for Disease Control and Prevention Division (2020). Hearing Loss. Retrieved from https://www.cdc.gov/ncbddd/hearingloss/index.html.

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. Men appropriate, these benchmarks will be presented throughout this chapter as comparison points for local indicators.

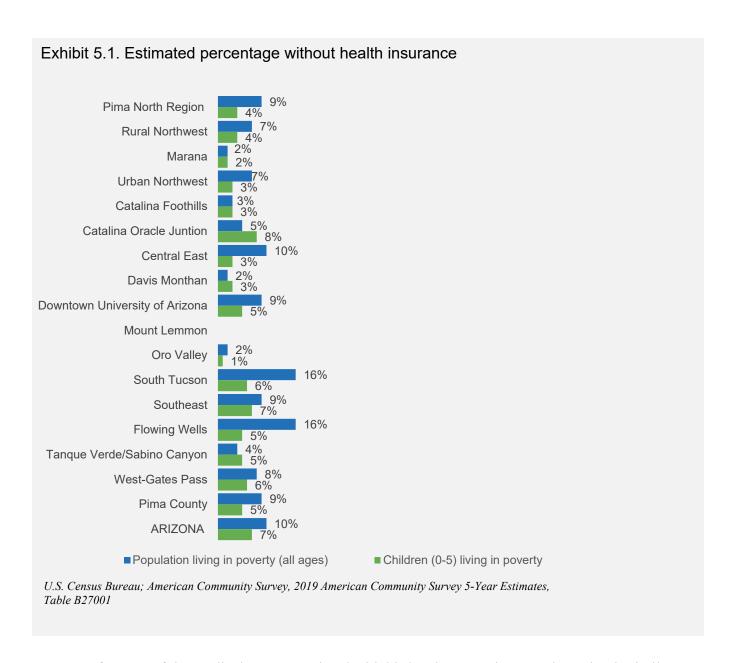
What the Data Tells Us

Access to Health Services

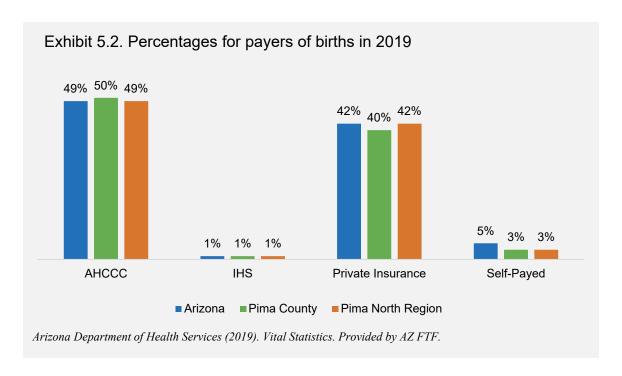
One indication of people's access to health services is whether they have health insurance coverage that helps make health care affordable. When children lack health insurance, they are at risk of poor health outcomes and long-term complications if their families avoid or delay medical care because of cost. The HP 2030 target is for 92.1% of Americans to have medical insurance by 2030.⁵⁷ In 2019, 91% of the population living in poverty in the Pima North Region had health insurance, leaving nine percent without health coverage. Four percent of children under age six living in poverty in this region lacked health insurance (Exhibit 5.1). Subregions with the highest proportions of uninsured children were Catalina Oracle Junction (8%) and Southeast (7%).

⁵⁶ Healthy People 2030. U.S. Department of Health and Human Services. ODPHP Office of Disease Prevention and Health Promotion. Retrieved from https://health.gov/healthypeople

⁵⁷ 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



In terms of payers of the medical costs associated with births, the FTF Pima North Region is similar to the county and state. Approximately half of all births in 2019 were covered by public insurance (primarily Arizona's Medicaid program—the Arizona Health Care Cost Containment, or AHCCC—as well as Indian Health Services, or IHS) and about 42% were covered by private insurance. Another three percent paid out of pocket (Exhibit 5.2).



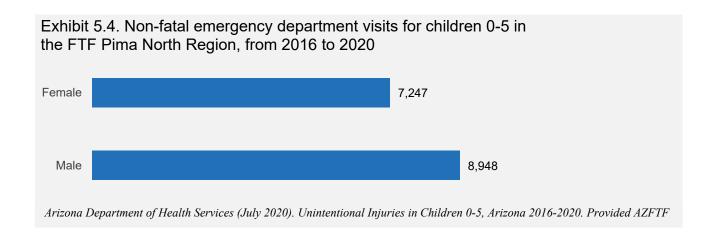
Hospitalizations

From 2016-2020, in the FTF Pima North Region, non-fatal unintentional injuries have led to 223 inpatient hospitalizations and 16,195 emergency department visits for children ages 0 to 4 (Exhibit 5.3). Male children were more likely to be injured than female children (Exhibit 5.4), a well-documented pattern among children across the country.

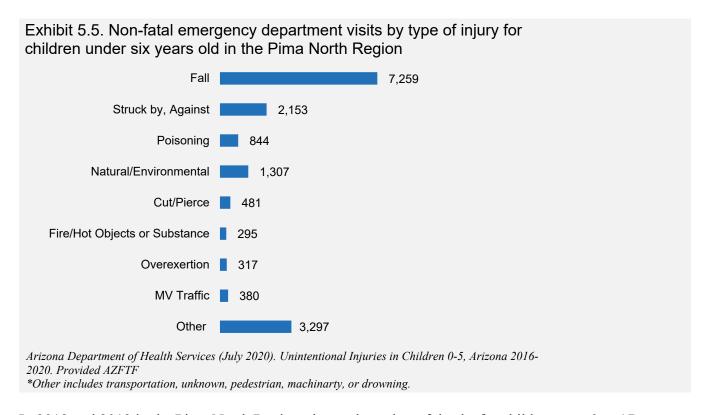
Exhibit 5.3. Injury Hospitalizations and ED Visits for Children 0-4, ADHS. (2016-2020)

Indicator	Arizona	Pima County	Pima North Region
Number of Non-Fatal Hospitalizations	2,890	399	223
Number of ED Visits	181,035	24,777	16,195

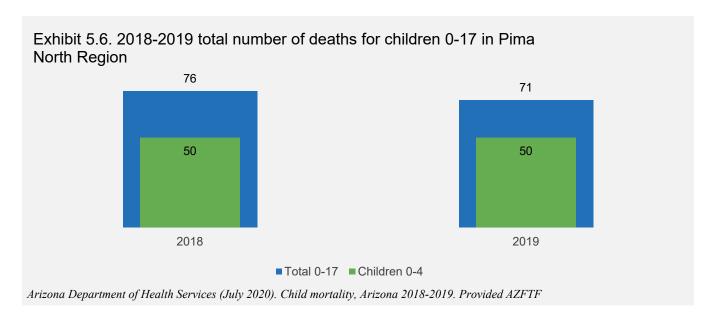
Arizona Department of Health Services (July 2020). Unintentional Injuries in Children 0-5, Arizona 2016-2020. Provided AZFTF



The most common reasons for non-fatal emergency department visits are for falling and being struck by or against an object (Exhibit 5.5). Accidents such as these further emphasize the importance of health care access for families and their children, as rapid medical response can prevent long term or more severe health complications.



In 2018 and 2019 in the Pima North Region, the total number of deaths for children ages 0 to 17 remained consistent (Exhibit 5.6). The majority of childhood deaths in both years occurred in young children ages 0 to 4 (66% and 70%, respectively).



Asthma and diabetes are chronic diseases that often affect children. An examination of children's hospitalization data for these conditions helps show the disease burden among children in the FTF region compared to the county and state.

From 2016 to 2020, asthma led to a total of 590 inpatient hospitalizations for children 0 to 14 years old in the Pima North Region (Exhibit 5.7). Children 0 to 14 that were hospitalized for asthma were most likely to identify as male (59%) and Hispanic or Latino/a (46%) (not shown). Throughout the Pima North Region, 48% of children hospitalized for asthma were 0 to 4 years old, a higher percentage than the state as a whole.

Exhibit 5.7. Inpatient hospitalizations for asthma for children 0-14 compared to children 0-4 (2016-2020)

	hospitalizations	•	Percent of inpatient hospitalizations that were children 0-4
Pima North Region	281	590	48%
Pima County	427	930	46%
ARIZONA	2,214	5,672	40%

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

From 2016 to 2020 in the Pima North Region, diabetes led to a total of 20 inpatient hospitalizations and 47 emergency room visits for children 0 to 17 years old. The average length of hospitalization was 2.7 days (Exhibit 5.8).

^{*}cell suppressed due to small size (less than 6)

Exhibit 5.8. Hospitalizations for diabetes for children 0-17 (2016-2020)

	Inpatient	Average length of stay	
	hospitalizations	(days) for hospitalization	Emergency room visits
Pima North Region	20	2.7	47
Pima County	36	2.7	77
ARIZONA	150	3.0	1,002

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

Pregnancies and Birth

In 2019, Pima North Region residents gave birth to 6,919 babies, which was 67% of all babies born in Pima County and nine percent of all births in the state (Exhibit 5.9).

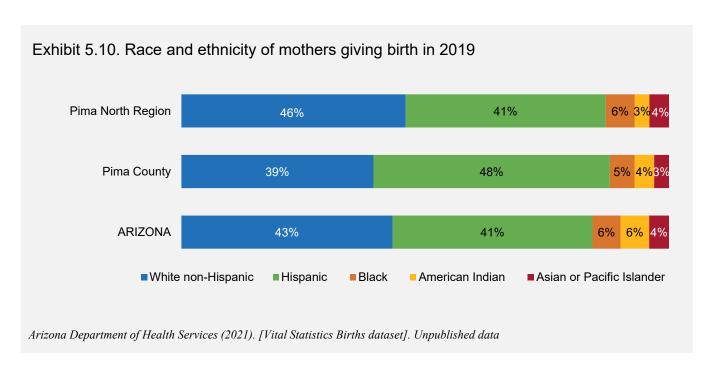
Exhibit 5.9. Live births during calendar year 2019, by mother's place of residence

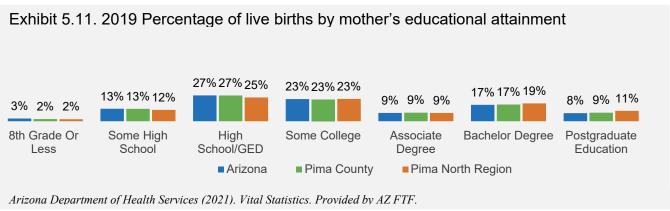
	Total number of births to Arizona-resident mothers in 2019
Pima North Region	6,919
Pima County	10,357
ARIZONA	79,183

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

Characteristics of People Giving Birth

Of more than 6,000 people who gave birth in the Pima North Region in 2019, 46% were white, non-Hispanic, 41% were Hispanic or Latino/a, six percent were Black or African American, four percent were Asian or Pacific Islander, and three percent were American Indian or Alaska Native (Exhibit 5.10). Those who gave birth in the Pima North Region had a slightly higher level of educational attainment (62% had some education beyond high school) than people who gave birth in the county and state as a whole (Exhibit 5.11).



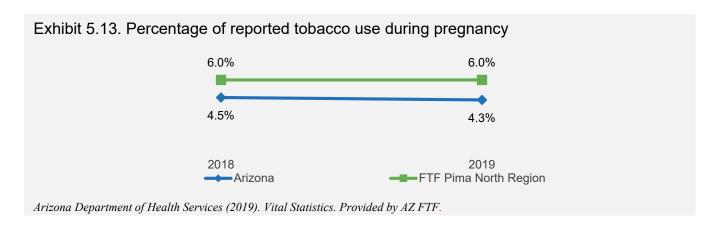


The population of those who gave birth in the Pima North Region in 2019 was also similar to their counterparts across the county and statewide on other attributes. About six percent were in their teens (Exhibit 5.12). Half of births (50%) were to mothers relying on AHCCCS or Indian Health Service (IHS) coverage, which was similar to the county (51%) and statewide (50%) percentages. In addition, a slightly higher proportion of mothers in the Pima North Region reported tobacco use during pregnancy (6%) compared to the statewide (4%) proportion (Exhibit 5.13).

Exhibit 5.12. Other characteristics of mothers giving birth in 2019

	Mother was 19 or younger	Mother was 17 or younger	Birth was covered by AHCCCS or Indian Health	Tobacco use during pregnancy
Pima North Region	5%	1%	50%	6%
Pima County	6%	1%	51%	5%
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. Obesity has been a concern in the US due to associated health outcomes, such as higher risks for diabetes, cancer, and heart disease.⁵⁸ Diabetes has also been associated with many negative health complications such as blindness, kidney failure, and amputation of limbs.⁵⁹

According to the College of Obstetricians and Gynecologists (ACOG), mothers who are obese during pregnancy are at higher risk of developing gestational diabetes, preeclampsia, and sleep apnea. According to the CDC, diabetes and obesity can be largely prevented by increasing physical activity and maintaining a healthy diet. HP 2030 aims to reduce the proportion of adults who are obese to 36% and the proportion of children and adolescents who are obese to 15.5%. In Arizona overall, the percentage of adults with obesity was 31% in 2019. Among racial and ethnic groups, American Indian and Alaska Native adults had the highest rates of obesity (58%) followed by Black adults (38%) and Hispanic adults (36%, Exhibit 5.14).

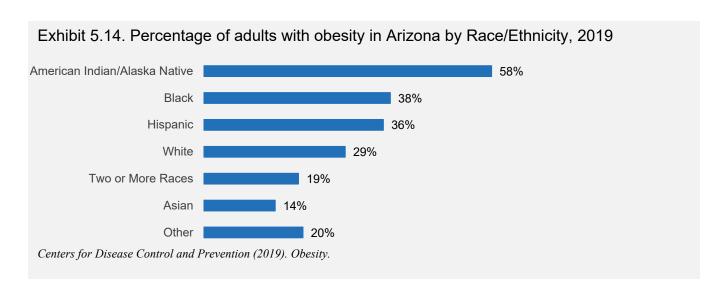
http://www.cdc.gov/chronicdisease/resources/publications/aag/diabetes.htm

⁶¹ 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

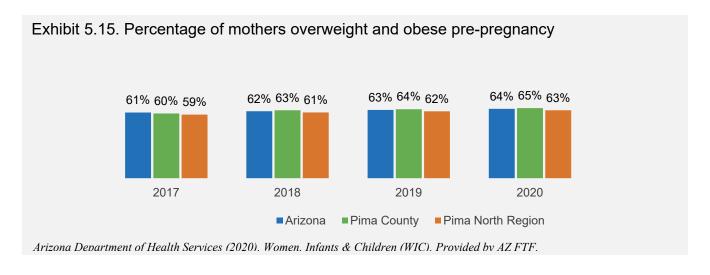
⁵⁸ Center for Disease Control and Prevention. (n.d.). Adult Obesity Facts. Retrieved from https://www.cdc.gov/obesity/data/adult.html ⁵⁹ Chronic Disease Prevention and Health Promotion. (n.d.). Diabetes At A Glance Reports. Retrieved from

⁶⁰ACOG (2016). Obesity and Pregnancy. Retrieved from http://www.acog.org/Patients/FAQs/Obesity-and-Pregnancy

⁶² Healthy People 2030. About Health People. Retrieved from https://health.gov/healthypeople/objectives-and-data/browse-objectives/overweight-and-obesity/reduce-proportion-adults-obesity-nws-03



In 2020 in the Pima North Region and in the county and state as a whole, about 65% of mothers participating in the Special Supplemental Nutrition Program for Women, Infants & Children (WIC) reported being overweight or obese pre-pregnancy (Exhibit 5.15). The rate of mothers being overweight or obese pre-pregnancy has grown slightly from 2017 to 2020.



Compared to the proportion of mothers participating in WIC who reported being overweight or obese pre-pregnancy in 2020 in the Pima North Region (63%, Exhibit 5.15), children participating in WIC were less likely to be obese. In the Pima North Region, the percentage of children participating in WIC that were obese or overweight was 30% in 2020. This proportion was slightly lower than in Pima County (31%) and Arizona (32%). Across the region, state and county, about six of ten children are considered to be normal weight (Exhibit 5.16). Over time, the proportion of children with obesity slightly increased between 2017 and 2020, increasing from 29% in 2017 to 30% in 2020 (Exhibit 5.17). This pattern is also similar throughout the county and state.

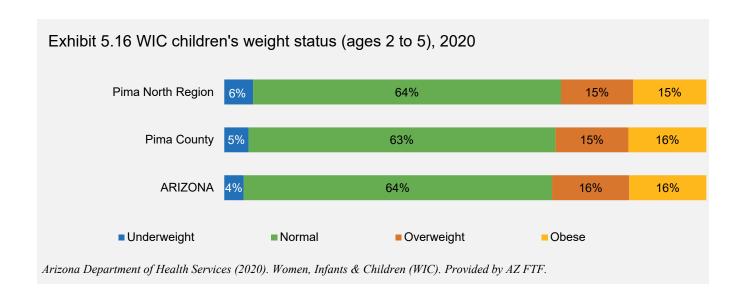


Exhibit 5.17. WIC children's obesity rates (ages 2 to 5), 2017 to 2020

	Childhood obesity rate, 2017	Childhood obesity rate, 2018	Childhood obesity rate, 2019	Childhood obesity rate, 2020	Percentage change from 2017 to 2020
Pima North Region	29%	29%	28%	30%	+1%
Pima County	30%	30%	30%	31%	+1%
ARIZONA	30%	30%	31%	32%	+2%

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

Prenatal Care

Research suggests that a lack of prenatal care is associated with many negative health issues for both the mother and the child.⁶³ Research also shows that children of mothers who did not obtain prenatal care were three times more likely to have a low birth weight and five times more likely to die in infancy than those born to mothers who did receive prenatal care.⁶⁴ In addition, studies show that women who are at the highest risk of not receiving prenatal care are mothers younger than 19 years old and single mothers.^{65,66} Educational attainment has also been associated with mothers receiving prenatal care, such that the higher a mother's educational attainment, the more likely they are to seek prenatal care.⁶⁷ It is important that mothers seek and receive prenatal care at an early stage in their pregnancy so physicians

⁶³ Prenatal Care Effects Felt Long After Birth. (n.d.). Retrieved from http://toosmall.org/blog/prenatal-care-effects-felt-long-after-birth ⁶⁴ Womens Health (n.d.). Prenatal care fact sheet. Retrieved from https://www.womenshealth.gov/publications/our-publications/fact-

womens Health (n.a.). Prenatal care fact sheet. Retrieved from https://www.womenshealth.gov/publications/our-publications/factsheet/prenatal-care.html#b

⁶⁵ Center for Disease Control and Prevention (n.d). Vital Statistics Online. Retrieved from http://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

⁶⁶ 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/

⁶⁷ 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=zIFPAOAAIAAJ&pg=RA2-

 $PA19\&lpg=RA2PA19\&dq=lack+of+prenatal+care+linked+with+mothers+educational+attainment\&source=bl\&ots=ilqp_JVnA\&sig=SQBGbmtlhOG9JNrgFLEjMOVkt90\&hl=en\&sa=X\&ved=0ahUKEwjM6vH_6vfPAhWCjlQKHWRjCwkQ6AEIVDAH#v=onepage\&q\&f=false$

can treat and prevent any health issues that may occur.⁶⁸

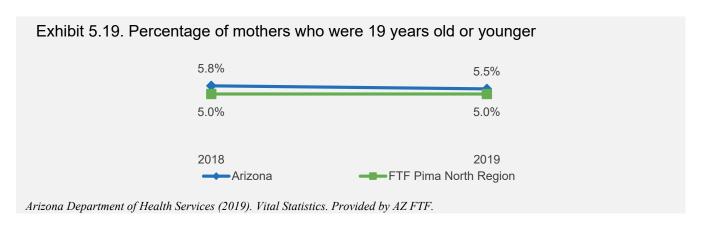
HP 2030 aims to bring the proportion of pregnant women who receive early and adequate prenatal care to 80.5%.⁶⁹ In the FTF Pima North Region, 65% of women began their prenatal care in the first trimester with 25% receiving 13 or more visits (Exhibit 5.18).

Exhibit 5.18. 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 that begun in first trimester
Pima North Region	5%	9%	22%	39%	25%	14%	65%
Pima County	6%	9%	22%	39%	24%	15%	64%
ARIZONA	3%	6%	18%	43%	29%	8%	69%

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

Additional factors that place mothers at risk of not receiving prenatal care, such as teen pregnancy, have remained steady. In the FTF Pima North Region, the percentage of teen mothers remained the same from 2018-2019; this indicator at the state level decreased (Exhibit 5.19).



Birth Outcomes

With regard to perinatal health, babies from the Pima North Region fared similarly to babies born in the county and statewide. In the region in 2019, eight percent of babies were low birth weight (Exhibit 5.20). Healthy People 2030 aims for fewer than nine percent of births to be born preterm; Pima North is slightly higher at ten percent. The percentage of newborns admitted to the NICU in the region (12%)

⁶⁸ Womens Health (n.d.). Prenatal care fact sheet. Retrieved from https://www.womenshealth.gov/publications/our-publications/fact-sheet/prenatal-care.html#b

⁶⁹ Healthy People 2030. About Health People. Retrieved from https://health.gov/healthypeople/objectives-and-data/browse-objectives/pregnancy-and-childbirth/increase-proportion-pregnant-women-who-receive-early-and-adequate-prenatal-care-mich-08

was comparable to the county and slightly higher than the state (12% for county and 8% for state, Exhibit 5.21).

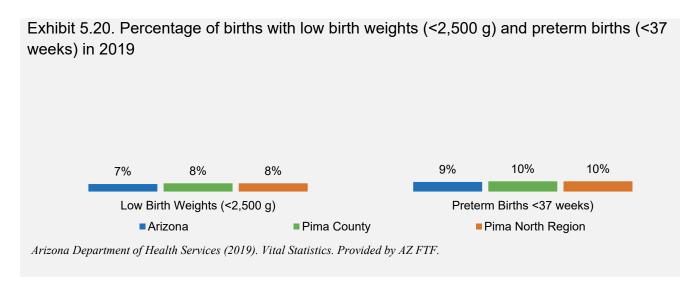


Exhibit 5.21. NICU admissions	
	Newborns admitted to intensive care unit
Pima North Region	12%
Pima County	12%
ARIZONA	8%

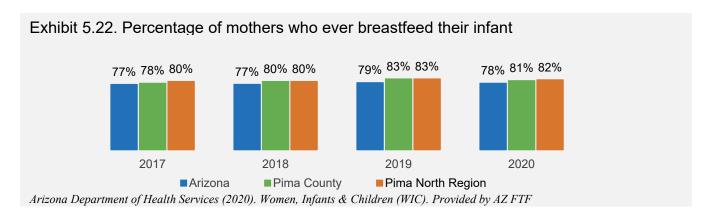
Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data

Engaging in Healthy Preventive Practices

The American Academy of Pediatrics recommends that mothers breastfeed for the first six months after giving birth. To Breast milk has antibodies that prevent babies from getting ill and has been shown to decrease the likelihood of babies becoming obese later in life. In the Pima North Region, the percentage of mothers participating in WIC who ever breastfed their infant increased by two percentage points (80% to 82%) from 2017 to 2020. In 2020, this percentage was higher than the state and county (Exhibit 5.22).

⁷⁰ 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

⁷¹ Office on Women's Health (2014). Why breastfeeding is important. Retrieved from https://www.womenshealth.gov/breastfeeding/breastfeeding-benefits.html



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.⁷² Receiving timely vaccinations not only protects the child who receives them, but protects the community by reducing the likelihood of disease spread. ⁷³ In the Pima North Region in 2020, high percentages of children in child care (Exhibit 5.23) and kindergarten (Exhibit 5.24) received all childhood vaccines, with three percent or fewer claiming exemptions for religious or medical reasons. In the region, 94% or more children received recommended doses of each vaccine except for Hep A at 80%. These rates are similar to the countywide rates and similar or higher than statewide rates except for Hep A (85% received statewide). Exhibit 5.25 visually compares the Pima North Region's vaccination rates with those of the state.

Exhibit 5.23. Vaccination rates and exemption rates for children in childcare

	Children 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
Pima North Region	9,921	95%	97%	97%	97%	80%	96%	97%	2%	0.2%
Pima County	12,960	95%	97%	97%	96%	81%	96%	97%	2%	0.0%
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.

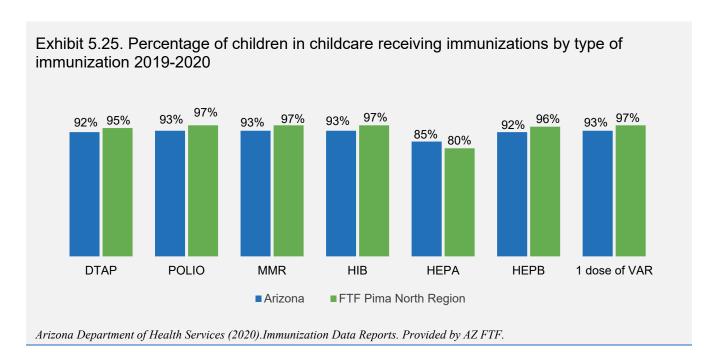
⁷² Basic Vaccines (2016). Importance of Vaccines. Retrieved from http://www.vaccineinformation.org/vaccines-save-lives/

⁷³ U.S Department of Health and Human Services (2016). Community Immunity. Retrieved from http://www.health.nv.gov/prevention/immunization/vaccine_safety/

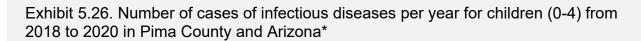
Exhibit 5.24. Vaccination rates and exemption rates for children in kindergarten

	Children 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
Pima North Region	7,633	94%	3%	94%	3%	94%	3%	95%	3%	96%	2%
Pima County	11,301	95%	3%	95%	3%	95%	3%	96%	2%	96%	2%
ARIZONA	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.



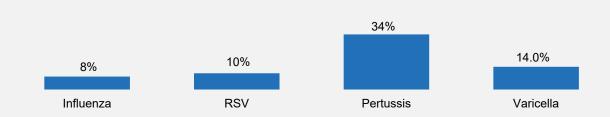
The number of infectious disease cases per year for children under age five in Pima County increased from 854 cases in 2019 to 1,107 cases in 2020 (Exhibit 5.26). Like Pima County, Arizona experienced an increase of infectious diseases from 2019 to 2020 (8,676 cases per year to 12,095 per year). As seen in Exhibit 5.27, the most common infectious diseases in Pima County in 2020 were pertussis (34%) and varicella (14%).





Arizona Department of Health Services (2019). Infectious Diseases. Provided by AZ FTF. *Data was not available at the regional level.

Exhibit 5.27. Percentage of occurance of infectious diseases for children (0-4) in 2020 in Pima County*



Arizona Department of Health Services (2019). Infectious Diseases. Provided by AZ FTF. *Data was not available at the regional level.

CHILD HEALTH HIGHLIGHTS

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
In the Pima North Region, the percentage of mothers	Continue to provide public education about the
participating in WIC who ever breastfed their infant on	benefits of breastfeeding and consider supporting
average at least once per day increased from 2017 to	workplace efforts to encourage breastfeeding
2020 by 2 percent (80%-82%).	practices for working mothers.
Four percent of children under age six in the Pima North	Work with partners to ensure access to health care
Region did not have any health insurance	for all children in the region.

Needs	Considerations
HP 2030 aims to bring the proportion of pregnant women who receive early and adequate prenatal care to 80.5%. In the FTF Pima North Region, 65% of women began their prenatal care in the first trimester with 25% receiving 13 or more visits.	Promote the importance of early prenatal care and provide education on the impact of prenatal care on the mother and child's future well-being.
In 2020, in the Pima North Region, and in the county and state as a whole, about 65% of mothers participating in WIC reported being overweight or obese pre-pregnancy. The rate of mothers being overweight or obese pre-pregnancy has remained steady from 2017 to 2020.	Support programs that educate pregnant and parenting mothers about healthy eating, active living, and maintaining healthy weight.



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. The 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. 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. Research as improvements in infant gestational age and birth weight.

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⁷⁴ 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 ⁷⁵ lbid.

⁷⁶ Carlson, S. Rosenbaum, D., Keith-Jennings, B., Nchako, C. (2016) SNAP works for America's Children. Center on Budget and Policy Priorities. Retrieved from https://www.cbpp.org/sites/default/files/atoms/files/9-29-16fa.pdf

⁷⁷ 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. Retrieved from https://doi.org/10.1016/j.chiabu.2021.105186

⁷⁸ 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. Retrieved from https://doi.org/10.1002/soej.12078

⁷⁹ Hamad, R., Collin, D., Baer, R., Jelliffe-Pawlowski, L. (2019) Association of revised WIC food package with perinatal and birth outcomes. Retrieved from 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. 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. 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. Late 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.

What the Data Tells Us

Child Safety and Domestic Violence

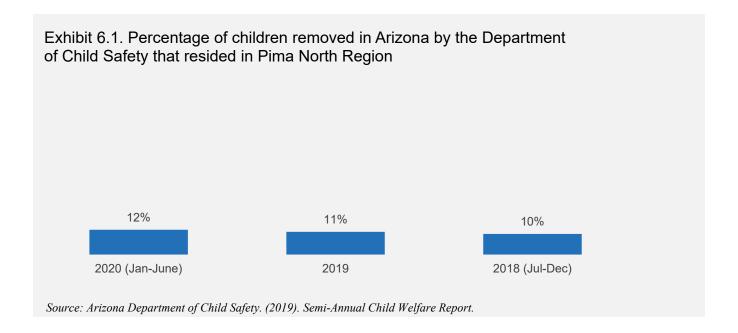
Understanding the scope of child removals in a region can help policy makers and organizations better support this vulnerable group. The percentage of child removals in Pima North by the Department of Child Safety (DCS) remained fairly steady from 2018 to 2020 (Exhibit 6.1). These percentages represent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

⁸⁰ 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.

⁸¹ 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

⁸² Dorsey, S., Burns, B., Southerland, D., Cox, J., Wagner, H., Farmer, E. (2012) Prior Trauma Exposure for Youth in Treatment Foster Care. J Child Fam Stud. Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3667554/

⁸³ Turney K, Wildeman C. (2016) Mental and Physical Health of Children in Foster Care. Pediatrics. Retrieved from: https://pubmed.ncbi.nlm.nih.gov/27940775/



Substance Use

In 2017, the U.S. Department of Health and Human Services declared a public health emergency to address the national opioid crisis.⁸⁴ 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.⁸⁵ Children in these situations are more likely to suffer later mental health disorders, their own substance abuse, and post-traumatic stress disorder.⁸⁶

From 2017 to 2020, 457 deaths from opioid overdose occurred in the Pima North Region, totaling eight percent of opioid-related deaths in Arizona (Exhibit 6.2). In both Pima County and Arizona, the number of non-fatal overdoses from opiates or opioids nearly tripled from 2017 to 2020 (Exhibit 6.3). When parents of children and youth use opiates or opioids, then they are more likely to experience child maltreatment and neglect.⁸⁷ These can lead to children suffering later mental health disorders including substance abuse and post-traumatic stress disorder.⁸⁸

⁸⁴ 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-

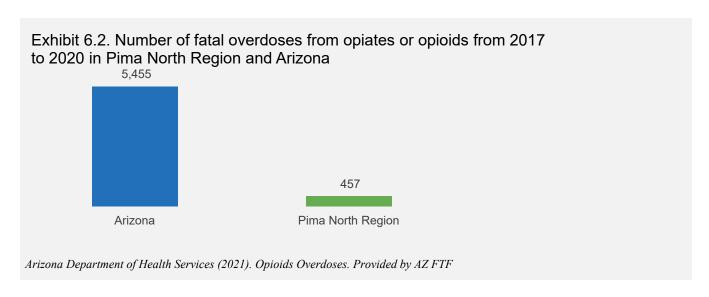
²⁰²⁰T08:51/https://www.hhs.gov/about/news/2017/10/26/hhs-acting-secretary-declares-public-health-emergency-address-national-opioid-crisis.html

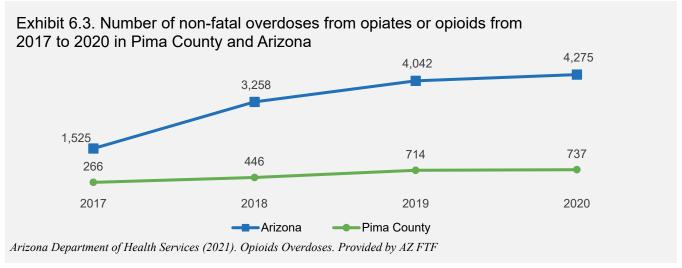
⁸⁵ Child Welfare Information Gateway (n.d.) The Opioid Crisis. Retrieved from https://www.childwelfare.gov/topics/systemwide/bhw/impact-substance/opioid-crisis/

⁸⁶ 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/

⁸⁷ Child Welfare Information Gateway (n.d.) The Opioid Crisis. Retrieved from https://www.childwelfare.gov/topics/systemwide/bhw/impact-substance/opioid-crisis/

⁸⁸ 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/





Services to Help Families

Numerous federal and local programs and services aim to provide families with food security, including Supplemental Nutrition Assistance Program (SNAP); Temporary Assistance for Needy Families (TANF; Women, Infants & Children (WIC); the 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 have shrunk in recent years due to the expiration of benefit increases instituted during the recession. ⁸⁹ These decreases come even as the number of families living in poverty has increased nationally. ⁹⁰ Exhibits 6.4 and 6.5 show how the number of families and children 0-5 receiving SNAP benefits

⁸⁹ Rosenbaum, D. & Keith-Jennings, B. (2016). Snap Costs and Caseloads Declining. Center on Budget and Policy Priorities. Retrieved from http://www.cbpp.org/research/food-assistance/snap-costs-and-caseloads-declining

⁹⁰ Spalding, A. (2012). Decline of TANF Caseloads Not the Result of Decreasing Poverty. Kentucky Center for Economic Policy. Retrieved from http://kypolicy.org/decline-tanf-caseloads-result-decreasing-poverty/

decreased from 2017 to 2020 in Pima North, Pima County and Arizona. In 2020, 74% of white and 42% of Hispanic/Latino children 0-5 were enrolled in SNAP (Exhibit 6.6).

Exhibit 6.4. Numbers of families receiving SNAP benefits, 2017 to 2020

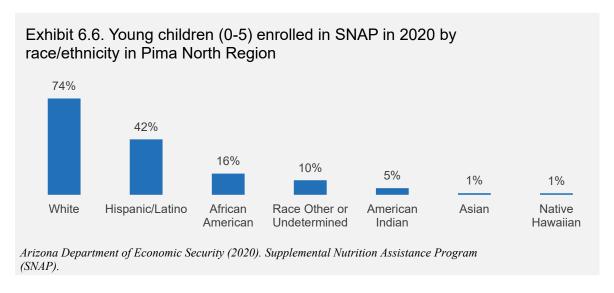
	FY 2017	F7 2018	FY 2019	FY 2020	Change from 2017 to 2020	
Pima North Region	15,390	14,208	13,336	12,782	-1	7%
Pima County	24,381	22,598	21,104	20,190	-1	7%
ARIZONA	164,092	151,816	140,056	132,466	-1	9%

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

Exhibit 6.5. 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	
Pima North Region	22,338	20,665	19,431	18,528		-17%
Pima County	35,651	33,131	30,963	29,439		-17%
ARIZONA	247,414	229,275	211,814	198,961		-20%

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



Similar to the SNAP benefits, the number of children and families receiving TANF benefits decreased from 2017 to 2020 in the Pima North Region, Pima County and Arizona (Exhibits 6.7 and 6.8). In 2020, approximately 1,500 families and 2,000 young children received TANF benefits. TANF benefits are the primary cash assistance program for families with low incomes.⁹¹

⁹¹ 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

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

					Change from
	FY 2017	FY 2018	FY 2019	FY 2020	2017 to 2020
Pima North Region	1,765	1,488	1,310	1,541	-13%
Pima County	2,895	2,531	2,214	2,445	-16%
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

					Change from
	FY 2017	F7 2018	FY 2019	FY 2020	2017 to 2020
Pima North Region	2,382	2,061	1,771	2,069	-13%
Pima County	3,925	3,529	3,019	3,289	-16%
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 school closures during the COVID-19 pandemic in 2020, the Arizona Department of Economic Security, the US Department of Agriculture Food and Nutrition Service, and the Arizona Department of Education issued the Pandemic Electronic Benefit Transfer (P-EBT) to current SNAP households and non-SNAP households with children eligible for free and reduced-price school meals. ⁹² 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 across the Pima North Region, Pima County and Arizona. In May 2021, within the Pima North Region, P-EBT provided financial relief to 2,179 families (Exhibit 6.9).

Exhibit 6.9. Number of families with children 0-5 enrolled in EBT, March 2021 to May 2021

	March 2021	April 2021	May 2021
Pima North Region	2,706	2,436	2,179
Pima County	4,591	4,130	3,697
Arizona	36,971	33,431	30,066

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 Pima North Region, 16,982 children under 5 were enrolled in WIC (35%). Similar to the county and state, this was a decrease from 2017 (Exhibit 6.10). Exhibit 6.11 provides a single month snapshot of participation in the program for November 2020; 89% of women,

⁹² Arizona Department of Economic Security (n.d.) Arizona P-EBT Benefits. Retrieved from https://des.az.gov/services/basic-needs/food-assistance/other-food-programs/arizona-p-ebt-benefits

94% of infants, and 90% of children who were enrolled in WIC in the region claimed their benefits in the month of November.

Exhibit 6.10. Infants and children (ages 0 to 4) enrolled in the WIC program as a percentage of the population, 2016 to 2020

	Number of children (ages 0-4) in the 2010 US Census	perce childrer	nber and ntage of n (0 to 4) ed, 2017	perce childrer	nber and ntage of n (0 to 4) ed, 2018	perce childrer	nber and ntage of n (0 to 4) ed, 2019	perco childre	mber and entage of en (0 to 4) led, 2020
Pima North Region	48,064	18,537	39%	17,997	37%	17,390	36%	16,982	35%
Pima County	74,796	28,964	39%	28,370	38%	27,334	37%	26,865	36%
Arizona	546,609	221,387	41%	211,732	39%	201,644	37%	193,622	35%

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

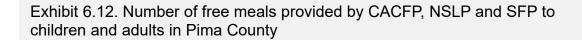
Exhibit 6.11. WIC participation rates by enrollees during November 2020

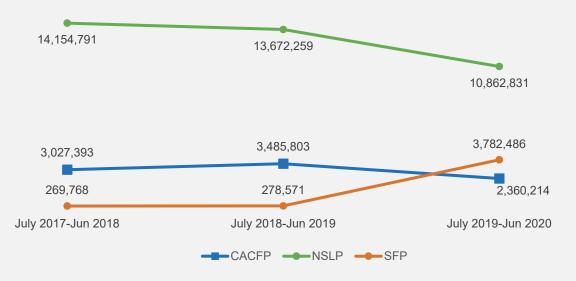
	Total	Women	Infants	Children
Pima North Region	91%	89%	94%	90%
Pima County	91%	89%	94%	90%
Arizona	89%	89%	93%	88%

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 families that meet income eligibility. From June 2018 to June 2020, the number of children and families receiving assistance in Pima County has decreased for CACFP and NSLP but increased for SFP (Exhibit 6.12).





Arizona Department of Education (2020). Child and Adult Care Food Program. Provided by AZ FTF. Arizona Department of Education (2020). National School Lunch Program. Provided by AZ FTF. Arizona Department of Education (2020). Summer Food Program. Provided b

Schools are an important part of the nutrition assistance system, especially for children experiencing food insecurity. In 2020, 55% of all public and charter school students in the Pima North Region were eligible for free or reduced-price lunch (Exhibit 6.13). This is consistent with both the county and statewide percentages.

Exhibit 6.13. Proportion of students (pre-kindergarten through twelfth grade) eligible for free or reduced-price lunch, 2018 to 2020

	2018	2019	2020
Pima North Region Schools	54%	52%	55%
Pima County Schools	56%	55%	56%
All Arizona Schools	57%	56%	55%

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

FAMILY SUPPORT HIGHLIGHTS

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
Eighty-nine percent of women, 94% of infants, and 90% of children who were enrolled in WIC in the region claimed their benefits in the month of November.	Continue to provide public education about the benefits

Needs	Considerations
In Pima County and Arizona, the number of non-fatal overdoses from opiates or opioids increased from 2017 to 2020	Consider including substance abuse prevention resources and referrals in home visitation and parent education programs
The number of children and families receiving SNAP benefits has decreased from 2017 to 2020 in Pima North, Pima County and Arizona.	Consider examining alternative strategies to support food security for children and families.

CONCLUSION

The FTF Pima North Region has both strengths and opportunities for improvement. The region has lower employment, lower 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 a great asset in the region as they play 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 Pima North 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 the age of six is projected to grow at a modest and steady rate, allowing the region to prepare for the growing demands of their youngest residents.	Discuss tactics for continuing to meet the needs of the under six population.
Economic Circumstances	
Almost all households in Pima North have computer and internet.	Consider engaging families using technology-based and online engagement tools.
Education	
In the FTF Pima North Region, 90% of adults age 25 and older have completed at least a high school education, which is a higher percentage than the county and state.	Increase awareness for parents to support each other and share knowledge and attitudes around the importance of education.
Early Learning	
Quality First has been increasing the quality of child care programs in the region. Seventy-six percent are quality-level settings (public 3-5 stars).	Support Quality First efforts in the region to continue to increase the opportunities for children to receive quality early care and education experiences.
Child Health	
In the Pima North Region, the percentage of mothers participating in WIC who ever breastfed their infant on average at least once per day increased from	Continue to provide public education about the benefits of breastfeeding and consider supporting workplace efforts to encourage breastfeeding

2017 to 2020 by two percent (80%-82%).	practices for working mothers.
Four percent of children under age six in the Pima North Region did not have any health insurance	Work with partners to ensure access to health care for all children in the region.
Family Support and Literacy	
Eighty-nine percent of women, 94% of infants, and 90% of children who were enrolled in WIC in the region claimed their benefits in the month of November.	Continue to provide public education about the benefits

Needs	Considerations
Population Characteristics	
In the region, more children ages zero to five identify as Hispanic or Latino than adults (47% vs. 25%). Seven percent in the region speak English less than	Provide culturally appropriate services and interpretation and translation assistance for families that are more comfortable speaking in a language other than English.
very well. Nearly one-quarter of children under six live in single-female households. The sub-regions of South Tucson and Catalina Oracle Junction have the highest percentage of children primarily cared for by a grandparent (23% and 16%).	Discuss supporting services specifically designed for single-parent and grandparent-led households to help them support the young children in their homes.
Economic Circumstances	
Pima North has slightly more children 0-5 living with a single parent in the labor force than the State.	Promote supports and resources that can help subsidize child care and other expenses for single parent households.
Median income for families is slightly lower in Pima County than in the State with a higher percent of the population living in poverty.	Consider encouraging stakeholders to target job training and employment programs to help increase employment and median incomes.
In Pima County, almost double the percent of Native Hawaiian and Other Pacific Islanders live below the federal poverty level compared to the State. This percentage gap is even larger for children under 5.	Ensure social service resources for the Native Hawaiian and Other Pacific Islander populations.
Education	
AzMERIT reports show that more than half of third graders are not meeting proficiency standards for English Language Arts and Math.	Increase parent outreach and awareness of early education programs to support learning and school readiness from an early age.
Early Learning	
In the Pima North Region in 2019, 94% of children that were eligible for child care subsidies received subsidies compared to 82% of children in 2020.	Identify gaps in child care subsidies to ensure that children in need are receiving these subsidies
Across Pima North districts, there were districts with high concentrations of preschool students with special needs. In the Tanque Verde Unified District, 43% or more preschool students in special education had a speech or language impairment. Moreover, a high percentage of preschool students in special education had a developmental delay at Marana Unified (64%) and Amphitheater Unified District (63%).	Work with school districts to refer children identified with special needs to support services.
Child Health	
HP 2030 aims to bring the proportion of pregnant women who receive early and adequate prenatal care to 80.5%. In the FTF Pima North Region, 65% of women began their prenatal care in the first trimester with 25% receiving 13 or more visits.	Promote the importance of early prenatal care and provide education on the impact of prenatal care on the mother and child's future well-being.

In 2020, in the Pima North Region, and in the county and state as a whole, about 65% of mothers participating in WIC reported being overweight or obese pre-pregnancy. The rate of mothers being overweight or obese pre-pregnancy has remained steady from 2017 to 2020.	Support programs that educate pregnant and parenting mothers about healthy eating, active living, and maintaining healthy weight.
Family Support and Literacy	
In Pima County and Arizona, the number of non-fatal overdoses from opiates or opioids increased from 2017 to 2020	Consider including substance abuse prevention resources and referrals in home visitation and parent education programs
The number of children and families receiving SNAP benefits has decreased from 2017 to 2020 in Pima North, Pima County and Arizona.	Consider examining alternative strategies to support food security for children and families.

APPENDIX A. EFFECTS OF COVID-19 ON EARLY CARE AND EDUCATION SYSTEMS

Why it Matters

As this year's regional needs and assets report comes amidst the COVID-19 pandemic, the Pima North Regional Partnership Council also solicited Harder+Company to conduct additional assessment activities to understand the effects of COVID-19 on early care and education systems in Pima North and in Pima County overall. From April-July 2021, the Harder+Company evaluation team conducted interviews with seventeen key community leaders including early childhood education administrators, directors, and teachers.

These interviews explored how early care and education programs/homes are doing through the pandemic. More specifically, these interviews shed light on 1) if programs are able to recruit/retain qualified staff; 2) whether programs have the resources needed (e.g., mental health consultation, relevant professional development opportunities, support for children with special needs, etc.); 3) what is the stress level of staff working directly with children and families daily; and 4) are programs financially viable and sustainable.

What the Data Tells Us

Pandemic Challenges for Children and Families

Before specifically discussing the effects of COVID-19 on early childhood systems, it is important to note the challenges for children and families. Due to the pandemic, many families experienced job loss, social isolation, challenges with school closures, and lack of child care. Some families lost loved ones and were frequently unable to observe traditional mourning rituals. These complexities, along with high levels of uncertainty such as how long the pandemic would last, caused elevated stress, anxiety, depression, and grief. An interviewee commented, "It has been such a scary time for families and children are naturally vulnerable because they depend on adults to have their most basic needs met."

"The pandemic intensifies gaps in quality of and access to education, employment, technology, etc. for our communities of color."

-Interviewee

These problems are further exacerbated for families and children who are living in poverty, are chronically ill, have disabilities, experience housing and food insecurity, reside in remote areas, are marginalized by mainstream society (e.g., indigenous people and migrant workers), or are suffering from neglect or abuse. ⁹³ Moreover, interviewees acknowledged that the pandemic disproportionately affects communities of color. An interviewee noted, "The pandemic intensifies gaps in quality of and access to education, employment, technology, etc. for our communities of color."

The COVID-19 pandemic has required communities across the state to wrestle with difficult questions about how to protect the health of community members while still delivering critical services. Although not officially considered an essential service, the early care and education system provides one of the most critical services to support families, particularly for parents working in critical sectors. However, due to the COVID-19 crisis, many child care programs have closed or are in danger of closing for good. The remainder of this text highlights what we learned from interviewees about the state of the early care and education system due to COVID.

Child care Providers are Navigating Reduced Enrollment and Revenue

All interviewees we spoke to documented temporary child care center closures at the beginning of the pandemic. We heard reports that most were able to re-open in Summer of 2020. A few have shut down permanently and a few others are still in fear that they might have to close permanently. Every child care provider we spoke to had experienced a decrease in enrollment, and most opened back up operating at around 50% capacity. This is similar to the national trends in which nearly half of child care providers closed their facilities during the COVID-19 shutdowns with enrollment down by 67% upon re-opening.⁹⁴

Enrollment was reduced due to several reasons:

- Parents feared for the health and safety of their children and chose not to send them back to childcare;
- Parents had been laid off or directed to work remotely and did not currently need child care;
- Many parents hired Nanny's instead of sending their child to a group setting; or
- Centers themselves limited staff-to-child ratios as a COVID-19 prevention effort.

No matter the reason, interviewees reported that reduced enrollment meant that less money was coming in. At the same time, operating costs were rising. All providers reported additional costs for things such as Personal Protective Equipment (PPE), enhanced cleaning protocols as well as the increased cost of food and other supplies.

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⁹³ Pattnaik, J., Jalongo, M. (2021) Early Childhood Education and Care in the Time of COVID-19: Introduction to a Special Issue of Early Childhood Education Journal. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8210967/

⁹⁴ Child Care & Early Education. Research Connections. Covid-19 reports. Retrieved from https://www.researchconnections.org/covid-19/covid-19-reports

Providers did report the aid from The Coronavirus Aid, Relief, and Economic Security Act (CARES Act) helped many of them but that it wasn't enough to fully sustain operation. Many providers described the need to tap into their reserve dollars, apply for loans and scholarships, and ask for donations. As one provider stated, "Our enrollment was down which came a reduction in dollars. The Paycheck Protection Program (PPP) loan helped us get the cleaning supplies we needed. We were thankful we had families make donations." Another provider added, "Due to safety precautions, we were no longer able to use the lunchroom, so we had to have children eat in classrooms. This required more paper products that some parents were nice enough to donate."

"I purchased out of pocket when I could. Every time I went to the grocery store, I would pick up gloves, toilet paper, paper towels for the center."

-Interviewee

Almost all owners/directors interviewed mentioned that they tapped into their personal savings to stay afloat. One director reported, "I purchased out of pocket when I could. Every time I went to the grocery store, I would pick up gloves, toilet paper, paper towels for the center."

With revenue down and costs up, a handful of providers said that they had to lay off or furlough staff.

Although all providers described facing numerous challenges, subsidized programs (those receiving financial assistance) and those with established infrastructures, such as school district programs, reported having more resources and support to weather these challenges. For example, among programs providing distance learning (i.e., online education) to children, state and federally contracted early care and education programs or those with dedicated public funding seemed more likely to have sufficient funds to purchase materials and supports for families' use at home, compared to private-pay programs, which were charging partial or no tuition during the program closures and thus had limited funds available to cover these costs. Some school-based and Head Start programs reported that they were even able to set families up with hotspots for internet access so they could take part in the virtual lessons online in real time.

Home-based providers, which lack a connection to a larger agency and often are not connected to a network of providers, reported having access to fewer resources and less guidance on best practices to mitigate COVID-19 disruptions.

Workforce is **Declining**

Providers who had to lay off or furlough staff reported concern about being able to rehire their staff

when enrollment increases. They shared that childcare providers are under paid and receive more money from unemployment benefits than they would by returning to work. According to data from the U.S. Bureau of Labor Statistics, the median pay rate for <u>preschool teachers</u> is \$14.67 per hour. For <u>childcare workers</u>, who often serve in supporting roles such as assistant teachers, floaters or aides, pay is even lower, at \$11.65 per hour. Employer-provided benefits such as health insurance, vacation time and sick leave are scarce, due to the thin margins many programs operate on. Only 2% of all U.S. occupations pay lower wages than in the childcare industry, which is made up of primarily female workers of color.95 An interviewee stated, "Few employees want to remain in the field because the salary and compensation package is so low."

In particular, women of color, who make up much of the childcare workforce, are disproportionately affected by low wages. Research has shown that women of color and those working with infants and toddlers face distinct wage gaps.⁹⁶

Interviewees noted that staff departures were a major problem in childcare even long before the pandemic. While exact numbers are hard to find, studies estimate annual turnover rates between 26 and 40% for early childhood educators in licensed facilities. Almost every provider interviewed acknowledged they lost at minimum one employee due to the risks and burdens of COVID-19. A provider stated, "I lost nine staff members, all for reasons relating to threats or challenges created by COVID-19." Another said, "A lot of my staff didn't return especially my older staff out of fear of getting COVID." A third mentioned, "I had staff not return because they felt they needed to protect themselves and their families."

⁹⁵ U.S. Bureau of Labor Statistics (2022) Occupational Employment and Wage Statistics, May 2021. Retrieved from https://www.bls.gov/oes/current/oes399011.htm

⁹⁶ Austin, L., Edwards, B., Whitebook, M. (2019) Racial Wage Gaps in Early Education Employment. Retrieved from https://cscce.berkeley.edu/racial-wage-gaps-in-early-education-employment/

Providers Have Adjusted Operations to Manage the Risk

Even though interviewees confirmed they lost staff during COVID, everyone we spoke with was willing to continue working amidst the ongoing risk of COVID given the pivotal role they play in the life of families. According to The Washington Post, about 12 million children rely on the child-care system, or about half of all kids under the age of 5.97 A provider stated, "I knew I had a job to do. I wanted to make sure everyone was safe. What I do is bigger than this virus. I need to be there for the families." Another provider commented, "I opened for the families because they need us. It was a difficult decision. As a leader, I knew I also needed to make space to acknowledge fears. We had a lot of conversations at regular staff meetings. At the end of the day, we have to go to work."

"I knew I had a job to do. I wanted to make sure everyone was safe. What I do is bigger than this virus. I need to be there for the families."

-Interviewee

A top priority for providers was understanding how to safely care for young children amidst COVID. Providers said that there was no clear guidance on what modifications needed to be made to make classrooms safer and reduce COVID transmission risk. One provider commented, "There was a lot of information out there. The information would just change so much and so quickly. I just kept reading up on the best practices and as the recommendations would change, we could change. We did have to come up with our own plans. There were no templates out there. We just tried to make the best choice with the information we had." With this said, about half of the providers we spoke with said that they were grateful for the Early Childhood Coalition that formed in response to COVID. From what we heard, one provider in the area formed a Coalition and welcomed all other providers/teachers to join. As all childcare programs were experiencing similar issues related to COVID, this Coalition was an outlet to share information and experiences and learn from one another. A provider noted, "Right after the shut down, a director in the area had the idea to start the Early Childhood Coalition. Through this group, we really got organized around how to return to school. We weren't receiving any guidance from the state. We thought we had to figure it out on our own. We were able to develop consistent policy about health checks upon arrival, limiting what kids could bring to school, hand washing, changing schedules to close earlier to clean, keeping the classrooms simple to avoid shared touching. There were a lot of meetings held to keep us informed."

Every provider we spoke to reported they opened their center with precautions and made safety adjustments to minimize COVID risk. A majority of providers no longer allowed parents to enter the school/classrooms. Teachers would meet parents in the parking lot and walk each child in. Parents were directed to keep children at home if they showed even the slightest sickness (e.g., running nose). Many

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⁹⁷ Strauss, V. (2020) America's fragile child-care system reported at risk of collapse in covid-19 crisis. The Washington Post. Retrieved from https://www.washingtonpost.com/education/2020/05/27/americas-fragile-child-care-system-reported-risk-collapse-covid-19-crisis/

providers voluntarily cut enrollment numbers to minimize class size. Anyone coming into the school/classroom was required to wear a mask. Most providers did require the children, especially those over the age of 3, to wear masks as well. Most providers also implemented temperature checks for anyone entering the school/classroom. Those providers that could afford it, hired professional cleaners to clean classrooms every night. A handful of providers communicated that they removed most, if not all, of the furniture from the classrooms to eliminate surfaces that could facilitate the spread of germs.

In addition, as soon as the COVID-19 vaccine was released, all providers we spoke with stated that they recommended their staff get vaccinated. The majority reported that they did not make vaccination mandatory, mostly because they were unsure of legally could mandate vaccines. Even without being mandated, we heard that there was little pushback from most staff across the centers. Most were eager and willing to get the vaccine. In fact, by the time we spoke with interviewees, all reported that their staff were fully vaccinated.

Children are Resilient

A constant theme was how resilient the children are in adapting to attending school during COVID. A

provider noted, "The kids have been incredibly resilient including the mask wearing. They are being themselves. They are doing everything they typically do." Another responded, "Kids are resilient. Even the 3-year-olds were great with the masks." A third reported the interesting ways in which some of the children expressed their frustration. "One little girl said how furious she was that Target was closed. She was livid that Target closed, and she couldn't get toys."

Almost all providers described how transparent they were with the children which they believed supported this resiliency. One provider stated, "COVID was a consistent topic. We provided the children with a photo of the virus. We talked to them about the importance of wearing masks and washing their hands." Providers also reinforced the importance of parents talking to their children about the virus with parents.

"COVID was a consistent topic. We provided the children with a photo of the virus. We talked to them about the importance of wearing masks and washing their hands."

-Interviewee

Early Learning Providers Need Support

While the providers we spoke with—administrators, educators, and caregivers—have shown themselves to be creative and highly dedicated to their families during the pandemic, the early learning system in Pima County faces great challenges both now and in the future. Based on our conversations with providers, we recommend the following actions to maintain and strengthen the system.

- Set subsidy reimbursement rates based on actual costs of providing quality services. Collect data and develop a model that estimates the true cost to providers of meeting state licensing and quality standards.
- **Develop and leverage existing networks** to provide family childcare providers with timely guidance, access to personal protective equipment (PPE), and other relevant resources. Encourage these providers to opt into an alliance or network to consolidate certain functions such as sharing administrative staff to manage enrollment, tuition, payroll, etc., sharing substitute pools, and purchasing supplies in bulk. Providers could also share the cost of grant writing and reporting.
- **Support independent programs** not connected to larger systems. Provide support, guidance, and access to adequate PPE to independent centers that are not part of an existing infrastructure or system—for example, through Child Care Resource and Referral agencies.
- Continue to ensure all programs and families have access to technology and resources to meet basic needs. Strengthen infrastructure to ensure programs can facilitate access to food and other basic needs for families, especially during times of crisis. Consider ways to expand access to technology for programs and families to support equity in learning opportunities.
- Share distance learning resources with all programs. Curate, consolidate, and widely disseminate resources and guidance regarding modes and strategies for distance learning that are developmentally appropriate for children under age 5.
- Support early child care providers as professionals. Provide support for their wellbeing, including physical and mental health services. Prioritize improved compensation as an essential component for the post-pandemic rebuilding of the early care and education system, targeting wages/salaries, as well as health insurance, retirement plans and other benefits. Those benefits should be paid to workers both in center- and in home-based care.

APPENDIX B. SUBREGIONAL FACT BOXES

The following pages include the subregional fact boxes for fifteen subregions of the FTF Pima North Region. The subregions are grouped by zip code as follows:

1. Rural Northwest: 85653, 85654, 85743

2. Marana: 85658

3. Urban Northwest: 85704, 85741, 85742

4. Catalina Foothills: 85718

5. Catalina/Oracle Junction: 857396. Central East: 85711, 85712, 857167. Davis Monthan: 85707, 85708

8. Downtown UofA: 85701, 85719, 85724

9. Mount Lemmon: 85619 10. Oro Valley: 85737, 85755

11. South Tucson: 85713, 85714, 85726 12. Southeast: 85710, 85730, 85748

13. Flowing Wells: 85705

14. Tanque Verde-Sabino Canyon: 85715, 85749, 85750

15. West Gates Pass: 85745