FIRST THINGS FIRST

Pinal Region



2022

NEEDS AND ASSETS REPORT

PINAL REGIONAL PARTNERSHIP COUNCIL 2022 NEEDS AND ASSETS REPORT

Funded by the

First Things First Pinal Regional Partnership Council

Prepared by

Community Research, Evaluation & Development (CRED)

John & Doris Norton School of Family and Consumer Sciences

College of Agricultural and Life Sciences

The University of Arizona

PO Box 210078

Tucson, AZ 85721-0462

Phone: (520) 621-8739

Fax: (520) 621-4979

https://norton.arizona.edu/cred

INTRODUCTION

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

This Needs and Assets Report for the Pinal 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 Pinal 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 Pinal Region. To that end, this information may be useful to local stakeholders as they work to enhance the resources available to young children and their families and as they make decisions about how best to support children birth to 5 years old in communities throughout the region.

ACKNOWLEDGEMENTS

The Pinal Regional Partnership Council wishes to thank all of the federal, state and local partners whose contributions of data, ongoing support and partnership with First Things First made this report possible. These partners included United Way of Pinal County, University of Arizona Cooperative Extension, 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. 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 Pinal Region.

Lastly, we want to acknowledge the current and past members of the Pinal 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.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	
ABOUT THIS REPORT	20
THE PINAL REGION	22
POPULATION CHARACTERISTICS	
Why It Matters	
What the Data Tell Us	
Population, Race and Ethnicity	
Immigrant Families and Language Use	
Family and Household Composition	
ECONOMIC CIRCUMSTANCES	41
Why it Matters	
What the Data Tell Us	
Income and Poverty	43
Food Insecurity	48
Employment	
Housing Instability	
Information Access Through Computers and Internet	
EDUCATIONAL INDICATORS	71
Why it Matters	72
What the Data Tell Us	
School Attendance and Absenteeism	
Achievement on Standardized Testing	
Graduation Rates and Adult Educational Attainment	
EARLY LEARNING	
Why it Matters	
What the Data Tell Us	
Early Care and Education Enrollment	
Early Care and Education Affordability	
Young Children with Special Needs	
CHILD HEALTH	
Why it Matters	
What the Data Tell Us	
Access to Care	
Prenatal Care	
Maternal Characteristics	
Nutrition and Weight Status	
Oral Health	
Immunizations and Infectious Disease	
Illness, Injury and Mortality	
FAMILY SUPPORT AND LITERACY	140
Why it Matters	
What the Data Tell Us	
Parent Education & Early Literacy	
Mental Health	
Substance Use Disorders	143
Child Removals and Foster Care	145

SUMMARY AND CONCLUSIONS	151
APPENDIX 1: ADDITIONAL DATA TABLES	159
Population Characteristics	159
Economic Circumstances	
Education	
Early Learning	181
Child Health	
Family Support and Literacy	211
APPENDIX 2: METHODS AND DATA SOURCES	213
APPENDIX 3: ZIP CODES OF THE PINAL REGION	216
APPENDIX 4: SCHOOL DISTRICTS OF THE PINAL REGION	218
APPENDIX 5: DATA SOURCES	221
REFERENCES	223

LIST OF FIGURES

Figure 1. The First Things First Pinal Region and its subregions	24
Figure 2. Share of children birth to 5 by subregion, 2010 U.S. Census	28
Figure 3. Number of babies born, 2014 to 2019	29
Figure 4. Children ages birth to 5 living with parents who are foreign-born, 2015-2019 ACS	32
Figure 5. Language spoken at home (by persons ages 5 and older), 2015-2019 ACS	33
Figure 6. English-language proficiency (for persons ages 5 and older), 2015-2019 ACS	34
Figure 7. Percent of kindergarten to 3rd grade students who were English Language Learne 2019-20	
Figure 8. Grandchildren ages birth to 5 living in a grandparent's household, 2015-2019 ACS	38
Figure 9. Median family income for families with children ages birth to 17, 2015-2019 ACS	44
Figure 10. Rates of poverty for persons of all ages and for children ages birth to 5, 2015-201 ACS	
Figure 11. Children ages birth to 5 living at selected poverty thresholds, 2015-2019 ACS	46
Figure 12. Number of children ages birth to 5 and households with children ages birth to 5 receiving TANF, state fiscal years 2016 to 2020	47
Figure 13. Number of children ages birth to 5 and households with children birth to 5 participating in SNAP, state fiscal years 2016 to 2020	49
Figure 14. Estimated percent of children ages birth to 5 participating in SNAP, state fiscal years 2016 to 2020	50
Figure 15. Children ages birth to 17 and birth to 5 receiving Pandemic EBT in the Pinal Regi March to May 2021	
Figure 16. Women enrolled and women participating in WIC, 2016 to 2020	52
Figure 17. Children ages birth to 4 enrolled and participating in WIC, 2016 to 2020	53
Figure 18. Free and reduced-price lunch eligibility, 2017-18 to 2019-20	54
Figure 19. Free and reduced-price lunch eligibility, 2019-20	55
Figure 20. Trends in lunches served through school nutrition programs, 2017-18 to 2019-20	56
Figure 21. Average annual unemployment rates (not seasonally adjusted), 2010 to 2020	57
Figure 22. Monthly unemployment rates (seasonally adjusted), 2019 to 2020	58
Figure 23. Monthly unemployment claims in the Pinal Region, Nov 2019 to Nov 2020	60
Figure 24. Percent of households with housing costs of 30 percent or more of household	

income by home ownership status, 2015-2019 ACS	64
Figure 25. Percent of household with neither a smartphone nor a computer, 2015-2019 AC	S 68
Figure 26. Persons of all ages in households with and without computers and internet connectivity, 2015-2019 ACS	69
Figure 27. Percent of children ages birth to 17 in household with a computer and internet connectivity, 2015-2019 ACS	70
Figure 28. Chronic absenteeism rates, 2018-19 to 2019-20	75
Figure 29. Trends in passing rates for AzMERIT 3rd Grade English Language Arts, 2015-1 2018-19	
Figure 30. Passing rates for 3rd grade AzMERIT Assessments, 2018-19	78
Figure 31. Trends in passing rates for AzMERIT 3rd Grade Math, 2015-16 to 2018-19	81
Figure 32. 4-year and 5-year graduation rates, 2019	83
Figure 33. Trends in 4-year and 5-year graduation rates, 2017 to 2019	84
Figure 34. Trends in 7th to 12th grade dropout rates, 2015-16 to 2019-20	84
Figure 35. Level of education for the adult population (ages 25 and older)	85
Figure 36. School enrollment for children ages 3 to 4, 2015-2019 ACS	89
Figure 37. Map of Early Care and Education Providers in the Pinal Region	91
Figure 38. Ratio of young children birth to 5 to child care slots	92
Figure 39. Estimated Number and Capacity of Early Care & Education Providers, 2020-202	2193
Figure 40. Number and capacity of regulated early care and educational providers by operational status in December 2020	95
Figure 41. Funded enrollment in Pinal Region Head Start programs run by Pinal-Gila Community Child Services by type, 2019-20	98
Figure 42. Number of informal care providers served through the Family, Friends, and Neighbors program in the Pinal Region, 2016-17 to 2020-21	99
Figure 43. Number of informal care providers served through the Family, Friends, and Neighbors program by subregion, 2020-21	99
Figure 44. Percent of Quality First programs with a 3-5 star rating and children enrolled in quality-level programs, state fiscal year 2020	. 101
Figure 45. Median monthly charge for full-time child care, 2018	. 103
Figure 46. Cost of center-based child care as a percent of median family income, 2018	. 104
Figure 47. Children birth to 5 eligible for, receiving, and on waitlist for DES child care	

subsidies, 2015 to 2	2019	105
•	volved children birth to 5 receiving DES child care subsidies, 20	
	oment and sensory screenings in the Pinal Region, SFY 2018 t	
Figure 50. Developi	oment and sensory screenings in the Pinal Region, SFY 2018 t	o 2020 107
•	n ages birth to 2 referred to and found eligible for AzEIP, federa	•
=	of children (ages 0-5) receiving DDD services, state fiscal yea	
Figure 53. Number	of children (ages 0-5) receiving DDD services, state fiscal year	ar 2020 112
•	in preschoolers with disabilities served by Local Education Aut 2019-20	
•	oolers with disabilities receiving services through Local Educati	
Figure 56. Children	n with disabilities served by Head Start, 2020-21	115
Figure 57. Children	with disabilities served by Head Start, 2020-21	116
•	arten to 3rd grade students enrolled in special education in pul primary disability, 2019-20	
Figure 59. Health in	nsurance coverage, 2015-2019 ACS	121
Figure 60. Births to	mothers with inadequate prenatal care, 2014 to 2019	122
Figure 61. Births to	mothers younger than 18, 2015 to 2019	124
Figure 62. Births to	mothers who used tobacco during pregnancy, 2014 to 2019.	125
Figure 63. Selected	d birth outcomes, 2019	126
Figure 64. Percent	of WIC-enrolled infants ever breastfed, 2016 to 2020	128
Figure 65. Obesity i	rates for WIC-enrolled children ages 2-4, 2016 to 2020	129
Figure 66. Children	n in child care with selected required immunizations, 2019-20	130
Figure 67. Child car	re immunization exemption rates, 2015-16 to 2019-20	131
Figure 68. Kinderga	arten immunization exemption rates, 2015-16 to 2019-20	134
•	al hospitalizations and emergency department visits due to unit a ages birth to 4 by selected mechanism of injury, 2016-2020 c	
Figure 70. Infant mo	ortality rates. 2018 to 2019	139

Figure 71. Number of non-fatal overdoses with opioids or opiates contributing to the overd 2017 to 2020	
Figure 72. Number of children ages birth to 5 removed by DCS, state fiscal years 2019 to	
Figure 73. Share of children ages birth to 5 removed by DCS in the Pinal Region by subre compared to the population ages birth to 5, state fiscal years 2019-2020 combined	•
Figure 74. Map of children removed by DCS by zip code, 2019-2020 combined	147
Figure 75. Substantiated maltreatment reports by type for children ages birth to 17, June-I	
Figure 76. Children ages birth to 17 reported to and removed by DCS, Jan 2018 to Dec 20	
Figure 77. Children ages birth to 17 entering out-of-home care compared to the number of licensed foster homes and unlicensed kinship homes in Arizona, Jan 2018-Dec 2020	f
Table 78. Rates of poverty for persons of all ages and for children ages birth to 5, 2015-20 ACS	
Figure 79. Children ages birth to 5 with all parents in the labor force, 2015-2019 ACS	183
Figure 80. Funded and cumulative enrollment in Pinal Region Head Start programs, 2019	
Figure 81. Eligible families not using DES child care subsidies, 2015 to 2020	195
Figure 82. Numbers of children (ages 0-2) receiving services from AzEIP, DDD, or both; s fiscal years 2019 and 2020	
Figure 83. Prenatal care for the mothers of babies born in 2019	202
Figure 84. Pre-pregnancy obesity rate for WIC-enrolled women, 2016 to 2020	204
Figure 85. Low birthweight births (less than 2,500 grams), 2014 to 2019	205
Figure 86. Preterm births (less than 37 weeks gestation), 2014 to 2020	205
Figure 87. Kindergarteners with selected required immunizations, 2019-20	208
Figure 88. Children ages birth to 17 removed by the Department of Child Services (DCS), June-Dec 2020	212
Figure 89. Zip Code Tabulation Areas (ZCTAs) in the Pinal Region	216
Figure 90. School Districts in the Pinal Region	218

LIST OF TABLES

Table 1. Population and households in the 2010 U.S. Census	27
Table 2. Race and ethnicity of the population of all ages, 2015-2019 ACS	30
Table 3. Race and ethnicity of children birth to 4	31
Table 4. Limited-English-speaking households, 2015-2019 ACS	35
Table 5. Living arrangements for children ages birth to 5, 2015-2019 ACS	37
Table 6. Selected characteristics of grandparents who are responsible for one or more grandchildren under 18 in their households, 2015-2019 ACS	40
Table 7. Unemployment and labor-force participation for the adult population (ages 16 and older), 2015-2019 ACS	59
Table 8. Parents of children ages birth to 5 who are or are not in the labor force, 2015-2019 ACS	62
Table 9. Housing-cost burden for all households, and for owners and renters separately, 201 2019 ACS	
Table 10. Households with and without computers and smartphones, 2015-2019 ACS	67
Table 11. Kindergarten to 3rd grade students enrolled in public and charter schools, 2019-20	
Table 12. Migrant students (grades K-12) enrolled in public and charter schools, 2017-18 to 2019-20	74
Table 13. AzMERIT assessment results: 3rd Grade English Language Arts, 2018-19	80
Table 14. AzMERIT assessment results: 3rd Grade Math, 2018-19	82
Table 15. Level of education for the mothers of babies born in 2018 and 2019	86
Table 16. Estimated Number and Capacity of Early Care & Education Providers, 2020-2021	90
Table 17. Number and licensed capacity of accredited child care providers, December 2020	94
Table 18. Arizona Enrichment Centers and ECE providers who received COVID-19 grants, December 2020	97
Table 19. Children enrolled in Quality First Programs, state fiscal year 2020 1	01
Table 20. Children ages birth to 2 referred to and found eligible for AzEIP, federal fiscal years 2018 to 2020	
Table 21. Numbers of children (ages 0-2) receiving services from AzEIP, DDD, or both; state fiscal years 2019 and 2020	

Table 22. Kindergarten to 3rd grade students enrolled in special education in public and charter schools by primary disability, 2019-20	. 118
Table 23. Selected characteristics of mothers giving birth, 2018 to 2019	. 123
Table 24. Newborns hospitalized because of maternal drug use during pregnancy, Jan 20 Jun 2020	
Table 25. Child care immunization exemption rates, 2015-16 to 2019-20	. 132
Table 26. Kindergarteners with selected required immunizations, 2019-20	. 133
Table 27. Confirmed and probable cases of infectious diseases in children ages birth to 4, 2017-18 to 2019-20	
Table 28. Hospitalizations and emergency room visits due to asthma, 2016-2020 combine	d135
Table 29. Numbers of deaths and mortality rates for infants, young children ages birth to 4 all children ages birth to 17, 2018 to 2019	
Table 30. Number of babies born, 2015 to 2019	. 159
Table 31. Race and ethnicity for the mothers of babies born in 2018 and 2019	. 159
Table 32. Children ages birth to 5 living with parents who are foreign-born, 2015-2019 ACS	S160
Table 33. Language spoken at home (by persons ages 5 and older), 2015-2019 ACS	. 161
Table 34. English-language proficiency (for persons ages 5 and older), 2015-2019 ACS	. 162
Table 35. Number of English Language Learners enrolled in kindergarten to 3rd grade, 20 18 to 2019-20	
Table 36. Percent of kindergarten to 3rd grade students who were English Language Lear 2017-18 to 2019-20	
Table 37. Grandchildren ages birth to 5 living in a grandparent's household, 2015-2019 AC	
Table 38. Median annual family income, 2015-2019 ACS	
Table 39. Children ages birth to 5 living at selected poverty thresholds, 2015-2019 ACS	. 167
Table 40. Families with children ages birth to 5 receiving TANF, state fiscal years 2016 to	
Table 41. Children ages birth to 5 receiving TANF, state fiscal years 2016 to 2020	. 168
Table 42. Families participating in SNAP, state fiscal years 2016 to 2020	. 168
Table 43. Children participating in SNAP, state fiscal years 2016 to 2020	. 168
Table 44. Children ages birth to 17 and birth to 5 receiving Pandemic EBT, March to May 2	2021
	169

Table 45. Women enrolled in WIC, 2016 to 2020	. 169
Table 46. Women participating in WIC, 2016 to 2020	. 169
Table 47. Children ages birth to 4 enrolled in WIC, 2016 to 2020	. 170
Table 48. Children ages birth to 4 participating in WIC, 2016 to 2020	. 170
Table 49. Free and reduced-price lunch eligibility, 2017-18 to 2019-20	. 171
Table 50. Lunches served through the National School Lunch Program, 2017-18 to 2019-2	
Table 51. Lunches served through the Child and Adult Care Feeding Program, 2017-18 to 2019-20	
Table 52. Lunches served through the Summer Food Service Program, 2017-18 to 2019-2	
Table 53. Monthly unemployment insurance claims, Nov 2019 to Nov 2020	
Table 54. Persons of all ages in households with and without computers and internet connectivity, 2015-2019 ACS	. 174
Table 55. Children ages birth to 17 in households with and without computers and internet connectivity, 2015-2019 ACS	
Table 56. Persons in households by type of internet access (broadband, cellular, and dial-	
Table 57. Kindergarten to 3rd grade students with chronic absences, 2018-19 to 2019-20.	. 177
Table 58. 4-year and 5-year graduation rates, 2019	. 178
Table 59. Trends in 4-year and 5-year graduation rates, 2017 to 2019	. 179
Table 60. 7th to 12th grade dropout rates, 2017-18 to 2019-20	. 180
Table 61. School enrollment for children ages 3 to 4, 2015-2019 ACS	. 181
Table 62. Number and licensed capacity of licensed or registered child care providers by to December 2020	•
Table 63. Number and capacity of regulated early care and educational providers by operational status in December 2020	. 184
Table 64. Funded and cumulative enrollment in Pinal Region Head Start programs, 2019-2	
Table 65. Funded enrollment in Pinal Region Head Start programs by type, 2019-20	. 187
Table 66. Cumulative enrollment in Pinal Region Head Start programs by race, 2019-20	. 188
Table 67. Number of informal care providers served through the Family, Friends, and	

Neighbors program in the Pinal Region, 2016-17 to 2020-21	. 189
Table 68. Number and capacity of Quality First Programs, January 2021	. 190
Table 69. Quality First Programs, state fiscal year 2020	. 191
Table 70. Median daily charge for full-time child care, 2018	. 191
Table 71. Median monthly charge for full-time child care, 2018	. 192
Table 72. Cost of center-based child care as a percentage of income, 2018	. 192
Table 73. Children receiving DES child care subsidies	. 193
Table 74. DCS-involved children receiving DES child care subsidies	. 194
Table 75. Eligible families not using DES child care subsidies, 2015 to 2020	. 195
Table 76. Number of children (ages 0-5) receiving DDD services, state fiscal years 2017 to 2020	
Table 77. Preschoolers with disabilities receiving services through Local Education Authorized to 2019-20	
Table 78. Preschoolers with disabilities receiving services through Local Education Authority type of disability, 2019-20	
Table 79. Kindergarten to 3rd grade students enrolled in special education in public and charter schools, 2017-18 to 2019-20	. 200
Table 80. Health insurance coverage, 2015-2019 ACS	. 201
Table 81. Prenatal care for the mothers of babies born in 2018 and 2019	. 202
Table 82. WIC-enrolled women with pre-pregnancy obesity, 2019 to 2020	. 203
Table 83. Pre-pregnancy obesity rate for WIC-enrolled women, 2016 to 2020	. 203
Table 84. Selected birth outcomes, 2018 to 2019	. 204
Table 85. WIC-enrolled infants ever breastfed, 2020	. 206
Table 86. Percent of WIC-enrolled infants ever breastfed, 2016 to 2020	. 206
Table 87. Weight status of WIC-enrolled children ages 2-4, 2020	. 206
Table 88. Children ages 2-4 with obesity 2016 to 2020	. 207
Table 89. Children in child care with selected required immunizations, 2019-20	. 207
Table 90. Kindergarten immunization exemption rates, 2015-16 to 2019-20	. 209
Table 91. Confirmed and probable cases of infectious diseases in children ages birth to 4, 2018 to 2020	. 210
Table 92. Non-fatal hospitalizations and emergency department visits due to unintentional	

injuries for children ages birth to 4, 2016-2020 combined2	210
Table 93. Number of deaths with opiates or opioids contributing, 2017 through 2020 2	211
Table 94. Number of children ages birth to 5 removed by DCS, state fiscal years 2019 to 202	
Table 95. Substantiated maltreatment reports by type for children ages birth to 17, June-Dec	
Table 96. Children ages birth to 17 removed by the Department of Child Services (DCS), Jur Dec 2020	
Table 97. Zip Code Tabulation Areas (ZCTAs) in the Pinal Region2	217
Table 98. School Districts and Local Education Authorities (LEAs) in the Pinal Region 2	<u>2</u> 19

EXECUTIVE SUMMARY

The First Things First Pinal Region includes all of Pinal County minus the tribal lands belonging to the Gila River Indian Community, the Tohono O'odham Nation, and the San Carlos Apache Nation. To look at variations within the region, there are eight subregions: Apache Junction-Gold Canyon, Casa Grande, Copper Corridor, Eloy-Arizona City, Florence-Coolidge, Maricopa-Ak Chin-Stanfield, Red Rock-Saddlebrooke, and San Tan Valley-Queen Creek.

Population Characteristics.

In the 2010 Census, the Pinal Region included 366,449 persons, of whom 34,984 were children under the age of 6. About 20% of the households in the region had at least one child under 6. The number of births in the region is remaining constant at around 4,400 births per year, which is in contrast to a steady decline in births seen statewide.

Young children in the region are racially and ethnically diverse, with no one group making up a majority of the population. More than 20% of residents older than age 5 speak a language other than English at home; the majority of these people also speak English very well. There are some areas in which larger proportions of the population may struggle to communicate in English; in the Eloy-Arizona City subregion, for example, about 17% report not speaking English very well. And while only 2% of the households in the region are identified as "limited-English-speaking," which means that no adult or teenager in the household speaks English very well, this still amounts 3,184 households that need additional consideration.

Most young children under the age of 6 (63%) live in two-parent households. Most of the rest (31%) live with a single parent. The remaining children either live with relatives other than parents (3%) or in a household with unrelated persons (3%). About 12% of the children under 6 live in a household which is headed by their grandparents; some of these are multi-generational households in which the child and the parent(s) are living with the grandparents and some of these are households in which the grandparent is raising the child. An estimated 4,657 grandparents in the Pinal Region are responsible for raising one or more grandchildren (up to age 17) who live with them. A third of these grandparents (33%) do not have the child's parent(s) living in the household.

Economic Circumstances.

The median family income in Pinal County is about \$66,500 per year, which is a bit less than the statewide median of \$70,200. This median income is very close to the self-sufficiency standard for a family of four, suggesting that many of the families in the county earn less than the amount estimated to be necessary to fully support themselves.

Economic security varies in communities across the Pinal Region. The American Community Survey (ACS) estimates that about 13% of the region's population—and 19% of its children under age 6—live below the poverty level. (In 2019, the poverty threshold for a family of two adults and two children was \$25,926 per year.) In the Eloy-Arizona City subregion, nearly half (49%) of children under 6 live in poverty.

Overall, use of social safety net programs had been declining in the region, pre-pandemic. For example, the numbers of families and children participating in the Supplemental Nutrition Assistance Program (SNAP) has decreased each year since SFY2016, and the number of women participating in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) has declined as well. The numbers of families and children participating in the Temporary Assistance to Needy Families (TANF) program had also been decreasing each year, but the numbers increased with the economic crisis of 2020, likely in part due to policy changes as well as increased need. Although many families were helped by the Economic Impact Payments during the pandemic, some were not eligible due to their citizenship status.

Food insecurity is a particular problem for low-income children. With schools closed, children lost access to free and reduced-price lunches. The Pandemic Electronic Benefits Transfer program (P-EBT) was created to fill in the gap. In the Pinal Region in May of 2021, 37,115 children received P-EBT benefits, of whom 1,490 were children under six. While important, this program failed to reach many families with children who should have been eligible. The Summer Food Service Program (SFSP), also operating under a new set of rules during the pandemic, was expanded to help fill the void left by the loss of meals served through the National School Lunch Program, serving nearly 1.3 million meals in 2019-20.

Pre-pandemic, unemployment rates in the Pinal County had been on a steady decline since the end of the Great Recession in 2009. In the last few months before the pandemic began, the monthly unemployment rate in Pinal County was about 5%. In April of 2020, however, the unemployment rate leapt up to 12.8% in the county. The most recent data show monthly rates in the range of 6-7%, which is higher than the pre-pandemic levels.

Housing costs can be another economic stressor. An estimated 26% of households in the Pinal Region live in housing which costs 30% or more of their income. This housing-cost burden is especially true among renters (43%), but still an issue for over a fifth (21%) of homeowners as well.

Most homes have some means of accessing the internet. In the Pinal Region, 92% of households are able to access the internet via smartphone, tablet, or computer. The percentage is lower in the Copper Corridor (80%) and Eloy-Arizona City (85%) subregions.

Educational Indicators.

In the Pinal Region, during the 2019-20 school year, enrollment in public and charter schools for kindergarten through third grade was approximately 4,450 students per grade. When the region's third grade students took the AzMERIT achievement assessments in the 2018-19 school year, 39% received passing scores in English Language Arts (ELA) and 46% had passing scores in Math. This puts Pinal Region students behind those statewide, where 46% and 51% of third-graders received passing scores in ELA and Math, respectively.

Overall graduation rates increased slightly between 2017 and 2019 in the Pinal Region. The four and five-year graduation rates in the Pinal Region in 2019 (82% and 85%) were higher than across Arizona as whole (79% and 83%), although variability did exist within districts and schools within the region.

Among the adult population of the region, 86% have a high-school education or more. The subregions of Eloy-Arizona City and Florence-Coolidge, however, have lower rates (72% and 77% respectively), Among mothers of babies born in 2018 or 2019 in the Pinal Region, 85% have a high-school education or more.

Early Learning.

The Pinal Region is home to 106 registered early care and education providers—a mix of child care centers, Head Start centers, public-school based programs, and home-based care—enough to care for up to 6,608 children if functioning at full capacity. However, staffing shortages are a problem across the region, particularly in the wake of the pandemic. Although providers are more plentiful in the more populated parts of the region, the San Tan Valley-Queen Creek subregion has a relatively low capacity, given the large number of young children in that part of the region. Furthermore, during December 2020, more than one-third of the registered providers in the Pinal Region were not open, due to the COVID-19 pandemic. In addition to the registered providers, there are many children care for through informal child care arrangements with family members, friends, and neighbors.

Child care is expensive. The median monthly charge in a licensed center ranges from \$570 for a 3- to 5year-old up to \$700 for an infant. Fees are likely to rise in the near future, partly because the pandemic has increased operating costs and led to staffing shortages. In response, some relief funds have been provided through the Department of Economic Security's (DES) COVID-19 grant program, which has supported 73 of the region's providers. The state has also increased the funds available for DES's child care subsidies.

In Arizona, children with special needs can receive services through the Arizona Early Intervention Program (AzEIP), the Division of Developmental Disabilities (DDD), the Arizona Department of Education's Early Childhood Special Education Program, and Head Start. Children can be referred into these programs after developmental screenings, which have declined in recent years and likely were further diminished during the pandemic. However, despite the declining screening numbers, the number of referrals has actually increased. The number of children found eligible has also risen over time, but remains only about 40% of those referred within a given year, which means there many families with concerns about their children's development who are not receiving services who may benefit from some form of additional support or education. There are also many times more kindergarten to 3rd grade students enrolled in special education than there are children being served by early intervention services. Furthermore, given shortages of service providers and the challenges of offering services remotely, families of children with special needs have faced particularly large challenges during the pandemic.

Child Health.

Access to health care is a critical part of optimal child development. In the Pinal Region, it is estimated that 7% of young children and 8% of the general population do not have health insurance coverage. Public insurance systems (i.e., Medicaid/AHCCCS and the Indian Health Service) cover approximately half of the births in the region each year, aligning with state and national patterns. In 2019, there were 4,437 births in the Pinal Region Among these mothers. Worryingly, the proportion of women who receive no prenatal care or minimal prenatal care (fewer than 5 visits) has been on the rise in the Pinal Region since 2016. Pregnant mothers' use of tobacco during pregnancy has been decreasing over the past few years, but remains relatively high when compared to Arizona overall and the Healthy People 2020 target. The rates of low birthweight and preterm births in the region have met or come close to meeting the Healthy People 2020 targets.

Children in child care settings and kindergarteners are required to have certain vaccinations. While compliance is generally above 90% in the region, the number of parents claiming exemptions has been increasing each year. In the 2019-20 school year, 7.1% of children in child care and 5.2% of kindergarteners filed for an exemption from a vaccination requirement. Rates were notably high in the Apache Junction-Gold Canyon subregion, where 22.3% of children in child care had religious exemptions, and in the San Tan Valley-Queen Creek subregion, where 8.3% of kindergarteners had personal belief exemptions.

The infant mortality rate in the Pinal Region was 6.3 deaths per thousand live births in 2019, which is higher than both the statewide rate of 5.4 per thousand and the Healthy People 2020 target of no more than 6.0 per thousand.

Family Support and Literacy.

Family support services are a critical need for many families in the region, especially with the disruptions caused by the pandemic. Children do best in stable, nurturing environments where they feel safe and supported, but many families face challenges because of poverty, mental-health problems, substance-use problems, or other stressors. Home visiting programs are one approach to supporting parents and families, and aim to reach over 400 children in the region a year.

National data suggest that alcohol and other substance use increased substantially during the early weeks of the pandemic. However, in Pinal County, the number of non-fatal overdoses involving opioids or opiates was already on a steady rise, increasing six-fold between 2017 and 2020, rising to a high of 315

overdoses in 2020. Between 2016 and 2020, there were 664 newborns in the Pinal Region hospitalized because of maternal drug use during pregnancy.

In situations where the harm in remaining with their family is determined to be too great to a child, they may be removed from their home, either temporarily or permanently. In the Pinal Region, DCS has removed about 200 children a year from their homes in recent years. The subregions of Apache Junction-Gold Canyon, Casa Grande, and Eloy-Arizona City had proportionally more young children removed, compared to the size of the overall populations of young children in each.

ABOUT THIS REPORT

The data in this report come from a variety of sources including federal and state agencies and local agencies or service providers. Federal government sources include publicly available data from the 2010 Census and the 2015-2019 American Community Survey (ACS) 5-Year Estimates. Because the 2010 Census is now a decade old, it is used minimally in this report. For example, children who were under six years old in 2010 are now between 11 and 16 years old. The Census Bureau expects to release detailed tables from the 2020 Census later in 2022. Data in this report from the ACS summarize the responses from samples of residents taken between 2015 and 2019, which is notably before the COVID-19 pandemic began. Because these estimates are based on samples rather than the full population, ACS data should not be considered exact. Estimates for smaller geographies, such as subregions, are less accurate than estimates for larger geographies, such as the county or state, because they are based on smaller sample sizes. Estimates which are based on very few respondents (fewer than 50) will not be included in the data tables in this report.

Data were provided to First Things First (FTF) by state agencies including the Arizona Department of Health Services (ADHS), the Arizona Department of Education (ADE), the Arizona Department of Economic Security (DES), and the Arizona Department of Child Safety (DCS). In most cases, the data in this report were calculated especially for the Needs & Assets process and are more detailed than the data that are published by these agencies for the general public. Whenever possible, this report will use data tailored to the region and sometimes subregions, but in some cases there are only county-level or statewide data available to report. This report also includes publicly available data for the state and counties from state agencies such as the Arizona Department of Commerce's Office of Economic Opportunity (OEO) and DCS semi-annual child welfare reports to supplement data received through specific requests.

Additionally, this report includes local quantitative and qualitative data collected from the Pinal Gila Community Child Services Inc. (PGCCS), Chicanos Por La Causa, the Friends, Family & Neighbors program of the United Way of Pinal County, and the Pinal Regional Partnership Council. Regional Partnership Council members and other local stakeholders participated in a facilitated data discussion on July 23rd, 2021, which allowed them to share their local knowledge and perspective in interpreting the data collected. Perspectives and feedback from participating session members are included as key informant perspectives within this report. The Data Interpretation Session paid special interest to the region's priority areas:

1. Access to and utilization of high-quality early care and education by families with young children across the region,

i Only Table 1 ("Population and households") and Figure 2 ("Share of children birth to 5 by sub-region") use 2010 Census data.

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

- 2. Families with special needs children and
- 3. Foster families and kinship-care families.

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

In most tables in this report, the top rows of data correspond to the FTF Pinal Region and defined subregions. Not all data are available at the FTF regional level because not all data sources analyze their data based on FTF regional boundaries. The last table rows present data that are useful for comparison purposes, including Pinal County, state of Arizona, and national estimates or targets where available. Data tables and graphs are as complete as possible. Data which are not available for a particular geography are indicated by the abbreviation "N/A." State agencies have varying policies about reporting small values. Entries such as "<10" or "<11" are used when the count is too small to be reported and has been suppressed to protect privacy. In some cases, table entries will indicate a range of values such as "[11 to 27]" because the suppression policy prevented the vendor from knowing the exact value, but comparison of these ranges of possible values to other values in the table or figure may still be useful. Table entries of "DS" indicate that data have been suppressed and we are unable to provide a useful range of possible values.

THE PINAL REGION

The First Things First regional boundaries were initially established in 2007, creating 31 regions which were designed to (a) reflect the view of families in terms of where they access services, (b) coincide with existing boundaries or service areas of organizations providing early childhood services, (c) maximize the ability to collaborate with service systems and local governments and facilitate the ability to convene a Regional Partnership Council, and (d) allow for the collection of demographic and indicator data. The regional boundaries are reviewed every two years. In fiscal year 2015, the boundaries were modified using census blocks (rather than zip codes), creating 28 regions. This report uses the 2015 definition of the regional boundaries.

The First Things First Pinal Region is defined as Pinal County, not including the lands belonging to the Gila River Indian Community, the Tohono O'odham Nation or the San Carlos Apache Tribe. The region does include the land belonging to the Ak-Chin Indian Community. Thus, in tables where values for both the region and the county are presented and the two values differ, that difference is attributable to the inclusion of the Gila River Indian Community, the Tohono O'odham Nation and the San Carlos Apache Tribe communities in the county-level data. The majority of the Tohono O'odham land in Pinal County is in the southwestern corner of the county and part of the Sif Oidak District, which includes the unincorporated places of Chuichu, Vaiva Vo, Kohatk and Tat Momoli. There is also a small bit of Tohono O'odham land near Florence; this land is part of the Gu Achi District.

The Eight Subregions

To provide more localized data, this report will include—whenever possible—information about eight subregions within the Pinal Region. The subregions are illustrated in Figure 2.

The **Apache Junction-Gold Canyon** subregion includes 14 census tracts (2.01, 3.07, 3.08, 3.09, 3.10, 3.11, 3.12, 3.13, 3.14, 3.15, 3.16, 3.17, 3.18, and 3.19) in the northern part of the county. The majority of the population in the subregion live in the Pinal County part of the city of Apache Junction (the remainder of Apache Junction is in the Southeast Maricopa First Things First Region). In addition, this subregion includes the unincorporated places of Gold Canyon, Queen Valley and part of Top-of-the-World.

The Casa Grande subregion contains 13 census tracts (13.01, 13.03, 13.04, 13.05, 13.06, 14.03, 14.04, 14.05, 14.06, 14.07, 14.08, 15, and 16). This subregion includes almost all of the city of Casa Grande as well as some of the surrounding unincorporated area.

The eastern part of Pinal County forms the **Copper Corridor** subregion. There are five census tracts here (4, 7, 22, 23, and 24). The towns of Superior, Kearny, and Mammoth lie in this subregion, as well as the unincorporated places of San Manuel, Oracle, Dudleyville, Campo Bonito and part of Top-of-the-World.

The **Eloy-Arizona City** subregion is defined as six census tracts (19, 20.01, 20.02, 20.03, 21.01, and 21.02), including the city of Eloy, most of Arizona City (which is not a city, but an unincorporated place) and a small part of Picacho.

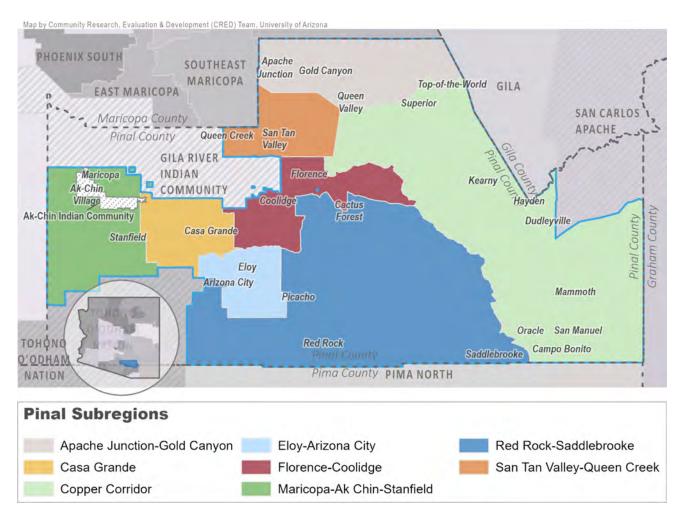
The subregion of Florence-Coolidge contains eight census tracts (8.01, 8.03, 9.01, 9.02, 10, 11, 12, and 9412) and includes the city of Coolidge and the town of Florence, along with some outlying unincorporated area.

The Maricopa-Ak Chin-Stanfield subregion includes 13 census tracts (17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.07, 17.08, 17.09, 17.10, 17.11, 9413, and 9414). The city of Maricopa, the unincorporated place of Stanfield, and the Ak-Chin Indian Community are found in this subregion. A portion of Census Tract 9414 is on the Tohono O'odham Nation and is therefore not included in the Pinal First Things First Region.

In the southern part of the county, the **Red Rock-Saddlebrooke** subregion is defined by four census tracts (6.03, 6.04, 8.02, and 21.03). This subregion includes the unincorporated places of Red Rock, Saddlebrooke and Cactus Forest, as well as parts of Arizona City and Picacho.

By population, the largest of the subregions is San Tan Valley-Queen Creek. This subregion is defined by twelve census tracts (2.04, 2.05, 2.06, 2.07, 2.08, 2.09, 2.10, 2.11, 2.12, 2.13, 2.14, and 2.15). It includes San Tan Valley (which is an unincorporated place) and the part of the town of Queen Creek which lies in Pinal County. (The remainder of Queen Creek town is in the Southeast Maricopa First Things First Region.)

Figure 1. The First Things First Pinal Region and its subregions



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



POPULATION CHARACTERISTICS

POPULATION CHARACTERISTICS

Why It Matters

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

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

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

What the Data Tell Us

Population, Race and Ethnicity

According to the 2010 U.S. Census, the Pinal Region had a population of 366,449, of whom 34,984 were children under the age of 6 (Table 1). This meant that Pinal contained 5.7% of the total Arizona population and 6.4% of the population of young children in the state. Twenty percent of the households in the Pinal Region included at least one young child, compared to only 16% of households statewide.

Table 1. Population and households in the 2010 U.S. Census

Geography	Total population	Population (ages 0-5)	Total number of households	Number and phouseholds with more children	ith one or
Pinal Region	366,449	34,984	123,199	24,027	20%
Apache Junction-Gold Canyon	57,253	3,127	25,512	2,252	9%
Casa Grande	57,701	5,417	20,755	3,780	18%
Copper Corridor	16,110	1,176	6,262	839	13%
Eloy-Arizona City	27,416	2,136	6,898	1,433	21%
Florence-Coolidge	46,709	2,959	10,435	1,970	19%
Maricopa-Ak-Chin-Stanfield	52,578	6,456	17,282	4,456	26%
Red Rock-Saddlebrooke	18,917	1,137	8,400	790	9%
San Tan Valley-Queen Creek	89,765	12,576	27,655	8,507	31%
Pinal County	375,770	36,181	125,590	24,750	20%
Arizona	6,392,017	546,609	2,380,990	384,441	16%
United States	308,745,538	24,258,220	116,716,292	17,613,638	15%

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

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

As of the 2010 Census, over a third (36%) of the young children are in the San Tan Valley-Queen Creek subregion (Figure 2). Collectively, that subregion and the Maricopa-Ak Chin-Stanfield subregion (18%) contain over half of the young children in the Pinal Region. Much smaller proportions of children reside in the Copper Corridor (3%) and Red Rock-Saddlebrooke (3%) subregions.

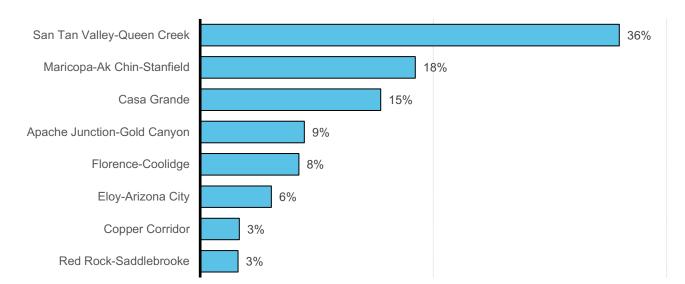
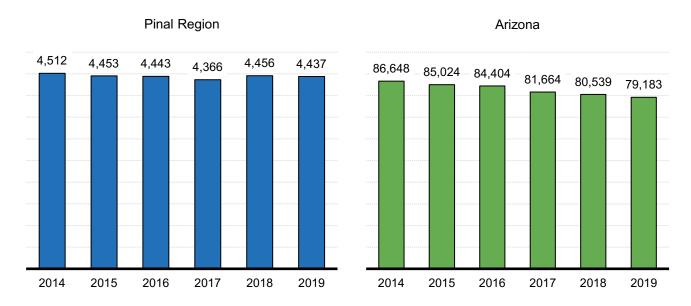


Figure 2. Share of children birth to 5 by subregion, 2010 U.S. Census

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

Between 2014 and 2019, there were about 4,400 babies born annually in the Pinal Region, with some variation from year to year. This relative consistency is in contrast to patterns statewide, where about 2% fewer babies were born each year compared to the previous year. This decrease in natality in Arizona mirrors a trend in the U.S., where between 1 and 2% fewer babies were born each year in the same time period.²⁴

Figure 3. Number of babies born, 2014 to 2019



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

The racial and ethnic composition of the Pinal Region overall is similar to that of Arizona overall, but it varies widely across subregions (Table 2). According to the American Community Survey (ACS) fiveyear averages, 31% of the region's population identifies as Hispanic or Latino, 58% as non-Hispanic White, with smaller fractions identifying their race as Black (4%), American Indian (3%), Asian or Pacific Islander (2%) or multi-racial (4%). Substantially higher proportions of residents in the Copper Corridor (55%), Eloy-Arizona City (51%) and Casa Grande (45%) subregions identify as Hispanic or Latino. The Apache Junction-Gold Canyon (83%) and Red Rock-Saddlebrooke (75%) subregions have at least three-quarters of their population identifying as White. The Maricopa-Ak Chin-Stanfield subregion has a higher proportion of African American residents than elsewhere in the region or state. Given that the COVID-19 pandemic disproportionately impacted Hispanic, Black and American Indian communities, ^{25,26} these subregional variations may be helpful to consider in supporting communities as they recover in the wake of the pandemic.

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

Geography	Estimated population (all ages)	Hispanic or Latino	White, not Hispanic or Latino	Black or African- American	American Indian or Alaska Native	Asian or Pacific Islander	Two or more races
Pinal Region	424,537	31%	58%	4%	3%	2%	4%
Apache Junction-Gold Canyon	64,413	13%	83%	1%	1%	1%	2%
Casa Grande	67,159	45%	44%	3%	7%	2%	6%
Copper Corridor	17,223	55%	40%	0%	1%	1%	4%
Eloy-Arizona City	29,757	51%	36%	6%	4%	3%	4%
Florence-Coolidge	53,229	38%	47%	7%	5%	1%	4%
Maricopa-Ak Chin-Stanfield	57,838	30%	48%	11%	5%	4%	7%
Red Rock-Saddlebrooke	24,681	19%	75%	1%	2%	1%	3%
San Tan Valley-Queen Creek	110,237	22%	67%	4%	2%	2%	4%
Pinal County	432,793	30%	57%	4%	5%	2%	4%
Arizona	7,050,299	31%	55%	5%	5%	4%	4%
United States	324,697,795	18%	61%	13%	1%	6%	3%

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

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

Compared to the overall population, the population of children birth to 4 in the Pinal Region is more diverse. No single racial/ethnic group has a majority, and 11% identify as multiracial (Table 3). As in the overall population, White, non-Hispanic children make up the largest proportion (44%), followed closely by Hispanic or Latino children (42%). Also similar to the overall population, there are relatively low proportions of Black (3%), American Indian (5%) or Asian and Pacific Islander (1%) children. More than one in ten young children in the Florence-Coolidge (15%) and Casa Grande (11%) subregions identify as American Indian.

Table 3. Race and ethnicity of children birth to 4

Geography	Estimated number of children (birth to 4 years old)		White, not Hispanic or Latino	Black or African- American	American Indian or Alaska Native	Asian or Pacific Islander	Two or more races
Pinal Region	24,398	42%	44%	3%	5%	1%	11%
Apache Junction-Gold Canyon	2,031	23%	69%	1%	0%	0%	7%
Casa Grande	4,309	61%	25%	2%	11%	0%	13%
Copper Corridor	572	84%	11%	0%	2%	2%	11%
Eloy-Arizona City	1,363	89%	6%	8%	2%	0%	3%
Florence-Coolidge	2,620	37%	38%	4%	15%	0%	10%
Maricopa-Ak Chin-Stanfield	3,879	44%	33%	11%	7%	2%	15%
Red Rock-Saddlebrooke	1,429	46%	50%	0%	3%	2%	11%
San Tan Valley-Queen Creek	8,194	27%	62%	1%	1%	1%	11%
Pinal County	24,924	42%	43%	3%	7%	1%	11%
Arizona	433,968	45%	38%	5%	6%	3%	9%
United States	19,767,670	26%	50%	14%	1%	5%	8%

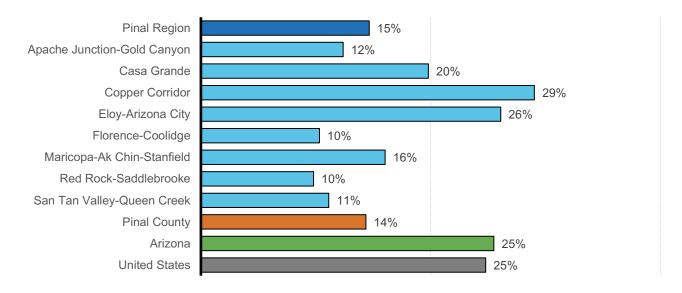
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Tables B01001, B01001b, B01001c, B01001d, B01001e, B01001g, B01001h, & B01001i

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

Immigrant Families and Language Use

A growing number of children nationwide live in a family where one or both of their parents is foreignborn.²⁷ Statewide, this is true for about a quarter (25%) of children (Figure 4). In the Pinal Region overall, this is true for only 15% of children, although it varies by subregion, rising to 29% in the Copper Corridor subregion. Despite the reality that parents may have become naturalized citizens or permanent residents and that the fact that the vast majority of these young children are citizens, 28 changes in national immigration policy have led some immigrant families to avoid using social services for which they and their children are legally qualified due to fear of deportation or risking their legal status in the country. ^{29,30,31} This can put immigrant families at risk of reduced access to medical care and increased food insecurity, which can lead to long-term impacts on health and educational attainment, as well as community-level economic impacts. ^{32,33,34,35} In addition, during the COVID-19 pandemic, immigrants have been more likely to work in frontline positions and experience job loss, increasing their risk of COVID-19 exposure and creating additional barriers to testing and treatment with the loss of employer-sponsored health insurance.³⁶

Figure 4. Children ages birth to 5 living with parents who are foreign-born, 2015-2019 ACS



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

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

Households with multiple languages spoken pose a unique balance of benefits for child learning and barriers to caregiver engagement (e.g. when interacting with schools or health care providers).³⁷ The ACS estimates that about 8 in 10 (79%) of the Pinal Region's residents speak only English at home, and that 18% speak Spanish at home (Figure 5). The remaining 4% speak other languages, of which American Indian languages are the most common.

Pinal Region 79% 4% Apache Junction-Gold Canyon 91% 3% Casa Grande 72% 3% Copper Corridor 3% 66% 31% Eloy-Arizona City 3% 62% Florence-Coolidge 71% 4% Maricopa-Ak Chin-Stanfield 77% Red Rock-Saddlebrooke 88% San Tan Valley-Queen Creek 85% **Pinal County** 79% Arizona 73% **United States** 78% ■ Speak only English at home ■ Speak Spanish at home ■ Speak languages other than English or Spanish at home

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

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

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

A majority of the residents who speak a language other than English at home report that they speak English "very well," meaning they are proficiently bilingual or multilingual. This is the case for 15% of Pinal Region residents ages 5 and older, and a full quarter of the population (25) in the Copper Corridor (Figure 6). Young children can benefit from this exposure to multiple languages; mastery of more than one language is an asset in school readiness and academic achievement, and offers cognitive and social-emotional benefits in early school and throughout their lifetime. 38,39,40,41 Acknowledging and valuing linguistic heritage and recognizing needs for resources and services in languages other than English remain important considerations for organizations and agencies across Arizona.

In addition to those who are multilingual, about 7% of Pinal Region residents speak a language other than English at home and do not consider themselves as speaking English "very well" (Figure 6). In the

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

Eloy-Arizona City subregion, this is true for an estimated 17% of residents. Parents and caregivers with limited English proficiency may experience barriers to accessing health care and social services, as well as barriers to engaging in important interactions at their children's schools; these barriers can affect a family's ability to promote positive child development. The availability of bi- or multi-lingual staff and resources can help support these families. 42,43

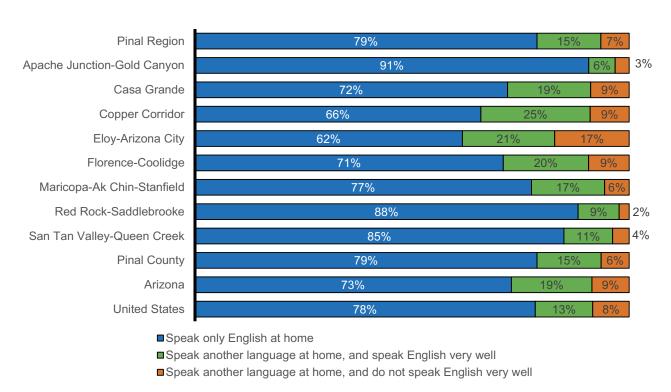


Figure 6. English-language proficiency (for persons ages 5 and older), 2015-2019 ACS

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

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

At the household level, over 2% of the households in the Pinal Region – representing over 3,000 households – are identified as "limited-English-speaking," which means that no adult or teenager in the household speaks English very well (Table 4). This proportion rises to 7% in the Eloy-Arizona City subregion where there are an estimated 524 families who would likely struggle to understand information conveyed only in English. While they make up a smaller proportion of their more populous subregion, there are also an estimated 947 such families in Casa Grande.

Table 4. Limited-English-speaking households, 2015-2019 ACS

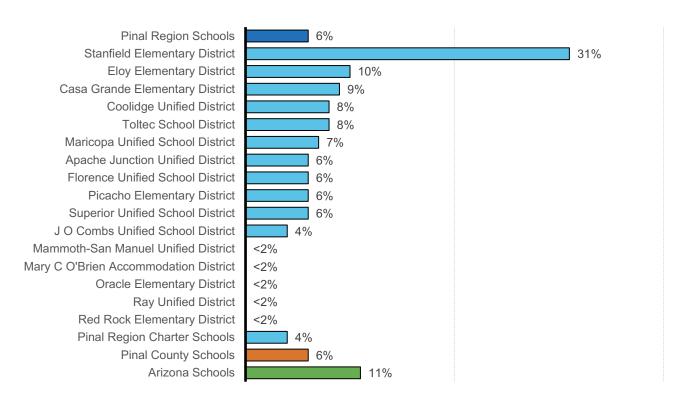
Geography	Estimated number of households	Number and percent of limited-English-speaking households			
Pinal Region	138,815	3,184	2%		
Apache Junction-Gold Canyon	28,928	394	1%		
Casa Grande	21,919	947	4%		
Copper Corridor	6,512	261	4%		
Eloy-Arizona City	7,438	524	7%		
Florence-Coolidge	11,626	199	2%		
Maricopa-Ak Chin-Stanfield	17,846	364	2%		
Red Rock-Saddlebrooke	10,299	131	1%		
San Tan Valley-Queen Creek	34,247	363	1%		
Pinal County	141,300	3,218	2%		
Arizona	2,571,268	102,677	4%		
United States	120,756,048	5,308,496	4%		

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

Note: A "limited-English-speaking" household is one in which no one over the age of 13 speaks English very well.

Schools dedicate resources and programming for students who do not speak English as their first language and need additional support to become proficient in English. These students are identified via caregiver report on a home language survey, and subsequently by a sub-proficient score on the Arizona English Language Learner Assessment (AZELLA).⁴⁴ In the Pinal Region overall, 6% of students are classified as English Learners (EL), compared to 11% statewide. Stanfield Elementary District stands out as having 31% of its kindergarten to 3rd grade students classified as EL students.

Figure 7. Percent of kindergarten to 3rd grade students who were English Language Learners, 2019-20



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

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

Family and Household Composition

About two-thirds (63%) of the children under 6 in the Pinal Region and Arizona live with two parents (or a parent and a step-parent) and the majority of the rest (31%) live with a single parent (Table 5). Far fewer live with relatives other than parents (such as grandparents, uncles, and aunts; 3%), or in the household of an unrelated person (such as a foster parent; 3%). In the Eloy-Arizona City subregion, however, nearly two-thirds of young children (62%) live with only one parent. Single-parent families are also the most common arrangement for young children in the Casa Grande (49%) and Copper Corridor (49%) subregions.

With the move to remote learning during the pandemic, parents and caregivers took on the challenging role of assisting with children's online learning. The burden was particularly taxing for single-parent households, with more than three-quarters (78%) of single parents surveyed nationally managing children's online learning. Single-parent households were more likely to experience unemployment, food insecurity, difficulty paying for housing and utilities and heightened behavioral difficulties in

children during the pandemic. 45,46,47 Single-parent households were also more likely to rely upon grandparents to take on primary caregiving (37%) and support of children's remote learning (20%) compared to the overall population (26% and 11%, respectively).⁴⁸ These additional hardships may impact the over 9,000 young children living in the Pinal Region with a single parent.

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

Geography	Estimated number of children (birth to 5 years old) living in households	Living with two married parents	Living with one parent	Living not with parents but with other relatives	Living with non- relatives
Pinal Region	29,284	63%	31%	3%	3%
Apache Junction-Gold Canyon	2,418	52%	34%	11%	3%
Casa Grande	5,314	47%	49%	2%	1%
Copper Corridor	741	46%	49%	5%	0%
Eloy-Arizona City	1,522	29%	62%	6%	3%
Florence-Coolidge	3,194	61%	32%	6%	1%
Maricopa-Ak Chin-Stanfield	4,712	63%	31%	1%	5%
Red Rock-Saddlebrooke	1,656	73%	19%	0%	8%
San Tan Valley-Queen Creek	9,727	81%	16%	1%	2%
Pinal County	29,989	63%	32%	3%	3%
Arizona	517,483	59%	37%	3%	2%
United States	23,640,563	63%	33%	2%	2%

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

Note: The four percentages in each row should sum to 100%, but may not because of rounding. The term "parent" here includes stepparents. Please note that due to the way the ACS asks about family relationships, children living with two cohabitating but unmarried parents are not counted as living with two parents (these children are counted in the 'one parent' category).

The ACS estimates that 12% of young children in the Pinal Region live in their grandparent's household, compared to 13% across Arizona (Figure 8). Note that the grandparent may or may not be responsible for raising the child, and that the child's parent(s) may or may not also be living in the household. Across subregions, there are 6 that have a higher proportion of these multigenerational families than the state (13%) or nation (11%). The Copper Corridor subregion has the highest percentage of children aged birth to 5 living in a grandparent's household (25%), followed by the Eloy-Arizona City (21%), Florence-Coolidge (19%), Casa Grande (17%), Apache Junction-Gold Canyon (15%) and San Tan Valley-Queen

Creek (14%) subregions. Key informants thought that in the Copper Corridor especially, this may represent grandparents caring for teenage parents' children.

Understanding the circumstances of grandparents living with their grandchildren is critical to providing services in a way that will meet the unique needs of grandparent-led families. Although multigenerational households can enhance family bonds and provide additional financial and caregiving resources, children's risk of living in poverty is higher for those living with grandparents and grandparents often encounter multiple barriers when accessing public assistance as caregivers and face unique psychological and physical stressors. ^{49,50,51,52} Grandparents who care for their grandchildren may require targeted outreach and information about resources, support services, benefits and policies available to aid in their caregiving role. ⁵³

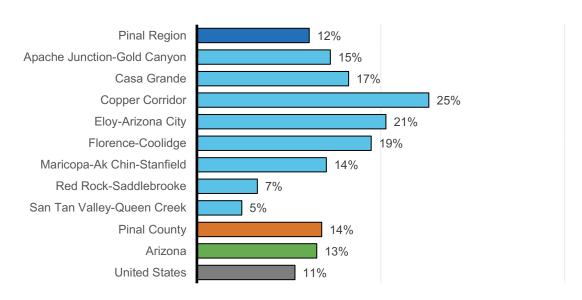


Figure 8. Grandchildren ages birth to 5 living in a grandparent's household, 2015-2019 ACS

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

Note: This table includes all children (under six years old) living in a household headed by a grandparent, regardless of whether the grandparent is responsible for them, or whether the child's parent lives in the same household.

Children living in kinship care, that is, living with a close friend or relative (like a grandparent) who is not a parent, can arrive in those situations for a variety of reasons, including a parent's absence for work or military service, chronic illness, drug abuse, or incarceration, or due to abuse, neglect or homelessness. Though the proportion of children living in kinship-care arrangements in the region is small, these families can face unique challenges, including navigating the logistics of informal guardianship (e.g., difficulties in registering children for school), coping with parental absence and addressing the challenges of being an ageing caregiver for a young child. In some situations, children in

kinship-care may also face special needs as a result of trauma, and could benefit from additional support and assistance to help them adjust and to ensure they have a stable and nurturing home environment.⁵⁴

According to ACS data, grandparents are considered responsible for their grandchildren if they are "currently responsible for most of the basic needs of any grandchildren under the age of 18" who live in the grandparent's household. An estimated 4,657 grandparents in the Pinal Region are responsible for raising one or more grandchildren (up to age 17) who live with them. A third of these grandparents (33%) do not have the child's parent(s) living in the household. Furthermore, of these over 4,600 grandparents, 55% are female, 43% are in their sixties or older, 20% are in poverty, and 16% are not proficient English speakers. Grandparents with limited English proficiency who are their grandchildren's primary care provider may experience barriers to accessing health care and social services for their grandchildren, as well as barriers to engaging in important interactions at schools.

Table 6. Selected characteristics of grandparents who are responsible for one or more grandchildren under 18 in their households, 2015-2019 ACS

	Estimated number of grandparents	Percent of these grandparents who:					
Geography	who live with and are responsible for grandchildren under 18 years old	Are female	Are 60 years old or older	Have an income below the poverty level	Do not speak English very well	Do not have the child's parents in the household	
Pinal Region	4,657	55%	43%	20%	16%	33%	
Apache Junction-Gold Canyon	588	65%	59%	30%	14%	47%	
Casa Grande	1,010	55%	38%	20%	11%	41%	
Copper Corridor	361	46%	69%	12%	10%	50%	
Eloy-Arizona City	465	69%	32%	40%	42%	28%	
Florence-Coolidge	459	56%	47%	12%	19%	37%	
Maricopa-Ak Chin-Stanfield	919	47%	43%	14%	14%	14%	
Red Rock-Saddlebrooke	88	38%	27%	7%	68%	27%	
San Tan Valley-Queen Creek	767	56%	33%	19%	4%	27%	
Pinal County	4,938	56%	43%	21%	15%	33%	
Arizona	64,841	62%	42%	22%	21%	31%	
United States	2,465,864	63%	44%	19%	14%	36%	

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

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

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



ECONOMIC CIRCUMSTANCES

ECONOMIC CIRCUMSTANCES

Why it Matters

Poor economic conditions are a threat to child well-being across a range of indicators including academic achievement, physical health and mental health.⁵⁵ Poverty can affect the way children grow and develop, even including changes to their brains.^{56,57} As such, children in impoverished homes are at a greater risk of problems that include being born at a low birth weight, lower school achievement and poor health.^{58,59,60,61,62,63,64} They are also more likely to remain poor later in life, passing along these challenges to future generations.^{65,66} On the other hand, children raised in families with higher incomes tend to do better in a variety of ways across their lives. This includes being less likely to have health problems like depression and diabetes and more likely to finish high school and earn higher wages.^{67,68,69,70}

Economic resources are important for meeting basic needs, like providing nutrition. Food security, defined by the U.S. Department of Agriculture (USDA) as "access at all times to enough food for an active, healthy life for all household members" is linked with many aspects of child well-being, and yet households with young children experience food insecurity at nearly twice the rate (15.3%) of households with no children (8.8%). Safety-net programs aim to minimize the impacts of poverty on child and family well-being. T3,74,75 These programs include:

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

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

^v For more information see: https://www.fns.usda.gov/wic

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

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

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

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

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

Housing support.xi

Other factors related to economic stability include employment and housing. ⁷⁶ Unemployment (and underemployment) xii can limit access to resources like health insurance – typically provided by employers – that support children's health and well-being. Unemployment can also contribute to family stress, conflict, homelessness and child abuse. 77,78 Similarly, housing instability can harm the physical. social-emotional and cognitive development of young children.⁷⁹ High housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health and homelessness. 80,81 This high relative cost leaves inadequate funds for other necessities, such as food and utilities.82

What the Data Tell Us

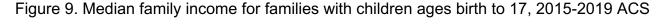
Income and Poverty

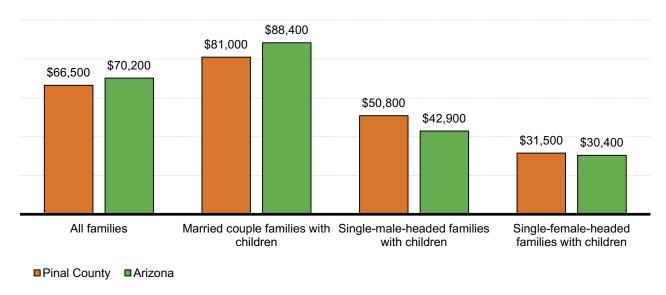
The median family income for Pinal County is estimated to be \$66,500 (Figure 9), which means that half of the county's families have incomes lower than that amount, and the other half have incomes above it. This includes all families of at least two people, whether or not they have children. For families who have at least one child (up to 17 years old), the median income is higher than that of all families, likely because many such families are dual-income families. The median income for married couples with children in Pinal County is \$81,000 for married couples, compared to \$50,800 for single-maleheaded families and \$31,500 for single-female-headed families. Single-parent-headed families fare better in Pinal County that elsewhere in the state of Arizona (Figure 9).

The COVID-19 pandemic had a sudden and dramatic impact on income for many families nationwide. In Arizona, typically at least half of surveyed adults reported that someone in their household had lost employment income, with one week spiking up to two-thirds of respondents. Arizona generally mirrors the trends seen nationwide.83

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

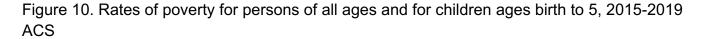
xii Underemployment means that someone works fewer hours than they would like or is in a job that does not require the skills or training that they have

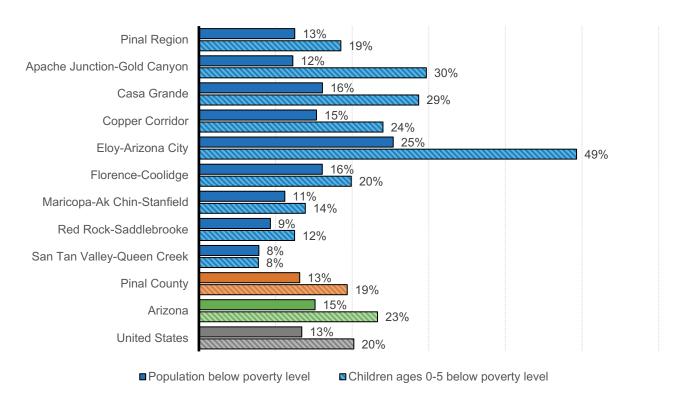




Note: Half of the families in the population are estimated to have annual incomes above the median value, and the other half have incomes below the median. The median family income for all families includes families without children ages birth to 17.

In the Pinal Region, the rate of poverty in the population is estimated to be 13%, or about one out of every eight persons (Figure 10). Among young children, the rate is higher; nearly one out of every five children under the age of six (19%) live in families with incomes below the poverty level. In both cases, Pinal Region residents are less likely to live in poverty than others statewide (15% overall, 23% of young children). Note that these rates represent averages over the five years spanning 2015 to 2019; data reflecting the COVID-19 pandemic era and its effects on poverty in the region are not yet available.





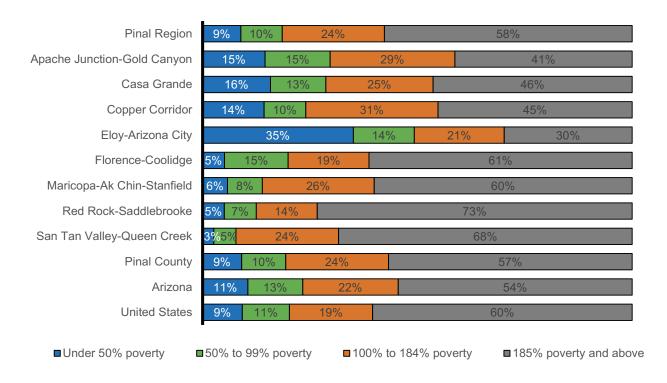
Note: This graph includes only persons whose poverty status can be determined. Adults who live in group settings such as dormitories or institutions are not included. Children who live with unrelated persons are not included. In 2019, the poverty threshold for a family of two adults and two children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

In the Pinal Region, an estimated 19% of children under 6 years old live in a household whose income is less than the federal poverty level (Figure 11). A total of 42% of young children live in households with incomes of under 185% of the poverty level, a commonly used threshold for safety net benefits such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and reduced-price school meals. Rates vary substantially by subregion. Over two-thirds (70%) of young children in the Eloy-Arizona City subregion live below 185% of the poverty line. Other subregions where over half of young children are below that 185% threshold include Apache Junction-Gold Canyon (59%), Copper Corridor (55%) and Casa Grande (55%).

It is important to note that the number of families and young children who live in poverty according to official definitions like this one far underestimates the number of children in families who struggle to make ends meet. As a benchmark, the Federal Poverty Guideline – the criterion used for establishing eligibility for some safety net programs – for a family of four was \$25,750 in 2019 and \$26,200 in 2020.84,85 However, the federal poverty guideline definition of poverty was developed in the 1950s and is based on the assumption that basic nutrition accounts for one-third of family spending; it is widely

considered to be much less than what a family actually needs to earn for financial stability. The "self-sufficiency standard" attempts to estimate how much families need to earn to fully support themselves, accounting for differences in costs of housing, transportation, child care and other budget items across places. The 2021 self-sufficiency standards for a family comprised of two parents, one infant and one preschooler is \$65,917,87 which is similar to the median income in Pinal County, (\$66,488). Given that half of families earn less than the median income, this suggests that many families in the county are likely to be struggling to fully support themselves.

Figure 11. Children ages birth to 5 living at selected poverty thresholds, 2015-2019 ACS



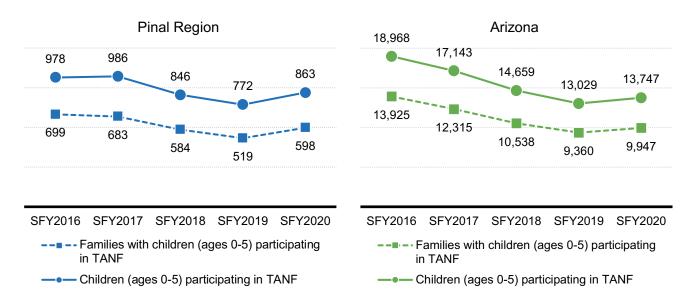
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B17024

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

Public assistance programs are one way of counteracting the effects of poverty and providing supports to children and families in need. The Temporary Assistance for Needy Families (TANF) Cash Assistance program provides temporary cash benefits and supportive services to children and families. Eligibility is based on citizenship or qualified resident status, Arizona residency and limits on resources and monthly income. The number of young children supported by TANF and the number of households with children under 6 receiving TANF has been declining in the Pinal Region and state in recent years (Figure 12). However, in state fiscal year 2020 (SFY2020), both the region and the state saw an increase in both young children and families with young children participating in TANF. The immediate, widespread

economic hardship induced by the pandemic resulted in shifts in existing cash assistance programs and the development of additional economic supports. For example, between February and July 2020, the number of families using TANF rose 35% in Arizona. During the state of emergency order, Arizona suspended the TANF work requirement⁸⁸ and lifetime eligibility limit of 12 months,⁸⁹ which had been the shortest in the nation, 90 thereby allowing more families to tap into these emergency funds. Overall, the percentage of young children in the Pinal Region (2%) and state (3%) participating in TANF in SFY2020 remains low.

Figure 12. Number of children ages birth to 5 and households with children ages birth to 5 receiving TANF, state fiscal years 2016 to 2020



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

To combat widespread economic hardship brought on by the COVID-19 pandemic, the federal government issued three Economic Impact Payments to eligible individuals in 2020 and 2021. These funds were available to U.S. citizens or lawful permanent residents whose adjusted gross incomes were no more than \$75,000 for single adults, \$112,500 for heads of household, and \$150,000 for married couples filing jointly.⁹¹ Eligible families received: \$1,200 per adult and \$500 per child in April 2020, \$600 per family member in December 2020/January 2021 and \$1,400 per person in March 2021.⁹²

While these payments were a financial boon for many families, immigrant families were excluded from the first round of payments under the CARES Act. Families in which at least one parent filed using an individual Taxpayer Identification Number (ITIN) (as a resident or nonresident immigrant) instead of a social security number (SSN) were originally excluded from the payments. This includes the families of 104,000 Arizona children who were ineligible for the first round of stimulus payments.⁹³ Although a subsequent bill allowed for retroactive payments if one parent had an SSN, these had to be claimed through 2020 tax returns. 94,95 For the second round of payments, filers using ITINs were ineligible, but

their spouses and children were eligible if the spouse used an SSN. Children who only have parents with ITINs received none of the emergency support, regardless of economic need.

Food Insecurity

Many families struggle with consistent access to "enough food for an active, healthy life," a problem known as food insecurity. His limited or uncertain availability of food is negatively associated with many markers of health and well-being for children, including heightened risks for developmental delays and being overweight or obese. To help reduce food insecurity, there are a variety of federally-funded programs including the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the National School Lunch Program, the School Breakfast Program, the Summer Food Service Program and the Child and Adult Care Food Program (CACFP). These programs are outline below. An additional food resource in the Pinal Region is the Emergency Food Assistance Program (TEFAP) which helps supplement the diets of low-income individuals by providing them with emergency food and nutrition assistance at no cost. TEFAP foods are distributed as Emergency Food Packages and in meals served at Congregate Feeding Sites (Soup Kitchens). There are 23 TEFAP sites in the Pinal Region. Notably, only about 58% of food insecure households nationwide report participating in federally-funded nutrition assistance programs.

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

SNAP.

Administered by the Arizona Department of Economic Security and also referred to as "Nutrition Assistance" and "food stamps," SNAP is designed to combat food insecurity. It has been shown to help reduce hunger and improve access to healthier food. In the years prior to the pandemic, the proportion of families with young children who participate in SNAP has steadily declined across the region and state (Figure 13). This decline likely reflects the continuing economic recovery from the Great Recession. Despite the proportion of young children who receive SNAP benefits declining between 2016 and 2020, in the region, an estimated third (33%) of all children ages birth to 5 received SNAP benefits in SFY2020 (Figure 14), underscoring how important this support is for childhood food security.

SNAP benefits support working families whose incomes simply do not provide for all their needs. For low-income working families, the additional funds available to access food from SNAP can help make a

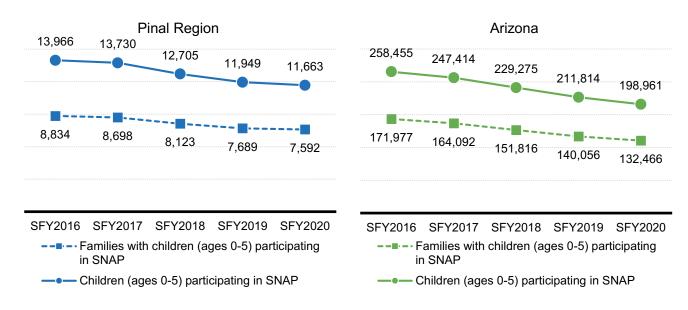
xiii For more information on TEFAP please visit: https://des.az.gov/services/basic-needs/food-assistance/emergency-food-assistance

meaningful difference. For example, for a three-person family with one person who earns a minimum wage, SNAP benefits can boost take-home income by 10-20 percent. However, even among those accessing SNAP benefits, nearly half of households in poverty still struggle with food security. 109

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

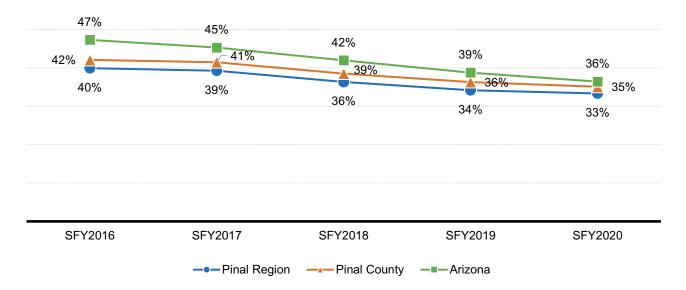
Despite these efforts to adapt SNAP benefits to the pandemic, in a survey of SNAP users in Arizona, nearly half (46%) of respondents found their benefits insufficient to meet their family's needs, due to barriers such as issues paying for online groceries and not being able to use a full month's benefit due to COVID-19 related shopping difficulties, such as stores running out of food items. Individuals with fewer financial resources are less able to stock up on necessities in order to be supplied for a quarantine, and formula stocking shortages were a particular concern for families with young children. 110,111

Figure 13. Number of children ages birth to 5 and households with children birth to 5 participating in SNAP, state fiscal years 2016 to 2020



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

Figure 14. Estimated percent of children ages birth to 5 participating in SNAP, state fiscal years 2016 to 2020

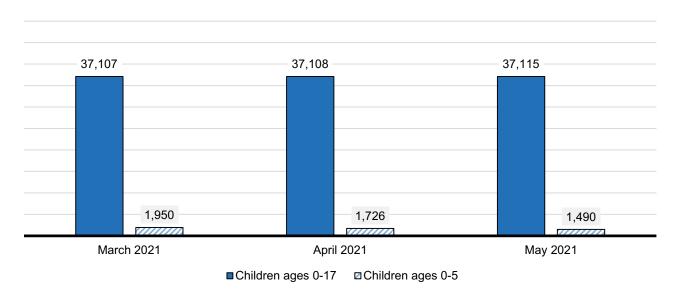


Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P14 & P20.

The Pandemic Electronic Benefit Transfer Program (P-EBT), a collaboration between the Arizona Department of Education, the Arizona Department of Economic Security and the USDA Food and Nutrition Service, was established to offset the loss of meals normally received for free at schools or child care settings. Eligible families included those participating in SNAP with a child under age 6 and those with a child who received free or reduced-price school lunch. Over 520,200 children were eligible for the program in Arizona, which ended on September 24, 2021.

The majority of the children who received Pandemic EBT in the Pinal Region were above the age of 5, even though children age 5 and under who were receiving SNAP were eligible to receive P-EBT. For example, in March 2021, only 1,950 of the 37,107 children aged birth to 17 receiving P-EBT were under 6 years of age; similar patterns were seen statewide (Figure 15). In contrast, in 2020, over 7,500 children under the age of 6 were participating in SNAP in the region (Figure 13), suggesting only about a quarter of eligible young children were enrolled in Pandemic EBT. In addition, while receipt of P-EBT remained nearly constant across all children aged birth to 17, receipt for children aged birth to 5 decreased between March and May 2021 in the region (Figure 15).

Figure 15. Children ages birth to 17 and birth to 5 receiving Pandemic EBT in the Pinal Region, March to May 2021



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

An additional resource to address food insecurity is the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) program administered by the Arizona Department of Health Services. WIC serves pregnant, postpartum and breastfeeding women, as well as infants and young children (under the age of 5) who are economically disadvantaged (i.e., family incomes at or below 185% of the federal poverty level). The program offers funds for nutritious food, breastfeeding and nutrition education, and referrals to health and social services. 112 Participation in WIC has been shown to be associated with healthier births, lower infant mortality, improved nutrition, decreased food insecurity, improved access to health care and improved cognitive development and academic achievement for children. 113

The number of women enrolled and participating in WIC declined in the region and across the state between 2016 and 2020 (Figure 16). In spite of these declines, participation rates among enrolled women in the region have remained high, with 94% of women enrolled in WIC consistently receiving benefits between 2016 and 2020.

Pinal Region Arizona 4.511 4,383 4,282 4.293 80,063 4,141 75,882 72,098 68.312 63,111 4,239 4.093 4,020 4,021 75,126 3,902 70,840 67,687 64.225 59.477 2016 2017 2018 2019 2020 2016 2017 2018 2019 2020 **─**■ Participating Enrolled Participating Enrolled

Figure 16. Women enrolled and women participating in WIC, 2016 to 2020

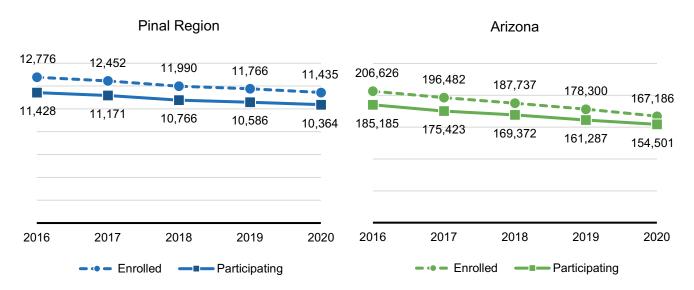
Source: Arizona Department of Health Services (2021). [WIC Dataset]. Unpublished data.

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

Similar to declines in WIC enrollment and participation among women, the number of children aged birth to 4 enrolled and participating in WIC steadily declined between 2016 and 2020 in the Pinal Region and across the state (Figure 17). Participation among enrolled children also remained fairly steady, with 91% of enrolled children aged birth to 4 receiving benefits in 2020. Participation rates for infants were slightly higher, with 96% of infants enrolled in WIC receiving benefits in 2020. Changes in WIC policy may have made it easier for enrolled families to participate. The USDA required all WIC programs transition to providing benefits through an electronic benefit transfer (EBT) card by October 1, 2020, and ADHS began transitioning WIC benefits from paper checks to an EBT card called "eWIC" in 2017. National research has shown that providing WIC benefits through an EBT card instead of paper checks is associated with a sustained and significant increase in WIC participation rates for women, infants and children by making WIC benefits easier to access and use. 115

It should be noted that while the available safety-net programs are important for families, not all key costs are covered. For families of young children in particular, the fact that SNAP and WIC funds cannot be used to purchase diapers can present a major financial burden.¹¹⁶

Figure 17. Children ages birth to 4 enrolled and participating in WIC, 2016 to 2020

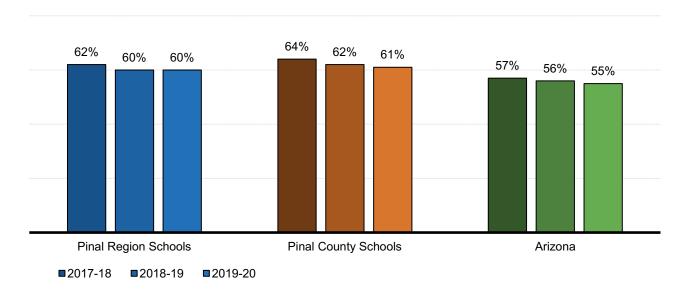


Source: Arizona Department of Health Services (2021). [WIC Dataset]. Unpublished data.

Note: Children are counted as 'participating' if they received benefits during the time period in question.

Schools play an important role in the nutrition assistance system, especially for children who are food insecure. Administered by the Arizona Department of Education, the National School Lunch Program (NSLP) provides free and reduced-price meals at school for students whose family incomes are at or less than 130% of the federal poverty level for free lunch, and 185% of the federal poverty level for reducedprice lunch. About 60% of students in the Pinal Region were eligible for free or reduced-price lunch in recent years (Figure 18), slightly more than the proportion eligible statewide (55% in 2020). Some school districts have nearly all students qualifying, including Eloy Elementary District (96%) and Picacho Elementary District (93%) (Figure 19). Charter schools in the region have a slightly lower proportion of eligible children (53%), whereas the single private school represented in the data (Saint Anthony of Padua Catholic School) has a huge proportion of eligible children (93%). District schools must participate in the NSLP, but charter and private schools choose whether to participate. Given the administrative burdens of participation, there are likely many private and charter schools that choose to not participate in NSLP even if they have some students who would be eligible.

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



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

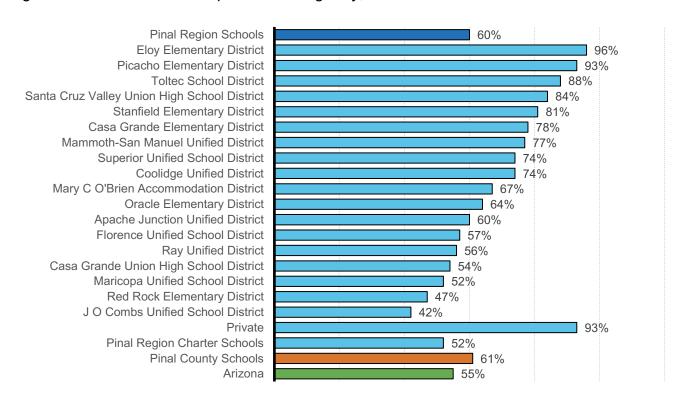


Figure 19. Free and reduced-price lunch eligibility, 2019-20

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

In addition to the NSLP, the Arizona Department of Education supports two other programs addressing children's food security. Funded by the United States Department of Agriculture (USDA), the Child and Adult Care Food Program (CACFP)¹¹⁷ gives reimbursements to participating child care centers, preschools, emergency centers, and after school programs for nutritious meals and snacks served to eligible children. Providers must complete a renewal each year. Eligible providers include for-profit child care centers serving at least 25% free or reduced-price participants or be a non-profit. 118 Also funded by the USDA, the Summer Food Service Program (SFSP)¹¹⁹ works to keep all children through age 18 fed when school is out of session by providing free meals (breakfast, lunch, supper) and snacks at community sites. The SFSP program unites community sponsors like camps, faith-based organizations and schools with sites like parks, libraries, community centers and apartment complexes in high-need areas to distribute food. 120

Figure 20 shows varying trends across school nutrition programs with decreases overall in NSLP and CACFP lunches served between 2017-18 and 2019-20, and an overall increase in lunches served through the SFSP. Decreases in the NSLP and CACFP were likely due to closures of child care centers and schools in the spring of 2020 due to the COVID-19 pandemic. In contrast, the USDA approved year-round operation of SFSP during the pandemic with no free or reduced-price lunch eligibility

criteria applied, allowing more children to receive food during quarantines. These patterns in Pinal County mirror those seen statewide.

Pinal County Arizona 4,609,669 4,440,157 101,727,112 102,012,129 3,607,301 76.454.370 1.292.308 21,786,393 296,745 313,121 7,225,302 7,242,730 253,578 5,556,341 1,870,111 7<u>1,911</u> 2017-18 2018-19 2017-18 2018-19 2019-20 2019-20 --- NSLP ····· SFSP ---- CACFP **─**• NSLP ····· SESP --- CACFP

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

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

Note: Due to the COVID-19 pandemic, the USDA issued a substantial number of waivers for school nutrition programs to allow greater flexibility for schools to get meals to students in need. More information on the pandemic's effect on school nutrition can be found on the ADE website: https://www.azed.gov/hns/covid19

Employment

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

The unemployment rate is the proportion of the total number of people in the civilian labor force who are unemployed and looking for work. Note that unemployment rates do not include persons who have dropped out of the labor force entirely, including those who wanted to but could not find suitable work and so have stopped looking for employment.¹²³

Pre-pandemic, nationwide, unemployment rates had been on a steady decline since the end of the Great Recession in 2009. In the year prior to the pandemic, 2019, the unemployment rate in Pinal County was 5.0% compared to 4.9% statewide (Figure 21). Nationally, in 2020, the unemployment rate more than doubled (from 3.7% to 8.1%) as a result of the pandemic. Unemployment rates jumped in Arizona (7.9%) and Pinal County as well (7.5%).

10.6% 9.7% 8.5% 10.3% 8.1% 9.4% 7.0% 7.9% 7.5% 6.3% 8.3% 7.8% 5.6% 5.1% 5.0% 5.0% 6.8% 6.1% 5.5% 4.9% 4.9% 4.8% 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Figure 21. Average annual unemployment rates (not seasonally adjusted), 2010 to 2020

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

—■—Arizona

--- Pinal County

The effect of the pandemic on unemployment rates is highlighted in monthly rates shown in Figure 22. Unemployment rates in the county and across the state peaked in April 2020, remained at more than double the pre-pandemic rates through July 2020, and then decreased to about 6% in Pinal County by the fall of 2020. By November 2020, Pinal County actually had slightly lower rates of unemployment than Arizona overall (Figure 22) – a flipping of the trend seen over the last decade (Figure 21).

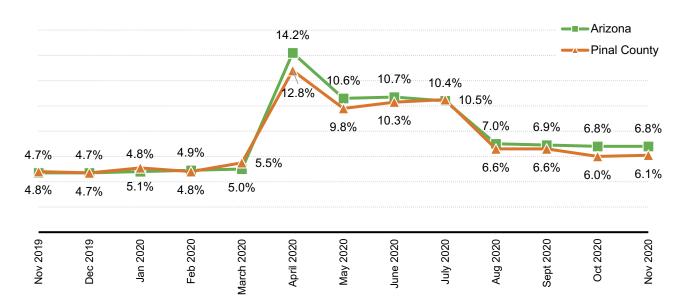


Figure 22. Monthly unemployment rates (seasonally adjusted), 2019 to 2020

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

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

An additional metric of employment is the labor-force participation rate. This rate is the fraction of the population who are in the labor force, whether employed or unemployed. The American Community Survey estimates that the average labor-force participation rate for Arizona over the five years from 2015 to 2019 is 60%, and 50% in the Pinal Region. In other words, half of the adult population in the Pinal Region is in the labor force (either working or looking for work) and half is not (which includes students, retirees, stay-at-home parents and others). As with many economic indicators, the labor-force participation rates and unemployment rates vary dramatically across subregions (Table 7). Labor force participation is highest in the Maricopa-Ak Chin-Stanfield (63%) and San Tan Valley-Queen Creek (63%) subregions, which also have the lowest rates of unemployment (5%). Labor force participation is lowest in the Eloy-Arizona City (31%), Florence-Coolidge (33%) and Red Rock-Saddlebrooke (35%) subregions, though for different reasons. Red Rock-Saddlebrooke includes retirement communities and has a comparatively low rate of unemployment (6%). Eloy-Arizona City and Florence-Coolidge have the highest rates of unemployment in the region (12%).

Table 7. Unemployment and labor-force participation for the adult population (ages 16 and older), 2015-2019 ACS

Geography	Estimated working-age population (age 16 and older)	Unemploy- ment rate	Labor-force participation rate	Percent of working-age population in the labor force and employed	Percent of working-age population in the labor force but unemployed	Percent of working-age population not in the labor force
Pinal Region	337,483	7%	50%	46%	3%	50%
Apache Junction-Gold Canyon	57,115	7%	43%	40%	3%	57%
Casa Grande	51,962	7%	56%	52%	4%	44%
Copper Corridor	14,281	12%	45%	40%	6%	55%
Eloy-Arizona City	25,368	10%	31%	28%	3%	69%
Florence-Coolidge	44,802	12%	33%	29%	4%	67%
Maricopa-Ak Chin-Stanfield	43,774	5%	63%	60%	3%	37%
Red Rock-Saddlebrooke	20,741	6%	35%	33%	2%	65%
San Tan Valley-Queen Creek	79,440	5%	63%	59%	3%	37%
Pinal County	343,846	7%	49%	46%	4%	51%
Arizona	5,600,921	6%	60%	56%	3%	40%
United States	259,662,880	5%	63%	60%	3%	37%

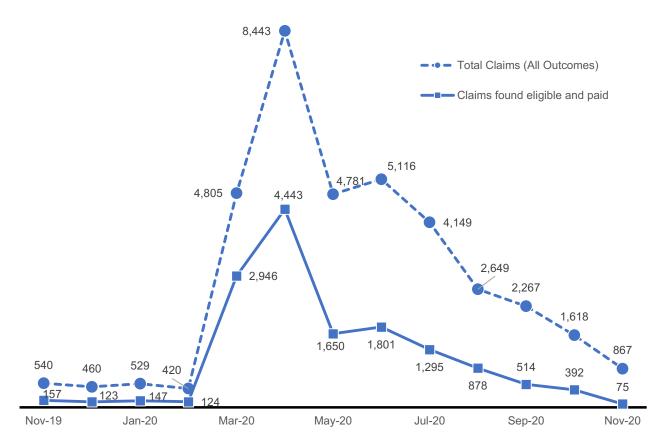
Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The "labor force participation rate" is the fraction of the population who are in the labor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

The COVID-19 pandemic shocked the labor market. Statewide, unemployment insurance claims peaked at 262.523 the week of May 16, 2020. This is over twice the number of claims at the peak of the Great Recession in 2009. 124 In March 2020, the Pandemic Unemployment Assistance (PUA) program temporarily expanded unemployment insurance eligibility to categories of workers who were not previously eligible for unemployment, including self-employed workers, freelancers, independent contractors and part-time workers. The Pandemic Emergency Unemployment Assistance (PEUC) program extended benefits for those who had already used the 26 weeks of benefits usually allowed in Arizona. 125 In addition to expanded eligibility, federal provisions granted unemployed workers nationwide supplemental funds during the pandemic - \$600 additional per week through July 31, 2020, and \$300 additional per week through September 5, 2021. 126

The demand for these programs in the Pinal Region is highlighted in Figure 23. The number of unemployment claims jumped substantially, from a pre-pandemic low of 420 in February 2020, to a high of 8,443 in April 2020. Claims remained elevated above pre-pandemic levels through November 2020. Notably, even as claims surged during the pandemic, there is a consistent and wide gap between the number of claims filed and the number of claims found eligible and paid. Pre-pandemic, about 30% of claims were paid. In March and April 2020, a higher proportion of claims were found valid (61% and 53%, respectively) and paid, but by the fall, a higher proportion of claims were denied, with only 9% of claims paid in November 2020. This suggests there may be widespread economic challenges in families with lost incomes who requested but did not receive unemployment benefits.

In May 2021, the governor announced that supplemental unemployment funding would end early in Arizona, on July 10, 2021, and instead launched Arizona's Back to Work Program which offered financial incentives for returning to work (\$2000 for full-time, \$1000 for part-time for eligible workers) as well as scholarships for community colleges. 127,128

Figure 23. Monthly unemployment claims in the Pinal Region, Nov 2019 to Nov 2020



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

About 60% of young children in the Pinal Region live in households where all present parents are in the workforce (that is, are employed, or actively seeking paying work) (Table 8). This includes children in

households with a single-parent in the labor force (27%) and two-parent households where both parents work (33%). In other words, the majority of Pinal Region households with young children likely require some form of child care. This need appears to be especially high in the Eloy-Arizona City subregion, where 61% of children live with a single parent who is in the labor force. Yet, the Center for American Progress estimates that 48% of Arizonans live in a "child care desert," defined as an area where there are at least three times as many children as there are child care slots, meaning that the absence of accessible, affordable child care may be a barrier to employment. 129 In Arizona, the majority of rural families (67%), low-income families (59%) and Hispanic/Latino families (55%) live in a child care desert, making them disproportionately impacted by barriers to child care and therefore barriers to employment.¹³⁰ This is slightly worse than in the U.S. as a whole, where 60% of rural families and 55% of low-income families live in child care deserts.

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

During the pandemic (through September 2021), DES offered the Essential Workers' Scholarship Program which offered essential workers child care scholarships that could be used for children through age 12.131 Arizona's Back To Work Program, announced in May 2021, can provide eligible parents returning to work between June and September 2021 with funding assistance for three months of child care.

Table 8. Parents of children ages birth to 5 who are or are not in the labor force, 2015-2019 ACS

Geography	Estimated number of children (birth to 5 years old) living with parent(s)	Living with two married parents, both in the labor force	Living with two married parents, one in the labor force and one not	Living with two married parents, neither in the labor force	Living with one parent, in the labor force	Living with one parent, not in the labor force
Pinal Region	27,724	33%	34%	1%	27%	6%
Apache Junction-Gold Canyon	2,085	33%	25%	2%	29%	11%
Casa Grande	5,118	25%	24%	1%	42%	9%
Copper Corridor	703	29%	20%	0%	42%	10%
Eloy-Arizona City	1,384	7%	25%	0%	61%	8%
Florence-Coolidge	2,975	28%	36%	1%	27%	8%
Maricopa-Ak Chin-Stanfield	4,427	37%	28%	1%	27%	6%
Red Rock-Saddlebrooke	1,530	38%	42%	0%	17%	4%
San Tan Valley-Queen Creek	9,502	39%	43%	1%	13%	4%
Pinal County	28,314	32%	33%	1%	27%	7%
Arizona	494,590	32%	28%	1%	29%	9%
United States	22,727,705	39%	25%	1%	27%	7%

Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The term "parent" here includes step-parents. The five percentages in each row should sum to 100%, but may not because of rounding. Please note that due to the way the ACS asks about family relationships, children living with two cohabitating but unmarried parents are not counted as living with two parents (these children are counted in the 'one parent' category).

Housing Instability

Examining indicators related to housing quality, costs and availability can reveal additional factors affecting the health and well-being of young children and their families in a region. Housing challenges such as issues paying rent or mortgage, overcrowded living conditions, unstable housing arrangements, and homelessness can have harmful effects on the physical, social-emotional and cognitive development of young children.¹³²

The most recent data available on housing affordability predates the COVID-19 pandemic. Traditionally, housing has been deemed affordable if it costs less than 30% of annual household income. ACS five-year estimates, of the estimated 138,815 households in the Pinal Region, 26% are housing-cost burdened, i.e., spending more than 30% of their household income on

housing. Those renting are even more likely to be housing-cost burdened, with 43% of renter-occupied housing units in the region costing more than 30% of household income compared to only 21% of homeowners (Figure 24). Looking across subregions, housing stock in the Copper Corridor is relatively more affordable, with only 19% of households paying more than 30% of their income (Table 9). Conversely, 57% of renters in the Eloy-Arizona City area are housing-cost burdened. This amount of income spent on housing leaves less available for food, utilities, early education programs and other supports that help young children thrive. Additionally, high housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health and homelessness. 134,135

While pre-pandemic housing cost burdens were already high enough to cause concern in some counties in Arizona, the economic disruptions of the COVID-19 pandemic, including losses of household employment income reported by approximately half of adults in the state, led to housing instability for some families as they struggled to make housing payments. Just before the pandemic, in October 2019, the Pinal Region had 387 students experiencing homelessness enrolled in public and charter schools. 136 This includes children living in shelters, cars, transitional housing, campground, motels and trailer parks, as well as children who are living 'doubled up' with another family due to loss of housing or economic hardship. Although data on this for 2020 and 2021 are not yet available, the economic upheaval brought on by the pandemic could raise that number. In an effort to mitigate housing disruptions, there have been multiple federal efforts to prevent eviction or foreclosure and ease housing instability among households in the U.S. throughout the pandemic. Eviction moratoriums and mortgage forbearance programs for federally-backed mortgages aimed to prevent families from losing their homes during the pandemic, and the Emergency Rental Assistance Program aimed to distribute funds for rental and utility payments to households at risk of eviction. 137 The American Rescue Plan provided additional assistance for both homeowners and renters with the aim of preventing eviction and foreclosure. 138 However, local housing agencies have struggled to implement many of these programs, and shifting funding requirements or stringent reimbursement policies have hampered efforts to get funds to households who need them. 139 The end of the federal eviction moratorium issued by the Centers for Disease Control and Prevention means that effective administration of housing aid is all the more important for protecting families from eviction and foreclosure. 140

Figure 24. Percent of households with housing costs of 30 percent or more of household income by home ownership status, 2015-2019 ACS

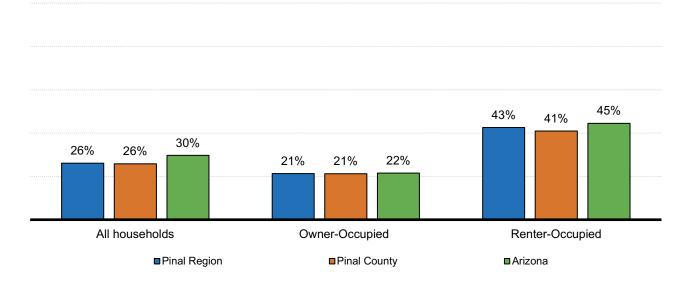


Table 9. Housing-cost burden for all households, and for owners and renters separately, 2015-2019 ACS

Geography	Estimated number of households	Housing costs 30 percent or more of household income	Estimated number of owner- occupied housing units	Housing costs 30 percent or more of household income	Estimated number of renter- occupied housing units	Housing costs 30 percent or more of household income
Pinal Region	138,815	26%	107,347	21%	31,469	43%
Apache Junction- Gold Canyon	28,928	26%	23,837	23%	5,091	39%
Casa Grande	21,919	28%	14,811	20%	7,108	45%
Copper Corridor	6,512	19%	5,165	15%	1,347	34%
Eloy-Arizona City	7,438	34%	4,933	22%	2,505	57%
Florence-Coolidge	11,626	23%	8,338	17%	3,288	37%
Maricopa-Ak Chin- Stanfield	17,846	25%	13,627	20%	4,219	42%
Red Rock- Saddlebrooke	10,299	21%	9,264	19%	1,035	40%
San Tan Valley- Queen Creek	34,247	28%	27,372	24%	6,875	43%
Pinal County	141,300	26%	108,402	21%	32,898	41%
Arizona	2,571,268	30%	1,656,756	22%	914,512	45%
United States	120,756,048	31%	77,274,381	22%	43,481,667	46%

Note: An "occupied housing unit" is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied as separate living quarters. Buildings such as dormitories, bunkhouses and motel rooms are not counted as housing units. The number of households is equal to the number of occupied housing units.

Information Access Through Computers and Internet

One increasingly critical need for modern homes is a reliable means of internet access. Families often rely on communication and information technologies to access information, connect socially, pursue an education and apply for employment opportunities. During the pandemic, a reliable internet connection was essential for a successful transition to remote work for many. Parents are also more likely to turn to online resources, rather than in-person resources, for information about obtaining health care and sensitive parenting topics including bonding, separation anxiety and managing parenting challenges.¹⁴¹ The term "digital divide" refers to disparities in communication and information technologies, 142 and the lack of sustained access to information and communication technologies in low-income communities is associated with economic and social inequality. 143 Low-income households may experience regular disruptions to this increasingly important service when they can't pay bills, repair or update equipment, or access public locations that may offer connectivity (e.g., computers at local libraries).¹⁴⁴

Americans are increasingly reliant on smartphones as their sole source of internet access. Particularly for individuals who are younger, lower-income and non-White, broadband service at home is less common and smartphone-only internet use is more common.¹⁴⁵

Nearly three-quarters (74%) of the households in the Pinal Region have both a computer and a smartphone in their home. An estimated 8% have a computer but no smartphone, 11% have a smartphone but no computer, and the remaining 8% have neither (Table 10). While these rates are similar to those seen across the state and nation, certain communities have a much different landscape of access. One in 5 households (20%) in the Copper Corridor subregion lacks a smartphone or a computer, suggesting they have no access to the internet while at home (Figure 25). This is also true for 15% of households in the Eloy-Arizona City subregion. Thus, despite trends toward online communications and social media announcements, it is important for state and local agencies to recognize that there are disparities in internet access and ensure that families can be reached and can obtain information about services through other means, including telephone or mail.

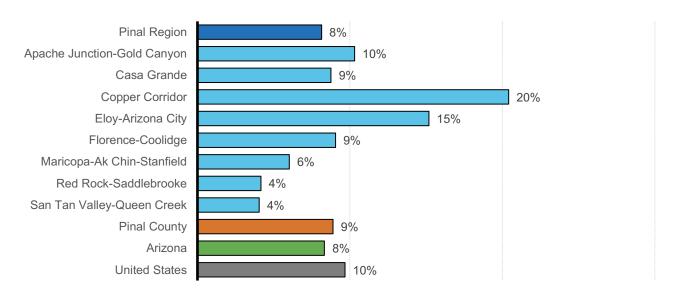
Furthermore, in many rural areas, even those families with internet access and a computer may find connectivity frustratingly slow or inconsistent. Households in rural areas typically experience more limited coverage from mobile networks and slower-speed internet services, as well as limited internet provider options which can result in higher monthly costs. This gap in the ability to connect will likely continue to be an issue in rural areas unless concerted efforts are made to improve access.

Table 10. Households with and without computers and smartphones, 2015-2019 ACS

Geography	Estimated number of households	Have both computer and smartphone	Have computer but no smartphone	Have smartphone but no computer	Have neither smartphone nor computer
Pinal Region	138,815	74%	8%	11%	8%
Apache Junction-Gold Canyon	28,928	69%	11%	10%	10%
Casa Grande	21,919	68%	8%	16%	9%
Copper Corridor	6,512	56%	9%	14%	20%
Eloy-Arizona City	7,438	58%	9%	17%	15%
Florence-Coolidge	11,626	70%	10%	11%	9%
Maricopa-Ak Chin-Stanfield	17,846	80%	4%	10%	6%
Red Rock-Saddlebrooke	10,299	82%	8%	6%	4%
San Tan Valley-Queen Creek	34,247	84%	5%	7%	4%
Pinal County	141,300	73%	8%	11%	9%
Arizona	2,571,268	73%	7%	12%	8%
United States	120,756,048	71%	7%	13%	10%

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

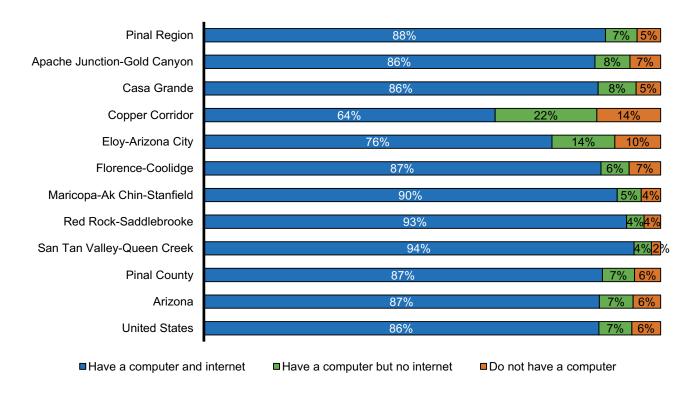
Figure 25. Percent of household with neither a smartphone nor a computer, 2015-2019 ACS



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

Looking at individuals rather than households, the majority of Pinal residents have access to a computer connected to the internet (88%) (Figure 26). About 7% have a computer without internet and about 6% have no computer. As with household connectivity, individuals in the Copper Corridor (64%) and Eloy-Arizona City (76%) subregions lag behind the rest of the region (88%), state (86%), and nation (86%) in terms of access to computers with internet (Figure 26).

Figure 26. Persons of all ages in households with and without computers and internet connectivity, 2015-2019 ACS



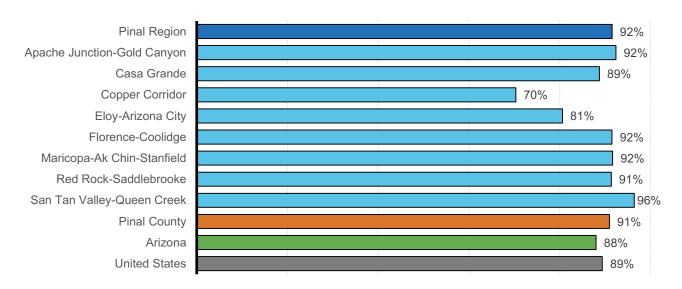
Note: The three percentages in each bar should sum to 100%, but may not because of rounding.

Computers and internet access are increasingly important for children in completing school assignments and projects, particularly during the later years of primary education and beyond. 151 Statewide, 88% of children birth to 17 have access to a computer and internet at home; this is true for 92% of children in the Pinal Region (Figure 27).

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

One silver-lining to the pandemic is the allocation of CARES Act and American Rescue Plan dollars for expanding rural broadband access, which may help shrink the digital divide. 152 Still, access to internet and computing devices was not evenly distributed across all communities—rural, low-income, and Native, Black and Hispanic students disproportionately faced access issues. 153 Even as schools return to in-person learning, investments in closing the digital divide remain essential to ensuring equity in outcomes for all students.

Figure 27. Percent of children ages birth to 17 in household with a computer and internet connectivity, 2015-2019 ACS



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



EDUCATIONAL INDICATORS

EDUCATIONAL INDICATORS

Why it Matters

A community's K-12 education system can support positive outcomes for children and their families, as well as the economic well-being of the entire community. Individuals with higher levels of education are less likely to live in poverty and tend to live longer and healthier lives. ¹⁵⁴ Graduating from high school, in particular, is associated with better health and financial stability, lower risk for incarceration and better socio-emotional outcomes compared to dropping out of high school. ^{155,156} Parents with more education are also more likely to have children with positive outcomes related to school readiness and educational achievement, with children of parents who have at least a high school diploma or GED scoring higher in reading, math and science in their first four years of school. ^{157,158} The educational achievement of adults within a region speaks to the assets and challenges of a community's workforce, including those that are working with or on behalf of young children and their families.

High-quality early learning experiences lay a foundation for children's learning in kindergarten, early elementary school and beyond. ¹⁵⁹ Participation in high-quality early education has been linked to better school performance in elementary and high school. ¹⁶⁰ Reading skills in third grade, specifically, are an important predictor of later academic learning and success measured in standardized tests. Students who are at or above grade-level reading in third grade are more likely to graduate high school and attend college. ¹⁶¹ Given these intergenerational impacts of educational attainment and the cascading effect of early education on later academic achievement and success in adulthood, it is critical to provide substantial support for early education and promote policies and programs that encourage the persistence and success of Arizona's children.

What the Data Tell Us

School Attendance and Absenteeism

In the 2019-20 school year a reported 18,778 children were enrolled in preschool through third grade in Pinal Region public and charter schools, including 968 preschool students (Table 11). Grades K through 3 averaged about 4,450 students per grade in the region. Charter schools are popular in the region, with about 35% of K-3 students attending a charter school.

Key informants noted the significant staffing challenges that schools in the region are facing, exacerbated by the COVID-19 pandemic. The reported staffing shortages extend from school administrators, to teachers, to paraprofessionals, to school bus drivers, potentially impacting every part of students' school experience, including their ability to get there. Well-trained, experienced professionals are reportedly in even shorter supply. The local workforce is seen as a finite an inadequate resource; key informants noted that "if we hire someone, we're just poaching from a neighboring district," and described a need to attract additional workers to the region.

Table 11. Kindergarten to 3rd grade students enrolled in public and charter schools, 2019-20

Geography	Preschool	Kindergarten	1st Grade	2nd Grade	3rd Grade
Pinal Region	968	4,320	4,484	4,505	4,501
Mary C O'Brien Accommodation District	N/A	21	17	20	18
Florence Unified School District	206	530	603	631	585
Ray Unified District	30	14	13	37	17
Mammoth-San Manuel Unified District	30	33	40	41	43
Superior Unified School District	N/A	29	26	17	29
Maricopa Unified School District	126	493	497	529	561
Coolidge Unified District	49	122	147	158	137
Apache Junction Unified District	73	210	210	234	209
Oracle Elementary District	46	DS	DS	DS	DS
J O Combs Unified School District	167	315	335	296	321
Casa Grande Elementary District	178	609	632	683	670
Red Rock Elementary District	DS	39	38	44	45
Eloy Elementary District	N/A	87	103	69	89
Toltec School District	21	105	109	108	115
Stanfield Elementary District	12	54	40	40	46
Picacho Elementary District	N/A	16	24	21	22
Pinal Region Head Start Centers	20	N/A	N/A	N/A	N/A
Pinal Region Charter Schools	N/A	1,641	1,644	1,576	1,589
Pinal County Schools	1,032	3,962	4,157	4,170	4,168
Arizona Schools	21,867	81,606	82,386	82,305	83,003

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

Note: The Pinal County data in this table reflect county totals calculated by ADE. In ADE calculations, students are assigned to counties based on the location of the district or charter operator, which means that charter schools operating in multiple counties may have all students assigned to only one county. The discrepancy between county and region totals thus reflect students enrolled in charter schools located in the Pinal Region but with main offices located in other counties. The preschoolers enrolled in Head Start centers in this table are preschool-aged children receiving special needs services from local education authorities.

One special subset of the student body are the children of migrant workers. Recognizing the importance of migratory workers, the federal government established the Migrant Education Program to ensure that all migrant students are supported through high quality educational programs. In Arizona, there are over 10,000 children of migratory workers aged 3 to 21 in educational programs, and these children are served through the Arizona Migrant Education Program. While the overall proportion of students in the Pinal Region in this program remains very low (<1% of all students), the number of students participating in this program increased substantially in 2019-20 compared to prior years (Table 12).

Table 12. Migrant students (grades K-12) enrolled in public and charter schools, 2017-18 to 2019-20

	Number of migrant students			Percent of students who were migrant stude			
Geography	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20	
Pinal Region Schools	86	79	140	0.2%	0.1%	0.2%	
Pinal County Schools	86	79	140	0.2%	0.2%	0.3%	
Arizona Schools	4,023	3,426	4,498	0.4%	0.3%	0.4%	

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

Note: Migrant students are those students participating in the Arizona Migrant Education Program, a federally-funded, state-run program that provides supplemental services to the children of migrant farmworkers.

School attendance and academic engagement early in life can significantly impact the direction of a child's schooling. Chronic absenteeism is defined as missing more than 10% of the school days within a school year (including for reasons of chronic illness), and it affects even the youngest children, with more than 10% of U.S. kindergarteners and first graders considered chronically absent. Chronic absences in children enrolled in kindergarten through third grade in the Pinal Region in the 2018-19 school year (14%) were similar to the percentage seen across the state (13%), with substantial variability across school districts (Figure 28). In the 2019-20 school year, chronic absences dropped everywhere – all subregions, the region overall, and the state overall, with Mammoth-San Manuel Unified District being the one exception (13% in 2018-19, 15% in 2019-20). The sharp drops in chronic absenteeism are likely driven by changes due to the pandemic including changes in how attendance was tracked by schools in the spring of 2020.

Looking to the 2018-19 year as the last "normal" school year, there are several districts where over a fifth of students were chronically absent. These districts include: Picacho Elementary District (32%), Stanfield Elementary District (31%), Coolidge Unified District (26%), Toltec School District (24%),

_

xiv For more information on the Arizona Migrant Education Program see https://www.azed.gov/migrant

Superior Unified School District (23%) and Oracle Elementary District (22%). Poor school attendance can cause children to fall behind academically, leading to lower proficiency in reading and math and increased risk of not being promoted to the next grade. 163 Chronic absenteeism also negatively impacts the development of key social-emotional skills, including self-management, self-efficacy and social awareness. 164 Consistent school attendance is particularly important for children from economically disadvantaged backgrounds, the group of children most at risk for chronic absenteeism. 165,166

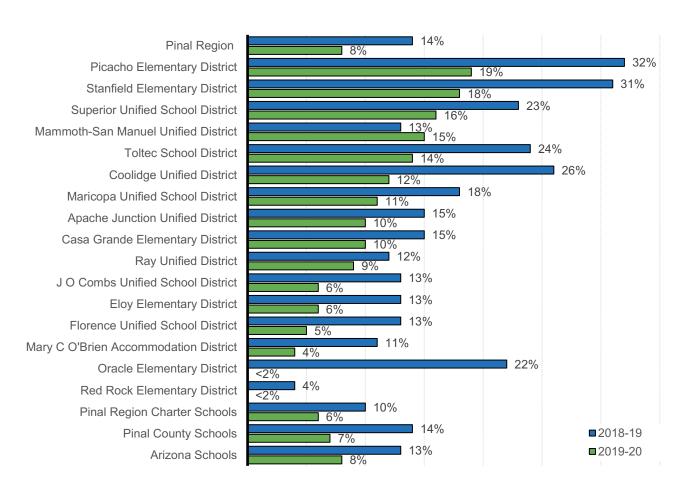


Figure 28. Chronic absenteeism rates, 2018-19 to 2019-20

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

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

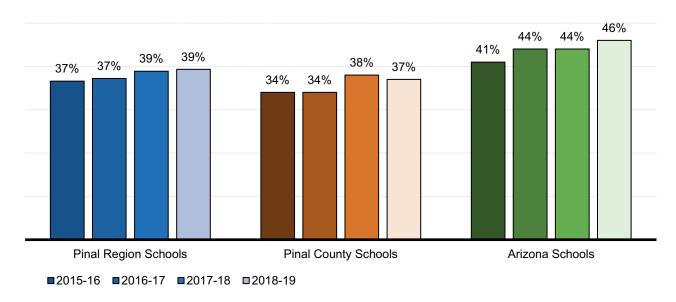
Achievement on Standardized Testing

A child's third grade reading skills have been identified as a critical indicator of future academic success. ¹⁶⁷ Students who are at or above grade level reading in third grade are more likely to go on to graduate high school and attend college. ¹⁶⁸ The link between poor reading skills and risk of dropping out of high school is even stronger for children living in poverty. More than a quarter (26%) of children who were living in poverty and not reading proficiently in third grade did not finish high school. This is more than six times the high school dropout rate of proficient readers. ¹⁶⁹

As of 2019, the statewide assessment tool for English language arts (ELA), including reading and writing, is Arizona's Statewide Achievement Assessment for English Language Arts and Math (AzM2).xv,170,171 In March 2020, Arizona cancelled statewide AzM2 testing and other statewide assessments for the 2019-20 school year.¹⁷² Thus, the most recent data available is from the 2018-19 school year, when the AzMERIT assessment was administered. In the 2018-19 school year, only 39% of Pinal Region students achieved passing scores on the third grade ELA assessment, which was lower than across Arizona as a whole (46%) (Figure 29). This was an improvement over previous years in the region, however, increasing from 37% achieving passing scores on the ELA assessment in the 2015-16 school year. Variation also was present across school districts in the region, with the Mary C O'Brien Accommodation District having a large majority of their third graders passing the ELA assessment (78%) (Figure 30). The many charter schools in the region also have higher AzMERIT scores, with 51% of their students passing the ELA assessment.

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

Figure 29. Trends in passing rates for AzMERIT 3rd Grade English Language Arts, 2015-16 to 2018-19



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

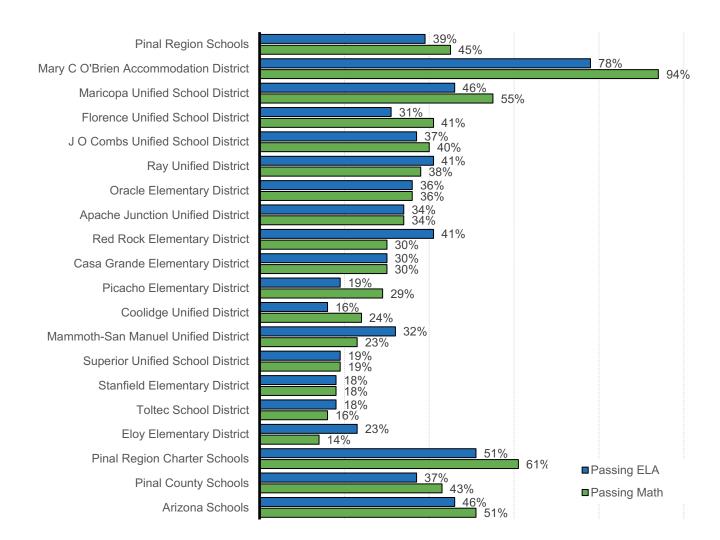


Figure 30. Passing rates for 3rd grade AzMERIT Assessments, 2018-19

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

In 2010, the Arizona legislature, recognizing the importance of early identification and targeted intervention for struggling readers, enacted *Move on When Reading* legislation. AzM2 scores are used to determine promotion from the third grade in accordance with the *Move on When Reading* policy. *Move on When Reading* legislation states that a student shall not be promoted to fourth grade if their reading score falls far below the third-grade level, as established by the State Board of Education. Exceptions exist for students identified with or being evaluated for learning disabilities and/or reading impairments, English language learners, and those who have demonstrated reading proficiency on alternate forms of assessment approved by the State Board of Education. Students who tested in the far below range can also be promoted to 4th grade if they complete summer school and then demonstrate reading at a proficient level. In the Pinal Region in 2018-19, 46% of 3rd grade students scored in the "falls far below"

range on the ELA assessment, suggesting that many struggle with basic literacy (Table 13). It is important to note that the ELA scores in the table below include a writing and language section in addition to the reading score, but only the reading score is used for the Move on When Reading policy. Thus, some of those testing in the "falls far below" category here may still surpass the reading cut score. While Table 13 suggests high rates of students who struggle with English and language arts skills, only a tiny fraction (less than 1%) of students statewide are typically retained because of the Move on When *Reading* policy.¹⁷⁴

Table 13. AzMERIT assessment results: 3rd Grade English Language Arts, 2018-19

Geography	Students Tested	Falls Far Below	Approaches	Meets	Exceeds	Passing
Pinal Region Schools	4,512	46%	15%	29%	10%	39%
Mary C O'Brien Accommodation District	DS	22%	<2%	33%	44%	78%
Florence Unified School District	DS	53%	15%	25%	7%	31%
Ray Unified District	DS	50%	9%	35%	6%	41%
Mammoth-San Manuel Unified District	DS	51%	16%	30%	3%	32%
Superior Unified School District	DS	63%	19%	11%	7%	19%
Maricopa Unified School District	DS	39%	15%	33%	13%	46%
Coolidge Unified District	DS	72%	12%	15%	<2%	16%
Apache Junction Unified District	DS	54%	13%	24%	10%	34%
Oracle Elementary District	DS	39%	24%	30%	6%	36%
J O Combs Unified School District	DS	47%	17%	30%	7%	37%
Casa Grande Elementary District	DS	56%	14%	24%	6%	30%
Red Rock Elementary District	DS	45%	14%	37%	4%	41%
Eloy Elementary District	DS	62%	15%	23%	<2%	23%
Toltec School District	DS	71%	11%	16%	<2%	18%
Stanfield Elementary District	DS	73%	9%	16%	2%	18%
Picacho Elementary District	DS	71%	10%	14%	5%	19%
Pinal Region Charter Schools	DS	32%	16%	35%	17%	51%
Pinal County Schools	4,142	47%	15%	28%	9%	37%
Arizona Schools	82,653	40%	14%	32%	14%	46%

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

Performance on the math test was slightly better than ELA performance, with 45% of Pinal Region third grade students achieving passing scores in the 2018-19 school year. This is, however, still lower than the passing rate across the state (51%) (Figure 31; additional details available in the appendix). Also, unlike the trajectory of improvements seen for ELA passing rates, the passing rates for math have bounced

around in recent years, from a low of 40% in 2016-17 to a high of 48% in 2017-18 (Figure 31). Again, variation in passing rates was present across districts in the region, although in most districts more students passed math than ELA (Figure 30). Nearly all Mary C O'Brien students (94%) passed the math assessment. Four districts had fewer than 1 in 5 third grade students pass the math assessment: Superior Unified School District (19%), Stanfield Elementary District (18%), Toltec School District (16%) and Eloy Elementary District (14%) (Table 14).

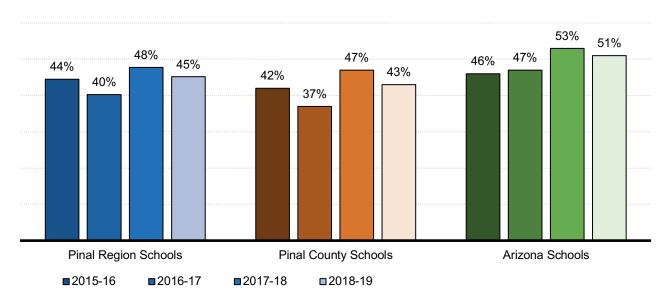


Figure 31. Trends in passing rates for AzMERIT 3rd Grade Math, 2015-16 to 2018-19

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

Table 14. AzMERIT assessment results: 3rd Grade Math, 2018-19

Geography	Students Tested	Falls Far Below	Approaches	Meets	Exceeds	Passing
Pinal Region Schools	4,527	28%	27%	32%	14%	45%
Mary C O'Brien Accommodation District	DS	<2%	6%	17%	78%	94%
Florence Unified School District	DS	31%	28%	29%	11%	41%
Ray Unified District	DS	29%	32%	35%	3%	38%
Mammoth-San Manuel Unified District	DS	34%	43%	20%	3%	23%
Superior Unified School District	DS	54%	27%	19%	<2%	19%
Maricopa Unified School District	DS	23%	22%	36%	18%	55%
Coolidge Unified District	DS	52%	24%	21%	3%	24%
Apache Junction Unified District	DS	37%	29%	26%	9%	34%
Oracle Elementary District	DS	27%	36%	27%	9%	36%
J O Combs Unified School District	DS	29%	31%	31%	9%	40%
Casa Grande Elementary District	DS	39%	31%	24%	6%	30%
Red Rock Elementary District	DS	26%	44%	20%	10%	30%
Eloy Elementary District	DS	58%	28%	13%	<2%	14%
Toltec School District	DS	58%	26%	13%	3%	16%
Stanfield Elementary District	DS	43%	39%	14%	4%	18%
Picacho Elementary District	DS	52%	19%	29%	<2%	29%
Pinal Region Charter Schools	DS	14%	25%	40%	21%	61%
Pinal County Schools	4,154	29%	28%	31%	12%	43%
Arizona Schools	83,042	23%	26%	33%	18%	51%

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

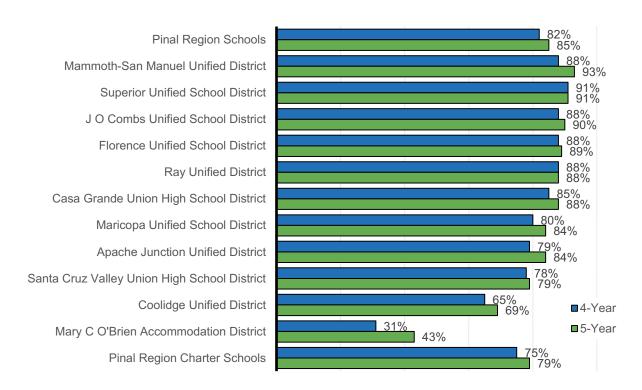
Graduation Rates and Adult Educational Attainment

Understanding current high school graduation and dropout rates within the state provides insight into the assets and challenges faced by a community and its future workforce. Adults who graduated from high school have better health and financial stability, lower risk for incarceration and better socio-emotional

outcomes compared to adults who dropped out of high school. 175,176 Increasingly, a high school education is necessary for employment in the US, with nearly two-thirds of all jobs in 2020 requiring more than a high school education.¹⁷⁷ Adults with lower educational attainment also tended to experience more economic challenges during the pandemic, with adults with less than a high school diploma experiencing more than twice the unemployment rate of adults with a bachelor's degree or higher.178

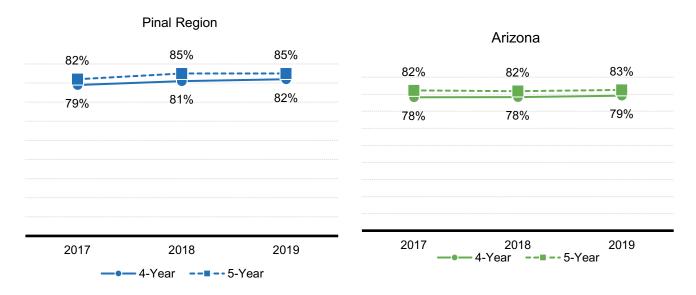
The four and five-year graduation rates in the Pinal Region in 2019 (82% and 85%) were higher than across Arizona as whole (79% and 83%), although variability did exist within districts and schools within the region (Figure 32). These overall graduation rates increased slightly between 2017 and 2019 in the Pinal Region (Figure 33).

Figure 32. 4-year and 5-year graduation rates, 2019



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

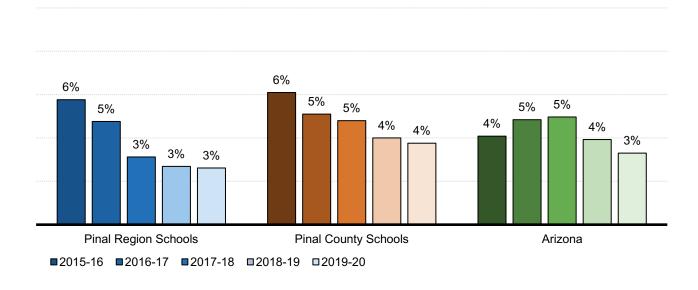
Figure 33. Trends in 4-year and 5-year graduation rates, 2017 to 2019



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

As graduation rates have climbed, dropout rates have declined in recent years. Specifically, in the Pinal Region they dropped from a recent high of 6% in 2015-16 to a low of 3% in 2019-20. Schools statewide have not seen the same consistent decline in rates in recent years (Figure 34).

Figure 34. Trends in 7th to 12th grade dropout rates, 2015-16 to 2019-20

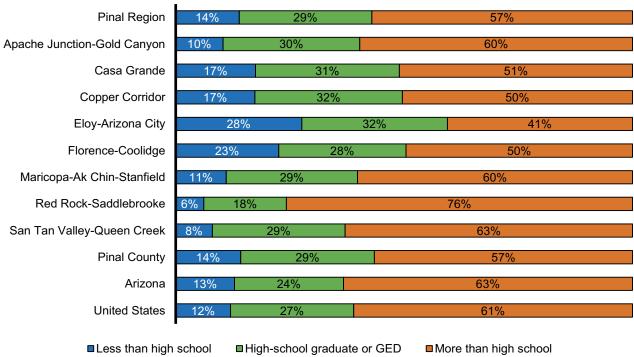


Source: Arizona Department of Education (2021). [Graduation Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

According to the American Community Survey, an estimated 14% of Pinal Region adults (ages 25 and older) have less than a high-school education. An additional 29% have a high-school diploma or a GED equivalent. The remaining 57% have at least some education beyond the high-school level. The Pinal Region as a whole has a slightly lower proportion (86%) of adults aged 25 and older with at least a high school education than the state (87%) or nation (88%) (Figure 35). In the Eloy-Arizona City subregion, over a quarter of adults (28%) did not complete high school, and in the Florence-Coolidge subregion, 23% of adults did not finish high school. These areas may especially benefit from programs that aim to simultaneously serve both young children and their parents. Such two-generation programs are designed to provide family-centered supports to low-income parents and their young children by providing access to education and workforce development for parents and high-quality early education for young children. 179,180 Providing resources and programming to support parental and youth education can help grow the human capital of both. 181,182

The greatest proportions of more highly-educated residents, i.e., those with some post-secondary education, reside in the Red Rock-Saddlebrooke (76%), and San Tan Valley-Queen Creek (63%) subregions.

Figure 35. Level of education for the adult population (ages 25 and older)



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

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

Parental educational attainment has been shown to influence child educational outcomes.¹⁸³ Education is also a key mechanism for upward mobility; parents with higher educational levels typically secure higher incomes to support their families.¹⁸⁴ Higher maternal education, in particular, is linked to both cognitive and socio-emotional development as well as general health in young children.¹⁸⁵ Slightly more than half of babies in the region in 2018 (54%) and 2019 (55%) were born to mothers who had more than a high-school education, less than across the state (57% both years) (Table 15). About 1 in 7 (15%) babies were born to mothers who lacked a high-school education.

Table 15. Level of education for the mothers of babies born in 2018 and 2019

Geography	Calendar year	Number of births	Mother had less than a high-school education	Mother finished high school or had GED	Mother had more than a high-school education
Discal Desires	2018	4,456	15%	31%	54%
Pinal Region	2019	4,437	15%	30%	55%
B: 10 1	2018	4,498	16%	30%	54%
Pinal County	2019	4,497	16%	31%	53%
ADIZONA	2018	80,539	17%	26%	57%
ARIZONA	2019	79,183	16%	27%	57%

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

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

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



EARLY LEARNING

EARLY LEARNING

Why it Matters

Early childhood is an exciting time of rapid physical, cognitive and social-emotional development. The experiences young children have during these early years are critical for healthy brain development and set the stage for lifelong learning and well-being. ^{186,187} Just as rich, stimulating environments can promote development, early negative experiences can have lasting effects. For example, gaps in language development between children from disadvantaged backgrounds and their more advantaged peers can be seen by two and a half years of age; ¹⁸⁸ those disparities that persist until kindergarten tend to predict later academic problems. ¹⁸⁹

Quality early care and education can positively influence children's overall development. ^{190,191} This is particularly true for children in poverty. ¹⁹² Access to quality child care and classroom environments can provide enriching experiences children might not have access to at home. Children who attend high-quality preschool programs repeat grades less frequently, obtain higher scores on standardized tests, experience fewer behavior problems and are more likely to graduate from high school. ¹⁹³ Furthermore, early childhood programs help identify children with special needs and can provide targeted interventions that may reduce their risk of developmental delays and prevent preschool expulsion. ^{194, 195} Children with special health care needs may particularly benefit from high quality teacher-child interactions in classrooms, ^{196,197} as they are more likely to experience more adverse childhood experiences than typically developing children, ¹⁹⁸ and are at an increased risk for maltreatment and neglect. ^{199,200}

A statewide early care and education system that is accessible, affordable and high-quality is essential for the social and economic health of Arizona. Not only does access to affordable, quality child care make a positive difference for children's health and development, it also allows parents to keep steady jobs and support their families.²⁰¹ Investment in programs for young children leads to increased education and employment, reduced crime and better overall health.^{202,203} The investment in early childhood is also potentially one of the most productive investments a community can make, with experts estimating that society gets back about \$8.60 for every \$1 spent on early learning programs.²⁰⁴

What the Data Tell Us

Early Care and Education Enrollment

American Community Survey (ACS) data indicate that about 34% of the region's estimated 10,360 3-and 4-year-old children^{xvi} were enrolled in some type of school, such as nursery school, preschool or kindergarten. This is lower than Arizona overall (39%) or the nation, where nearly half of children (48%) are in preschool (Figure 36). Preschool enrollment is estimated to be particularly high in the Copper Corridor subregion (58%), and particularly low in the Eloy-Arizona City subregion (11%).

xvi The ACS does not report enrollment estimates for children younger than 3.

34% Pinal Region Apache Junction-Gold Canyon 42% Casa Grande 28% Copper Corridor 58% Eloy-Arizona City 11% Florence-Coolidge 36% Maricopa-Ak Chin-Stanfield 40% Red Rock-Saddlebrooke 36% San Tan Valley-Queen Creek 34% **Pinal County** 34% Arizona 39% **United States**

Figure 36. School enrollment for children ages 3 to 4, 2015-2019 ACS

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

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

Though high-quality early care and education can promote development, families often face barriers in accessing these opportunities for their children. Families in both urban and rural areas of Arizona face a gap between the number of young children and the availability of licensed child care, and this gap is larger in rural parts of the state.^{205,206,207,208} As of 2019, Arizona needed an additional 76,740 licensed or registered early care and education slots to provide spaces for all young children in working families according to analyses by the Bipartisan Policy Center.²⁰⁹ This highlights the need for additional, high-quality, affordable early care and education providers in Arizona.

In the Pinal Region, there are 106 registered child care providers approved to serve up to 6,608 children (Table 16).xvii Providers in the region are most often child care centers (n=41), and these centers account for more than half of the capacity in the region. The 19 public schools with early childhood programs also contribute a substantial number of slots (1,657). Additionally, there are 22 Head Start programs with capacity to serve 1,020 children. While there are a similar number of home providers (24), they can only serve 162 children. Although it is one of the smaller subregions in terms of population of young children, it is worth noting that there are no registered child care providers within Red Rock-Saddlebrooke subregion. Approximate provider locations are illustrated in Figure 37. In discussing the supply of early care and education, key informants acknowledged that many areas in the county are

EARLY LEARNING 89

xvii Please note that these data were compiled by merging four different licensing and enrollment datasets from ADHS, DES, FTF, and Child Parent Centers Head Start program. For a table highlighting only those registered with DES, please see the additional tables in Appendix 1.

child care deserts, but that particularly in the wake of the pandemic, there are severe challenges with finding and keeping staff, particularly highly-qualified staff. Key informants also noted that the low wages typically offered in the child care industry mean that as the minimum wage rises in all sectors as the result of recent legislation, potential employees may choose jobs that are perceived as easier than child care if they can make comparable earnings. Ways of training and developing a broader ECE workforce would be welcomed.

Table 16. Estimated Number and Capacity of Early Care & Education Providers, 2020-2021

		l ECE viders	Child ca	re centers	Head	d Start	Public	Schools	Home P	roviders
Geography	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
Pinal Region	106	6,608	41	3,769	22	1,020	19	1,657	24	162
Apache Junction- Gold Canyon	11	698	6	561	2	99	1	30	2	8
Casa Grande	25	1,562	14	1,034	2	230	5	282	4	16
Copper Corridor	9	356	1	43	3	102	4	207	1	4
Eloy-Arizona City	9	357	3	124	4	225	0	0	2	8
Florence-Coolidge	17	722	7	359	5	224	2	109	3	30
Maricopa-Ak Chin- Stanfield	19	1,511	4	878	4	90	4	485	7	58
Red Rock- Saddlebrooke	0	0	0	0	0	0	0	0	0	0
San Tan Valley- Queen Creek	16	1,402	6	770	2	50	3	544	5	38
Pinal County	120	7,379	47	4,210	25	1,160	22	1,834	26	175
Arizona	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Source: Arizona Department of Economic Security (2021). Child Care Administration [Dataset]. Data received by request. Arizona Department of Health Services (2021). Child Care Licensing [Dataset]. Data received by request. First Things First (2021). Quality First Data Center [Dataset]. Pinal-Gila Community Child Services (2021). Data received by request. Head Start Program Data [Dataset]. Data received by request. Analyses conducted by the UArizona CRED Team.

Note: This table was compiled by merging five licensing and enrollment datasets from ADHS, DES, FTF, Chicanos Por La Causa Head Start and Pinal-Gila Community Child Services Head Start. We removed all duplicate programs (based on name, phone number, and address) as well as program that only serve children ages 5-12, as these are typically before- & after-school programs that only serve school-age children. Head Start & Early Head Start programs are counted separately. Since these data rely on local data requests, comparison data are not available at the state-level. Please note that where both enrollment and capacity data were available, we used capacity data (not enrollment data) to reflect the maximum number of slots available.

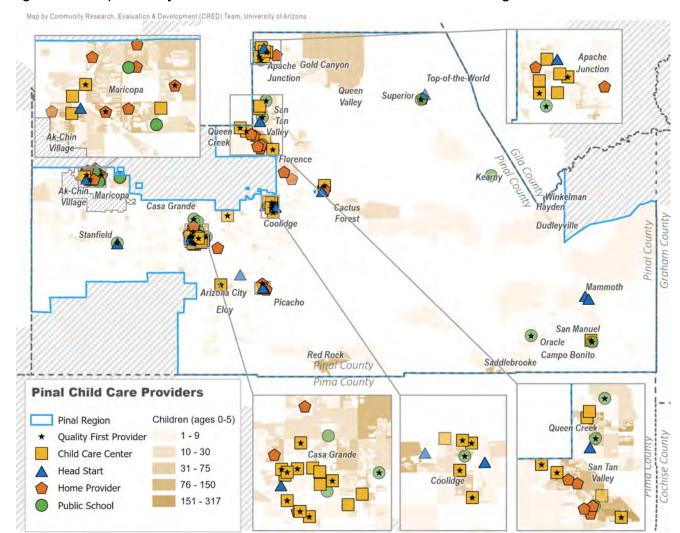


Figure 37. Map of Early Care and Education Providers in the Pinal Region

Source: Arizona Department of Economic Security (2021). Child Care Administration [Dataset]. Data received by request. Arizona Department of Health Services (2021). Child Care Licensing [Dataset]. Data received by request. First Things First (2021). Quality First Data Center [Dataset]. Western Arizona Council of Governments (2021). Head Start Program Data [Dataset]. Data received by request. Chicanos Por La Causa (2021). Head Start Program Data [Dataset]. Data received by request. Analyses conducted by the UArizona CRED Team.

Note: This table was compiled by merging five different licensing and enrollment datasets from ADHS, DES, FTF, and Western Arizona Council of Governments and Chicanos Por La Causa Head Start programs. We removed all duplicate programs (based on name, phone number, and address) as well as programs that only serve children ages 5-12, as these are typically before- & after-school programs that only serve school-age children.

The Center for American Progress estimates that 48% of Arizonans live in a "child care desert," defined as an area where there are at least three times as many children as there are child care slots, meaning that the absence of accessible, affordable child care may be a barrier to employment.²¹⁰ In Arizona, the majority of rural families (67%), low-income families (59%) and Hispanic/Latino families (55%) live in a child care desert, making them disproportionately impacted by barriers to child care and therefore

barriers to employment.²¹¹ This is slightly worse than in the U.S. as a whole, where 60% of rural families and 55% of low-income families live in child care deserts.

The child care shortage is also a clear issue in the Pinal Region. Comparing the number of children birth to 5 to the number of available child care slots in the region overall, there are 4.4 times as many children as slots (Figure 38), meaning the region meets the above definition of a desert. All subregions except the Copper Corridor also meet this definition (although a ratio can't be calculated for Red Rock-Saddlebrooke subregion since there are no ECE providers there). The child care shortage appears to be the worst in the San Tan Valley-Queen Creek subregion, where there are nearly 7 times as many young children as there are slots. Even if the calculation is altered to only estimate the shortage of slots for families who presumably have the greatest need – those with all present parents in the labor force – there are still 3.5 times as many young children as there are slots in the San Tan Valley-Queen Creek subregion.

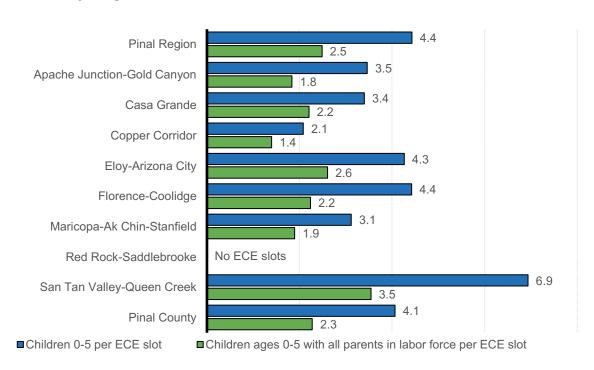


Figure 38. Ratio of young children birth to 5 to child care slots

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B23008 and Arizona Department of Economic Security (2021). Child Care Administration [Dataset]. Data received by request. Arizona Department of Health Services (2021). Child Care Licensing [Dataset]. Data received by request. First Things First (2021). Quality First Data Center [Dataset]. Pinal-Gila Community Child Services (2021). Data received by request. Head Start Program Data [Dataset]. Data received by request. Analyses conducted by the UArizona CRED Team.

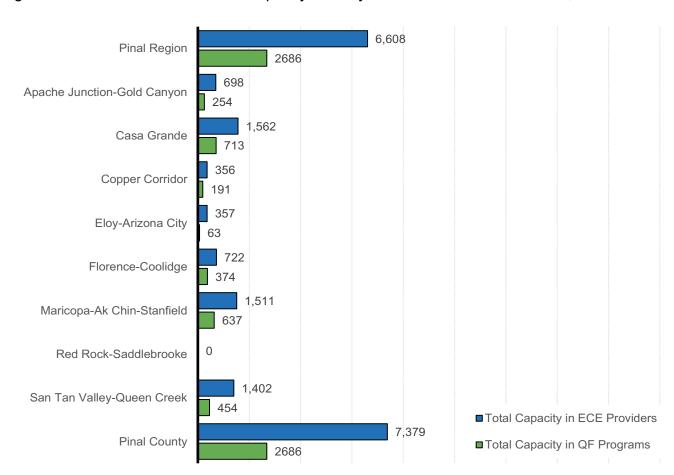


Figure 39. Estimated Number and Capacity of Early Care & Education Providers, 2020-2021

Source: Arizona Department of Economic Security (2021). Child Care Administration [Dataset]. Data received by request. Arizona Department of Health Services (2021). Child Care Licensing [Dataset]. Data received by request. First Things First (2021). Quality First Data Center [Dataset]. Pinal-Gila Community Child Services (2021). Head Start Program Data [Dataset]. Data received by request. Data received by request. Analyses conducted by the UArizona CRED Team.

Note: This table was compiled by merging four different licensing and enrollment datasets from ADHS, DES, FTF, and Child Parent Centers Head Start program. We removed all duplicate programs (based on name, phone number, and address) as well as program that only serve children ages 5-12, as these are typically before- & after-school programs that only serve school-age children. Head Start & Early Head Start programs are counted separately.

Providers are considered quality educational environments by DES if they are accredited by a national organization, such as the Association for Early Learning Leaders or the National Association for the Education of Young Children (NAEYC),²¹² or if they receive a Quality First 3-star rating or higher (see below). In the Pinal Region, just 2 providers (2%) have attained national accreditation. Both of these are home-based providers, meaning that they can provide only 8 total child care slots. There is one provider in the Eloy-Arizona City subregion, and one in the Maricopa-Ak Chin-Stanfield subregion (Table 17).

Table 17. Number and licensed capacity of accredited child care providers, December 2020

Geography	Number of accredited providers	Percent of providers who are accredited	Capacity in accredited providers	Percent of provider capacity which is with accredited providers
Pinal Region	2	2%	8	0.1%
Apache Junction-Gold Canyon	0	0%	0	0%
Casa Grande	0	0%	0	0%
Copper Corridor	0	0%	0	0%
Eloy-Arizona City	1	13%	4	1%
Florence-Coolidge	0	0%	0	0%
Maricopa-Ak Chin-Stanfield	1	8%	4	0.4%
Red Rock-Saddlebrooke	0	N/A	0	N/A
San Tan Valley-Queen Creek	0	0%	0	0%
Pinal County	2	2%	8	0%
Arizona	233	9%	24,824	12%

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

Note: This table only includes data for providers listed in the National Data System for Child Care NACCRRAware database. These providers are listed through the Child Care Resource & Referral Guide to allow parents and caregivers to find child care and early education providers. Providers that only provide before- and after-school care are not included in this table. This table shows the percent of licensed or registered centers, homes, or individual providers listed in the CCR&R who have a national accreditation, such as NECPA – National Early Childhood Program Accreditation, CDA – Child Development Association, AMI – American Montessori International, or NAEYC – National Association for the Education of Young Children.

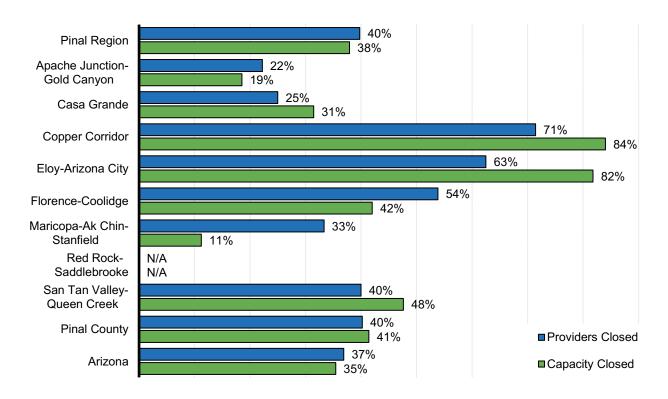
The COVID-19 pandemic made child care even less accessible for many families. Many child care centers and homes closed in the early days of the pandemic due to concerns about safety of children, staff and families.^{213,214} The pandemic's effect on out-of-home child care arrangements heightened stress for families and widened pre-existing inequities in work, income and well-being. In a nationally-representative survey in the summer of 2020, about half of families with young children (47%) reported that they lost their pre-pandemic child care arrangements, and the majority of parents and caregivers surveyed (70%) were worried about returning to prior arrangements.²¹⁵

During the month of December 2020, statewide, more than one third (37%) of the regulated early care providers that were listed in the CCR&R guide were closed. These providers accounted for 36% of the known care capacity in the state. In the Pinal Region, of 88 DES-registered providers, 35 (40%) were closed in December 2020, representing a loss of 2,195 slots or 38% of the previous capacity (Figure 40). Closures were notably lower in the Apache Junction-Gold Canyon, Casa Grande, and Maricopa-Ak Chin-Stanfield subregions, where 22%, 25%, and 33%, respectively, of providers closed. These closures

resulted in a respective loss of 19%, 31%, and 11% of capacity (Figure 40). Closures were especially high in the Copper Corridor and Eloy-Arizona City subregions, which lost 84% and 82% of their capacity, respectively.

Locally, key informants described challenges in serving families during the pandemic. Difficulties included getting families accustomed to virtual classes during the pandemic, having families struggle with their internet connections, and seeing children struggle with quarantines. Serving children with special needs during the pandemic was particularly hard.

Figure 40. Number and capacity of regulated early care and educational providers by operational status in December 2020



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

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

To help communities during the pandemic, First Things First helped recruit providers to become Arizona Enrichment Centers. 216 The Arizona Enrichment Center program provided funding to licensed child care facilities in order to serve the children of essential workers during the pandemic in 2020 and provided scholarships to essential workers making less than \$65,000 annually.^{217, xviii} Two-thirds of all Arizona Enrichment Centers were Quality First participating providers (334 of 506 total enrichment centers).²¹⁸ In the Pinal Region, 15 providers became Arizona Enrichment Centers, serving 113 children through the program (Table 18).

Notably, even if child care centers remained opened during the pandemic, they had to shoulder additional costs related to cleaning and staffing changes, among others. Over half of centers (56%) surveyed by the National Association for the Education of Young Children (NAEYC) reported that they were losing money while operating in December 2020, and a quarter of home-based providers and a third of center-based providers surveyed indicated that they would close in the next three months without additional support. While the extent that these costs are passed on to families remains to be seen, estimates indicate that child care operating costs increased by an average of 47% nationwide. In Arizona, costs were projected to jump substantially more, potentially increasing by 84% for center-based providers (\$685 to \$1,257) and 75% for family home providers (\$732 to \$1281). Many providers are also facing significant staffing challenges and low enrollments. According to a survey by NAEYC in July 2021, most Arizona child care centers surveyed (84%) experienced staffing shortages, driven in large part by the low wages in the early education sector. 221

For many providers, relief funds provided through the Coronavirus Aid, Relief, and Economic Security (CARES) Act, Coronavirus Response and Relief Supplemental Appropriations Act, and American Rescue Plan have been critical for reducing debt incurred during the pandemic.²²² The relief bills passed by Congress during the pandemic have allocated significant funds for child care providers, including \$1.2 billion allocated for Arizona for the next three years through the American Rescue Plan and Coronavirus Response and Relief Supplemental Appropriations Act.²²³ DES also offered a Child Care COVID-19 grant program to help child care providers cover operational costs including but not limited to, salaries, tuition relief for families, cleaning supplies, and rent and utilities to safely remain open or reopen during the pandemic.^{xix} In the Pinal Region, 73 providers enrolled in this grant program offered through DES (Table 18).

_

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

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

Table 18. Arizona Enrichment Centers and ECE providers who received COVID-19 grants, December 2020

Geography	Arizona Enrichment Centers	Number of children approved for enrollment	Percent of CCRR- listed providers that were Arizona Enrichment Centers	Number of providers enrolled in COVID-19 grant program
Pinal Region	15	113	17%	73
Apache Junction-Gold Canyon	0	0	0%	4
Casa Grande	6	35	25%	20
Copper Corridor	0	0	0%	4
Eloy-Arizona City	0	0	0%	3
Florence-Coolidge	4	30	31%	14
Maricopa-Ak Chin-Stanfield	2	16	17%	10
Red Rock-Saddlebrooke	0	0	N/A	0
San Tan Valley-Queen Creek	3	32	20%	18
Pinal County	15	113	16%	74
Arizona	480	5,681	19%	1,808

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

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

Head Start

Head Start is a comprehensive early childhood education program for children whose families meet Department of Health and Human Services income eligibility guidelines. The program offers a broad range of individualized services in the areas of education and child development, special education, health services, nutrition, and parent/family development. Preschool-aged children are served through Head Start programs, and infants and toddlers are served through Early Head Start. In the Pinal Region, Pinal-Gila Community Child Services operates 13 Head Start sites, many of which run an Early Head Start program in addition to traditional Head Start. Chicanos Por La Causa also runs 2 Migrant Head Start programs in Eloy: The Eloy Center and the George Washington Carver Child Care Partnership (CCP) program. CCP partners Early Head Start programs with child care centers and family home providers. Eloy Center had a capacity of 40; George Washington Carver CCP had a capacity of 25. In 2019-20, Eloy had a cumulative enrollment of 40 and Carver had 19. Head start slots, also known as funded enrollment, represents a program's capacity to serve children at a point in time.²²⁴ Pinal-Gila Community Child Services programs had a funded enrollment of 733 in the Pinal Region in 2019-20. Of the funded slots in traditional Head Start, just over half were in expanded duration programs (n=287)

with the remainder in part day programs (n=261) (Figure 41). Additionally, 185 slots existed for Early Head Start programs.

Figure 41. Funded enrollment in Pinal Region Head Start programs run by Pinal-Gila Community Child Services by type, 2019-20

Expanded Duration, 287	Part-Day, 261	Early Head Start, 185
---------------------------	---------------	-----------------------

Source: Pinal-Gila Community Child Services (2021). Head Start Program Data [Dataset]. Data received by request.

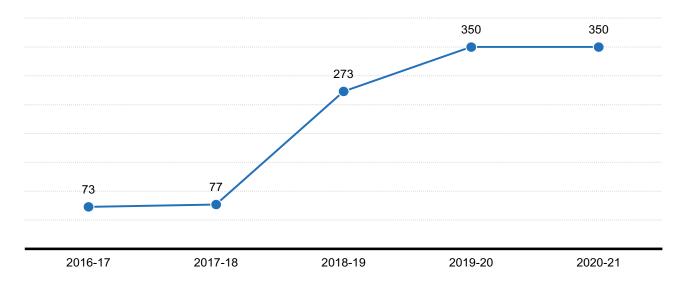
Notes: These numbers reflect funded enrollment during the 2019-20 school year, which were lower than the total licensed capacity for many centers (shown in Table 16). Capacity from the 2 Migrant Head Start programs run by Chicanos Por La Causa is not reflected here. "Expanded Day" refers to lengthening the hours of services that Head Start offers individual children and their families, with the goal of increasing children's learning and developmental outcomes by providing more hours of high-quality learning experiences. Longer hours also support families who are working or in school to pursue self-sufficiency while their children are in safe and nurturing early learning environments. Read more about this effort here: https://www.nhsa.org/knowledge-center/center-advocacy/top-issues/extended-duration/.

Cumulative enrollment encompasses the total number of individuals that Head Start programs serve across the program year and can surpass funded enrollment due to families staying part of a year and then being replaced by a new family. Pinal-Gila Community Child Services programs had a cumulative enrollment of 896 in the Pinal Region in 2019-20; details by center are available in Appendix 1. Chicanos Por La Causa had a cumulative enrollment of 59 in 2019-20. Across the region, 142 families were on the waitlist.

Informal Care providers

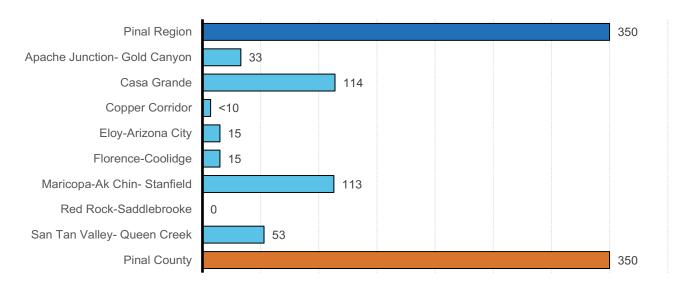
United Way of Pinal County also provides training and support to kith and kin caregivers through the Family, Friend, and Neighbor (FFN) Program. Growing in response to demand, this program expanded dramatically in recent years (supported with additional funding), reaching more than four times as many families in 2020-21 than in 2017-18 (Figure 42). A key informant noted that this program is particularly popular among kinship (i.e., family) caregivers, especially grandparents serving in a child care capacity. Of the 159 kindship care providers served through FFN (about 45% of the participants), 145 are grandparents. The program's reach is strongest in Casa Grande and Maricopa-Ak Chin-Stanfield subregions (Figure 43). These kith and kin caregivers play an important role in caring for young children in the region, given the relatively small number registered child care providers.

Figure 42. Number of informal care providers served through the Family, Friends, and Neighbors program in the Pinal Region, 2016-17 to 2020-21



Source: United Way of Pinal County (2021). [FFN dataset]. Unpublished data received by request.

Figure 43. Number of informal care providers served through the Family, Friends, and Neighbors program by subregion, 2020-21



Source: United Way of Pinal County (2021). [FFN dataset]. Unpublished data received by request.

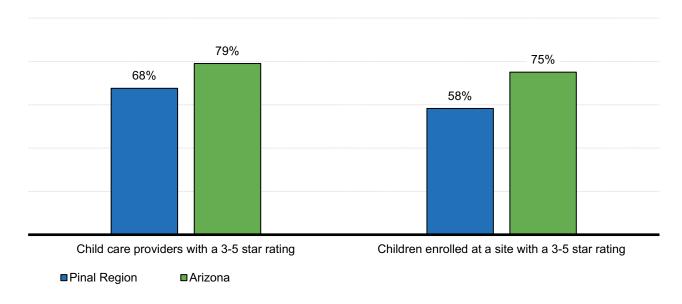
Quality First

Beyond the basic goal of being a safe place for children, there are a number of different ways for a child care program to enrich a child's experience. Quality standards help ensure these early environments support positive outcomes for children's well-being, academic achievement, and success later in life. Quality First is Arizona's Quality Rating and Improvement System (QRIS) for early child care and preschool providers. The Quality First program describes quality settings as those that include teachers and staff who know how to work with young children and offer hands-on activities, create learning environments that nurture the development of every child and foster positive, consistent relationships and interactions that give children the individual attention they need. A Quality First star rating represents where along the continuum of quality (1 to 5 stars) a program was rated and how they are implementing early childhood best practices. Through Quality First, child care health consultants also help provide health and safety guidance to providers.

In 2020, the Pinal Region had 37 programs in the Quality First System, 25 of which (67%) had achieved a 3-star rating or higher, indicating that they meet quality standards. This is a lower proportion than participating Quality First programs statewide, where 79% have achieved a 3-star rating or higher (Figure 44). In the Pinal Region, the 25 3-star or higher rated programs served just over 1,000 children (1,019), a small fraction of the over 27,000 young children in the region (Table 19). Quality First also offers scholarships; 380 children were served through these in state fiscal year 2020.

Looking forward, the 2022 state fiscal year budget includes \$74 million specifically focused on increasing the number of quality child care and preschool settings in Arizona, which could add up to 800 Quality First providers statewide over the next three years. Statewide, this investment is particularly important for access to high quality early education due to the 2019 loss of \$20 million in federal funding through the Preschool Development Block Grants (PDG) and Preschool Development Birth through Five Grants (PDG B-5). ECE providers who have received PDG funding in the Pinal Region include the Stanfield Elementary School District. Loss of this funding could lead to greater shortages in available care, especially high quality care, without the offset of increased investment in Quality First.

Figure 44. Percent of Quality First programs with a 3-5 star rating and children enrolled in quality-level programs, state fiscal year 2020



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

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

Table 19. Children enrolled in Quality First Programs, state fiscal year 2020

Geography	Children enrolled at a Quality First provider site	,	quality-level setting (3-5
Pinal Region	1,748	1,019	58%
Pinal County	N/A	N/A	N/A
Arizona	60,927	45,822	75%

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

Early Care and Education Affordability

In addition to issues of availability, the high cost of early care and education can place formalized care out of reach of many families. The average annual cost of full-time center-based care for a young child in Arizona is nearly equal to the cost of one year at a public college. ^{232,233}

The average monthly cost for child care in Arizona varies based on the type of provider and age of the child, with licensed child care centers often having the highest rates across all age groups. Without accounting for possible family discounts for families with multiple children at the same center, a family with one preschooler and one infant can expect to pay about \$1,521 per month for a licensed child care

center provider (Figure 45). As a point of comparison, the median rent in Pinal County is \$1,064,²³⁴ meaning that formal child care arrangements may easily exceed what many families pay per month on housing. This can create financial challenges that are further compounded for families with multiple children under the age of 5.^{xx,235,236} A married family with two children living at the poverty line in Arizona, for example, would need to pay over 77% of their household income for center-based care if charged these rates. ^{237,238}

The cost of care varies by the type of care and the age of the child receiving care. Care is typically more expensive for infants, because the lower teacher-to-child ratio needed for infant care often necessitates a higher cost of care. In 2018, in approved family homes in the Pinal Region, the median cost of full-time care across all age groups was higher relative to the cost of similar care across the state (Figure 45). However, care in certified group homes or child care centers in the region tends to be less expensive than elsewhere. For example, residents in the region pay lower prices than parents statewide for child care centers (e.g., \$700 per month for infant care vs. \$861/month) and certified group homes (e.g., \$520 per month for infant care vs. \$600/month), but more for approved family homes (e.g., \$510 per month for infant care vs. \$400/month).

_

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

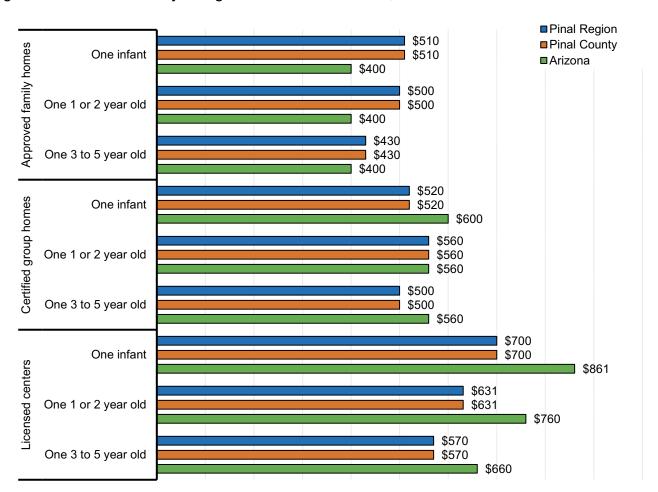


Figure 45. Median monthly charge for full-time child care, 2018

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

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

Based on a median family income of \$66,500, families in Pinal County pay about 10-12% of their income for child care, depending on the child's age (Figure 46). Although this is slightly more affordable relative to other families statewide (11-15% of a median \$70,200 income), it still puts child care as a substantial cost for families, especially for families with multiple young children needing care. The United States Department of Health and Human Services recommends that parents spend no more than 10% of their family income on child care to avoid being overburdened.²³⁹ Furthermore, these proportions were calculated based on the median income for all families. Single parent homes, particularly those with a single female householder, have a much lower median income (see Figure 9), resulting in a higher proportion of their income being spent on child care. Key informants noted that such cost burdens meant that many families may choose to stay out of the work force, caring for their children directly rather than paying a large portion of their income for child care. While this may make

sense for a family's budget in the short term, it has long term repercussions in terms of earnings that contribute to future social security payments, for example.

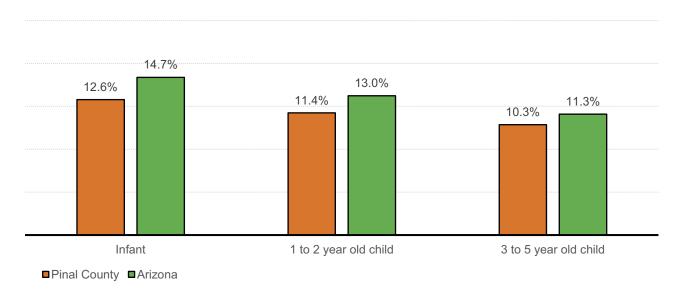


Figure 46. Cost of center-based child care as a percent of median family income, 2018

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

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

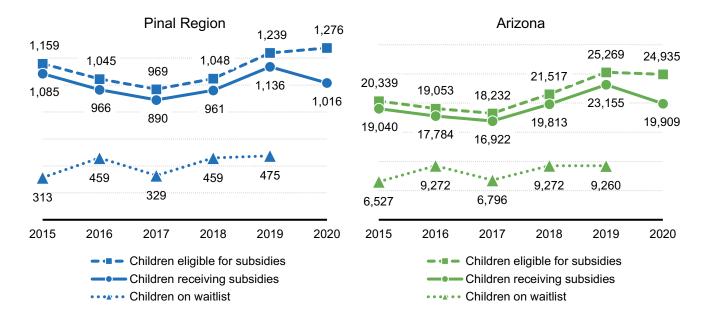
Child care subsidies provided by government agencies can help to offset families' child care costs, reducing financial barriers to accessing child care and ensuring parents can remain employed and provide for their family's needs.²⁴⁰

The number of children birth to 5 years eligible for DES child care subsidies in the Pinal Region has increased steadily from 2017 (n=969) to 2020 (n=1,286) (Figure 47). The number of children receiving DES child care subsidies also tracked with the increase in eligibility numbers – until 2020. Presumably as a result of the pandemic when many parents and caregivers ceased out-of-home care for their children,²⁴¹ 2020 saw a drop in the number of children using subsidies (Figure 47). In a nationally representative survey in the summer of 2020, about half of families with young children (47%) reported that they lost their pre-pandemic child care arrangements, and the majority of parents and caregivers surveyed (70%) were worried about returning to prior arrangements.²⁴²

Figure 47 also illustrates the suspension of the DES child care subsidy waitlist in June 2019. Prior to that, there had been hundreds of young children in the region who were interested in the subsidy program but unable to promptly access that source of support. The suspension meant that for the first time since the start of the waitlist in 2009 during the Great Recession, all children who qualify for subsidies are able to receive them, assuming that they are able to find a provider.²⁴³ This was due to \$56

million in additional federal funds from the Child Care and Development Fund (CCDF) that was authorized by the Arizona State Legislature. The funding increase has also allowed DES to increase provider reimbursement rates, which may make it easier for families to use their child care subsidies.²⁴⁴ However, local key informants noted challenges with getting families to apply for subsidies, reporting that families are wary of providing information to government agencies. Furthermore, eligible families may not access child care subsidies for a number of reasons, including limited knowledge about how to navigate the system, an inability to afford child care even with the subsidy or a lack of providers within their area who will take subsidy payments.^{245,246}

Figure 47. Children birth to 5 eligible for, receiving, and on waitlist for DES child care subsidies, 2015 to 2019



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

Note: The DES child care waitlist was suspended in June 2019, so there are no waitlist numbers for 2020.

The Department of Child Safety (DCS) has a special arrangement with DES to prioritize child care subsidies to DCS-involved families. This partnership aims to help protect children from abuse and neglect by reducing caregiver stress and providing opportunities for children to interact with adults outside of the family who could help alert DCS to potential concerns.²⁴⁷ The number of DCS-involved children receiving DES child care subsidies had averaged around 700 annually in the years prior to the pandemic (Figure 48; note that these DCS-involved children are in addition to the non-DCS subsidy recipients). Then, as with the non-DCS-involved population, subsidy use dropped off considerably during the pandemic. The 420 DCS-involved children who used DES child care subsidies in 2020 represent 56% of those eligible. These children are in especially fragile families, where the stress of the pandemic coupled with the lack of outside support during mass quarantines could leave them particularly vulnerable. Nationwide, during the pandemic, reports of child maltreatment dropped – even as severity appeared to increase –as children were isolated at home, away from mandated reporters.^{248,249} In the wake of the pandemic, additional efforts to support DCS-involved families may be warranted.

Pinal Region Arizona 1,136 23,155 1,085 966 961 19,909 19,040 815 713 696 678 681 13,352 13,098 12,201 12,219 11,808 420 7,137 2015 2016 2017 2018 2019 2020 2015 2016 2017 2018 2019 2020 -- -- Non-DCS Children -- Non-DCS Children

DCS-involved Children

Figure 48. DCS-involved children birth to 5 receiving DES child care subsidies, 2015 to 2019

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

Young Children with Special Needs

DCS-involved Children

Timely and appropriate developmental screenings can help to identify children who may have special needs. By identifying these children early, intervention can help young children with, or at risk for, developmental delays to improve language, cognitive and socio-emotional development. ^{250,251} It also reduces educational costs by decreasing the need for special education. ²⁵² In Arizona, services available to families with children with special needs include those provided through the Arizona Early Intervention Program (AzEIP), ^{xxi} the Division of Developmental Disabilities (DDD), ^{xxiii} and the Arizona Department of Education Early Childhood Special Education Program. ^{xxiiii}

The Pinal Regional Partnership Council supports the screening process in the region through grants. The University of Arizona Cooperative Extension has screened thousands of children annually (Figure 49). The screenings in 2020 are at a recent low due to pandemic disruptions; screenings essentially halted in March 2020 with still a quarter of the fiscal year remaining. In SYF2020, of developmental screenings conducted through this program, over half (58%) identified a concern (Figure 50). About one-third (34%) of the screenings yielded a significant concern, and 24% yielded a mild to moderate concern. All of the concerns were reportedly referred for services.

106 Pinal Region

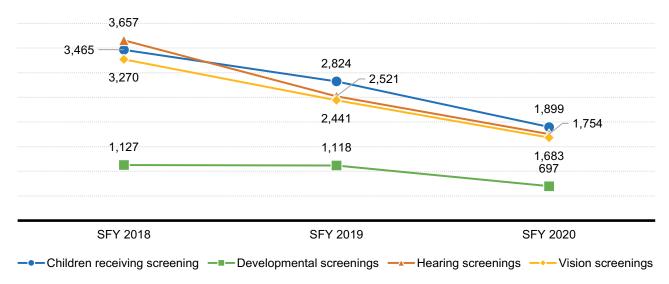
_

xxi For more information on AzEIP, visit https://www.azdes.gov/azeip/

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

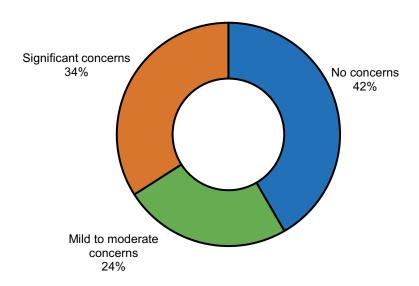
xxiii For more information on ADE's Early Childhood Special Education program, visit https://www.azed.gov/ece/early-childhood-special-education/ and https://www.azed.gov/ece/early-childhood-special-education/and https://www.azed.gov/ece/early-childhood-special-education/and https://www.azed.gov/special-education/az-find/

Figure 49. Development and sensory screenings in the Pinal Region, SFY 2018 to 2020



Sources: Developmental and Sensory Screening, Pinal Regional Partnership Council data report (SFY2018-2020). [Grantee Report dataset]. Unpublished data.

Figure 50. Development and sensory screenings in the Pinal Region, SFY 2018 to 2020



Sources: Developmental and Sensory Screening, Pinal Regional Partnership Council data report (SFY2018-2020). [Grantee Report dataset]. Unpublished data.

Once concerns have been identified, the Arizona Early Intervention Program (AzEIP)^{xxiv} is an interagency system of services and supports for families of young children (birth to 3) with disabilities or developmental delays in Arizona. The number of young children referred to AzEIP in the Pinal Region has risen consistently by about 100 children per year in recent years (Figure 51). Even in 2020, while statewide numbers declined, likely a result of constraints of the COVID-19 pandemic, Pinal's rose to a recent high of 1,110 referrals. These increasing numbers may speak to both a rising need and/or a growing capacity to recognize and refer children with developmental delays to AzEIP, bolstered by the strength of screening programs in the Pinal Region. While the goal is that children receive key interventions in their early years through this program, key informants report a shortage of occupational therapists and speech therapists in the region, meaning that there may be issues in having local capacity to meet rising demand for services.

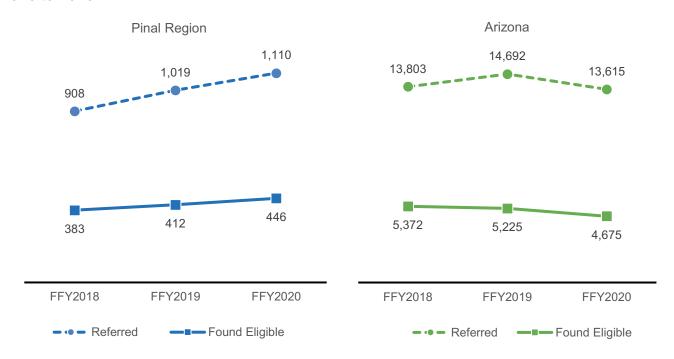
The number of children found eligible has also risen over time but remains only about 40% of those referred within a given year (Figure 51). This is a bit higher than the state overall (34% in 2020), but still means there are many families with concerns about their children's development who are not receiving services. Notably, Arizona has some of the strictest eligibility requirements for early intervention services compared to other states in the U.S.²⁵³ Providing early intervention services for young children has been shown to reduce the need for special education services later in childhood,²⁵⁴ so assuring that children have access to timely and adequate screening and intervention services from birth to five can be key for helping children to be ready for kindergarten.

Although the Pinal Region data doesn't show the same pandemic-era drop in 2020 seen statewide, there was still widespread disruption. In spring 2020, AzEIP halted in-home and community services and switched to virtual visits (computer-or phone-based).²⁵⁵ The transition to remote services was challenging for both service providers and families. Technology was a barrier to families receiving early intervention services, and the form of services often transitioned to more of a family-coaching approach rather than direct interaction with the child.²⁵⁶ Given these added challenges, it is not surprising that families with young children with special needs also struggled more emotionally and psychologically through the pandemic. According to a nationally representative series of surveys throughout the pandemic, in households of children with disabilities, both young children and their caregivers experience higher levels of stress and anxiety than households of typically developing children.^{257,258}

_

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

Figure 51. Children ages birth to 2 referred to and found eligible for AzEIP, federal fiscal years 2018 to 2020



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

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

The proportions of young children referred to and found eligible for AzEIP in 2020 is a bit higher in the region (40%) than the state overall (34%) (Table 20). Subregions generally fell in a similar range of proportion of referred children found eligible, from a low of 29% in the Eloy-Arizona City subregion to a high of 47% in the Maricopa-Ak Chin-Stanfield subregion. Key informants also mentioned that there were concerns about the successful implementation of AzEIP programming, noting high staff turnover among AzEIP coordinators and challenges finding new staff.

Table 20. Children ages birth to 2 referred to and found eligible for AzEIP, federal fiscal years 2018 to 2020

	Number of children (ages 0-2) referred to AzEIP				of children (a gible for AzE		Percent of referrals found eligible		
Geography	FFY 2018	FFY 2019	FFY 2020	FFY 2018	FFY 2019	FFY 2020	FFY 2018	FFY 2019	FFY 2020
Pinal Region	908	1,019	1,110	383	412	446	42%	40%	40%
Apache Junction- Gold Canyon	104	110	89	34	38	37	33%	35%	42%
Casa Grande	159	171	202	67	77	69	42%	45%	34%
Copper Corridor	16	25	23	[1-11]	[1-10]	[1-15]	DS	DS	DS
Eloy-Arizona City	30	55	68	12	15	20	40%	27%	29%
Florence-Coolidge	101	90	117	38	36	40	38%	40%	34%
Maricopa-Ak Chin- Stanfield	147	229	208	71	100	97	48%	44%	47%
Red Rock- Saddlebrooke	22	21	28	[1-11]	[1-10]	[1-15]	DS	DS	DS
San Tan Valley- Queen Creek	329	318	375	149	135	167	45%	42%	45%
Pinal County	967	1,056	1,139	421	431	463	44%	41%	41%
Arizona	13,803	14,692	13,615	5,372	5,225	4,675	39%	36%	34%

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

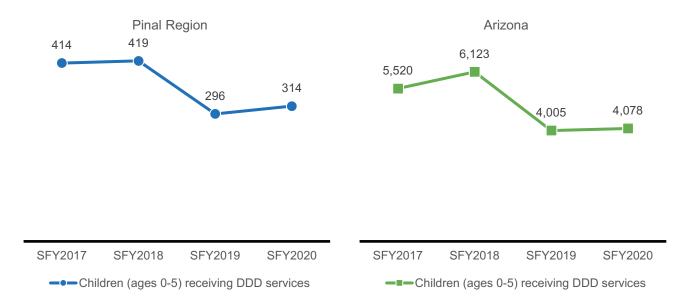
AzEIP may refer families to the Division of Developmental Disabilities (DDD) if the child has or is at risk for developing a qualifying disability, including cerebral palsy, epilepsy, autism spectrum disorder or an intellectual or cognitive disability.^{xxv} DDD can provide services to individuals with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

Recent years have seen an overall decline (-24%) in the number of young children receiving DDD services across the Pinal Region (Figure 52). This pattern very similar to that seen across the state as a whole, and the reasons for the decline before the pandemic are unknown. Interestingly, the number of children being served by DDD increased very slightly from 2019 and 2020 in both the Pinal Region and across the state, despite the pandemic interruptions. In 2020, the number of children receiving services through DDD by subregion, mirrored the share of young children in each (

Figure 53; Figure 2).

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

Figure 52. Number of children (ages 0-5) receiving DDD services, state fiscal years 2017 to 2020



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

Pinal Region 314 Apache Junction-Gold Canyon 27 Casa Grande 42 Copper Corridor 1-10 Eloy-Arizona City 12 Florence-Coolidge 30 Maricopa-Ak Chin-Stanfield 77 Red Rock-Saddlebrooke 1-10 San Tan Valley-Queen Creek 115 **Pinal County** 318

Figure 53. Number of children (ages 0-5) receiving DDD services, state fiscal year 2020

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

A 2008 study using nationally representative data estimates that approximately 13% of children ages 0-2 in the U.S. have developmental delays that could benefit from early intervention services, but only about 3% of children actually receive services. Furthermore, Arizona has been among the bottom five states in terms of young children receiving early intervention services. In the Pinal Region, the proportion of children receiving services is similar to that national estimate. An estimated 2.8% of children birth to 2 years were receiving services from AzEIP or DDD in 2020, which is higher than the proportion statewide (2.1%) (Table 21). These data suggest that there are likely many children in the Pinal Region who would benefit from early intervention services but are not receiving them.

-

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

Table 21. Numbers of children (ages 0-2) receiving services from AzEIP, DDD, or both; state fiscal years 2019 and 2020

Geography	Children receiving AzEIP or DDD services, SFY 2019	Children receiving AzEIP or DDD services, SFY 2020	Percent change from 2019 to 2020	Population of Children (ages 0- 2), 2010 Census	Estimated percent of children (ages 0- 2) receiving AzEIP or DDD services, SFY 2020
Pinal Region	472	487	+3%	17,258	2.8%
Apache Junction- Gold Canyon	40	47	+18%	1,560	3.0%
Casa Grande	83	83	0%	2,676	3.1%
Copper Corridor	[1-15]	[1-12]	N/A	543	DS
Eloy-Arizona City	12	19	+58%	1,049	1.8%
Florence-Coolidge	47	44	-6%	1,484	3.0%
Maricopa-Ak Chin- Stanfield	97	117	+21%	3,258	3.6%
Red Rock- Saddlebrooke	[1-15]	[1-12]	N/A	541	DS
San Tan Valley- Queen Creek	177	164	-7%	6,147	2.7%
Pinal County	503	501	-0%	17,834	2.8%
Arizona	6,376	5,721	-10%	270,519	2.1%

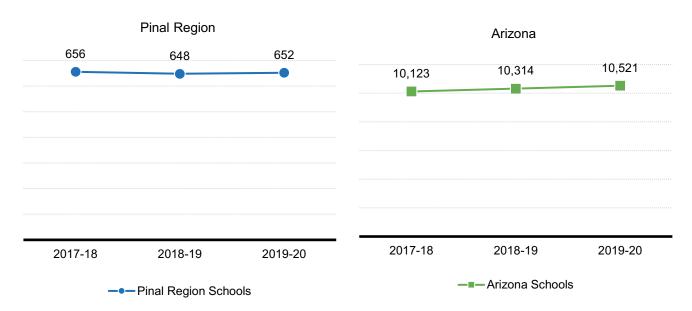
Source: Arizona Department of Economic Security (2021). [Arizona Early Intervention Program & Division of Developmental Disabilities datasets]. Unpublished data. U.S. Census Bureau (2010). Decennial Census, Table P14.

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

As a child with special needs approaches age 3, they transition from receiving services through AzEIP to receiving services from their local education authority (LEA). Data from the Arizona Department of Education show that the number of young children (ages 3 to 5) with special needs receiving services from LEAs in the Pinal Region has remained around 650 students since the 2017-18 school year, with 652 children receiving services in 2019-20 (Figure 54).

The availability of early learning opportunities and services for young children with special needs is an ongoing concern across the state, particularly in the more geographically remote communities and some tribal communities. Adding to the existing challenges in serving these students, pandemic-related school closures further impacted children with special needs. In-person services for children through LEAs were disrupted and required transitions to remote modalities.²⁶¹ Young children with special needs may need additional supports to compensate for the challenges faced during the pandemic.

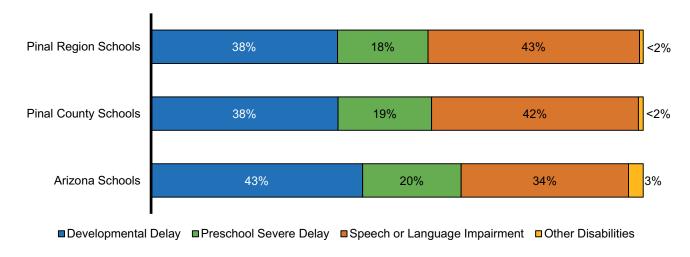
Figure 54. Trends in preschoolers with disabilities served by Local Education Authorities (LEAs), 2017-18 to 2019-20



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

Among children who are in special education programs in public preschools in the Pinal Region, 43% have a speech or language impairment, 38% of children have a developmental delay and 18% have a "preschool severe delay" (Figure 55). The preschool severe delay category is defined by Arizona as a very low score on assessments of in one or more of these areas: cognitive development, physical development, communication development, social or emotional development, or adaptive development.²⁶²

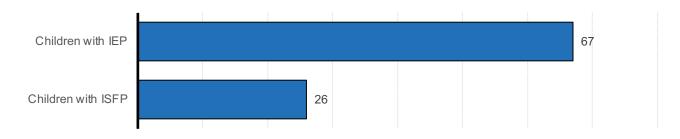
Figure 55. Preschoolers with disabilities receiving services through Local Education Authorities (LEAs) by type of disability, 2019-20



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

Head Start programs also serve young children with special needs. In 2020-21, Head Start programs run by Pinal-Gila Community Child Services served 67 Head Start participants through individualized education plans (IEPs), and 26 Early Head Start participants with individualized family service plans (IFSPs)xxvii (Figure 56). Among the children with disabilities served by Head Start, 65% had developmental delays and 35% had speech impairments (Figure 57).

Figure 56. Children with disabilities served by Head Start, 2020-21



Source: Pinal-Gila Community Child Services (2021). Head Start Program Data [Dataset]. Data received by request.

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

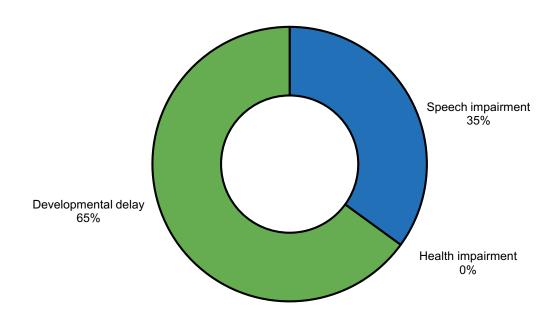


Figure 57. Children with disabilities served by Head Start, 2020-21

Source: Pinal-Gila Community Child Services (2021). Head Start Program Data [Dataset]. Data received by request.

Adding to the existing challenges in serving these students, pandemic-related school closures further impacted children with special needs. In-person services for children through LEAs were disrupted and required transitions to remote modalities.²⁶³

Children with special health care needs may particularly benefit from high quality teacher-child interactions in classrooms, ^{264,265} as they are more likely to experience more adverse childhood experiences than typically developing children, ²⁶⁶ and are at an increased risk for maltreatment and neglect. ^{267,268}

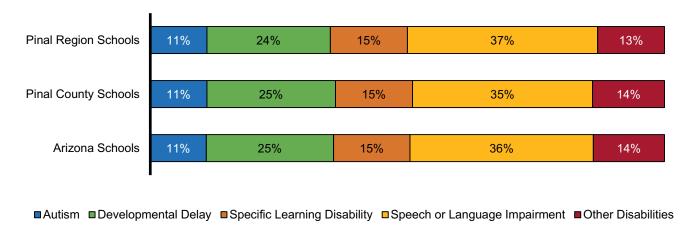
For older children in the region (enrolled in kindergarten through third grade), the number of children enrolled in special education services in public or charter schools increased by about 100 students per year in recent years. As of October 1 in the 2019-20 school year, there were 2,297 kindergarten to 3rd grade students enrolled in special education in public and charter schools in the Pinal Region. This is nearly 5 times the number of children birth to 2 in the region being served by early intervention services (487 served by AzEIP and DDD in 2020). Even accounting for the wider age range served in elementary school, there are relatively more students being served through schools than early intervention programs. It may be that children with delays are being identified and diagnosed when they are older, potentially missing the opportunity for earlier intervention which can be more effective and less costly.

Of those kindergarten through third grade students enrolled in special education in public and charter schools in the Pinal Region, most have a primary disability of a speech or language impairment (37%) or developmental delay (24%) (Figure 58). Less often these children have a primary disability of specific learning disability (15%), other disability (13%) or autism (11%). These proportions are quite similar to

those for children across the state as a whole. Interestingly, while charter schools in the region serve hundreds of students with disabilities (n= 497; 22% of all students in the region being served), their students are much more commonly those with speech or language impairments (55%) (Table 22). They serve relatively fewer students with autism (6%) or developmental delays (18%) than seen region-wide, suggesting that traditional public (i.e., district) schools remain a key resource for families with children with special needs.

School-based services for children with special needs were also significantly impacted, with remote learning creating barriers to fulfilling students' Individualized Education Plans (IEPs) resulting, for some, in a loss of academic, social and physical skills that will require targeted support to address. ²⁶⁹ As schools return to in-person learning, children with special needs may need additional supports to build skills and recover unfinished learning over the past year and a half.

Figure 58. Kindergarten to 3rd grade students enrolled in special education in public and charter schools by primary disability, 2019-20



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

Table 22. Kindergarten to 3rd grade students enrolled in special education in public and charter schools by primary disability, 2019-20

Geography	Number of K-3 students enrolled	Autism	Develop- mental Delay	Specific Learning Disability	Speech or Language Impairment	Other Disabilities
Pinal Region Schools	2,297	11%	24%	15%	37%	3%
Mary C O'Brien Accommodation District	DS	<2%	<2%	27%	55%	18%
Florence Unified School District	284	13%	27%	13%	28%	18%
Ray Unified District	DS	17%	33%	33%	<2%	17%
Mammoth-San Manuel Unified District	31	6%	21%	21%	47%	6%
Superior Unified School District	DS	<2%	<2%	>98%	<2%	<2%
Maricopa Unified School District	268	13%	18%	19%	37%	13%
Coolidge Unified District	43	5%	51%	5%	27%	11%
Apache Junction Unified District	114	6%	34%	11%	31%	18%
Oracle Elementary District	DS	DS	DS	DS	DS	DS
J O Combs Unified School District	169	18%	24%	10%	35%	13%
Casa Grande Elementary District	271	12%	24%	14%	33%	16%
Red Rock Elementary District	23	21%	29%	9%	26%	15%
Eloy Elementary District	30	6%	28%	11%	47%	8%
Toltec School District	60	7%	43%	12%	23%	16%
Stanfield Elementary District	16	15%	30%	10%	40%	5%
Picacho Elementary District	DS	<2%	20%	20%	60%	<2%
Pinal Region Charter Schools	497	6%	18%	17%	49%	9%
Pinal County Schools	2,216	11%	25%	15%	35%	14%
Arizona Schools	39,071	11%	25%	15%	36%	14%

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

Additional data tables related to Early Learning can be found in Appendix 1 of this report.



CHILD HEALTH

CHILD HEALTH

Why it Matters

The physical and mental health of both children and their parents are important for optimal child development and well-being. Early childhood health, and even maternal health before pregnancy, has lasting impacts on an individual's quality of life.^{270,271} Experiences during the prenatal and early childhood period can result in lifelong impacts on immune functioning, brain development and risk for chronic diseases.^{272,273} Early health also has lasting impacts on long-term economic well-being and the well-being of their future children, with poor childhood health potentially perpetuating the harmful cycle of intergenerational poverty.^{274,275} Therefore, adequate access to health insurance, preventive care and treatment services are not only vital to support a child's current health, but for their long-term development and future success.^{276,277,278}

One useful set of metrics for evaluating child health in Arizona are the Healthy People objectives. These science-based objectives define priorities for improving the nation's health and are updated every 10 years. Understanding where Arizona children and mothers fall in relation to these national benchmarks (Healthy People 2020)xxviii,279 can help highlight areas of strength in relation to young children's health and those in need of improvement in the state. The Arizona Department of Health Services monitors state level progress towards a number of Healthy People maternal, infant and child health objectives for which data are available at the county level, including increasing the proportion of pregnant women who receive prenatal care in the first trimester, reducing low birth weight, reducing preterm births and increasing abstinence from cigarette smoking among pregnant women.²⁸⁰

What the Data Tell Us

Access to Care

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

In the Pinal Region, according to American Community Survey (ACS) data averaged over the five years from 2015 to 2019, an estimated 8% of the overall population do not have health insurance coverage,

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

slightly lower than across the state as a whole (10%) (Figure 59). Coverage is slightly higher for young children under 6, with only 7% of young children in the region uninsured, similar to the state (7%), but higher than across the U.S. as a whole (4%). Health insurance coverage does vary by subregion, with the Eloy-Arizona City subregion having the highest percentage amongst the whole population uninsured (10%), but one of the lowest percentages of uninsured young children (3%). These data also suggest widespread health insurance coverage for children in Copper Corridor (0% uninsured). The San Tan Valley-Queen Creek subregion has the highest proportion of uninsured young children in the region (8%), about twice the national rate. Note that the American Community Survey considers persons who are covered by the Indian Health Service (IHS) uninsured.^{287,288}

Federal relief efforts during the pandemic have included expansion of subsidies for health insurance purchased on Affordable Care Act marketplaces as well as special and expanded enrollment periods for insurance through these marketplaces.²⁸⁹ These efforts helped prevent losses of insurance for many Americans despite the enormous number of jobs lost, and may make health insurance more accessible for families in Arizona.²⁹⁰

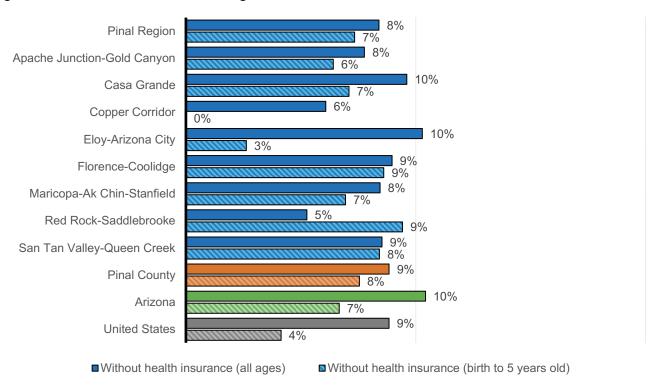


Figure 59. Health insurance coverage, 2015-2019 ACS

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

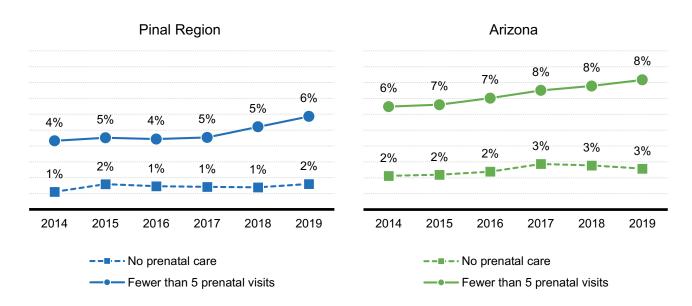
Note: This table excludes persons in the military and persons living in institutions such as college dormitories. People whose only health coverage is the Indian Health Service (IHS) are considered "uninsured" by the U.S. Census Bureau.

Prenatal Care

Consistent and accessible health care during and after pregnancy is critical for supporting pregnant mothers and young children. Prenatal care, starting early in pregnancy and continuing at regular intervals to delivery, can improve health outcomes for mothers and infants and reduces the risk of prenatal smoking, pregnancy complications, prematurity, and maternal and infant mortality. ^{291,292,293,294}

In 2019, there were 4,437 births in the Pinal Region (Table 23). Among these mothers, 70.7% began prenatal care in their first trimester, which is better than the state overall (68.9%), but well below the Healthy People 2020 target of 84.8% (Figure 60). Concerningly, the proportion of women who receive no prenatal care or minimal prenatal care (fewer than 5 visits) has been on the rise in the Pinal Region since 2016. This trend is also happening statewide, pointing to factors beyond the Pinal Region. Given the impacts of inadequate prenatal care on birth outcomes, targeted efforts to engage more women in early and adequate prenatal care could help improve the health of mothers and babies.

Figure 60. Births to mothers with inadequate prenatal care, 2014 to 2019



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

Note: Mothers of twins are counted twice in these figures

Maternal Characteristics

A mother's health status before, during and after pregnancy influences her child's health. Half (50%) of mothers used AHCCCS or Indian Health Service (IHS) coverage to cover their birthing costs (Table 23), making the access to preconception and prenatal care provided through these programs critical to safeguarding the health of young children and their mothers.

Certain maternal characteristics can increase the risk of poor health outcomes for both mothers and their babies. Maternal obesity is associated with increased risk of birth complications and neonatal and infant

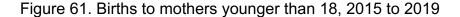
mortality.^{295,296} In addition to health implications early in life, babies of mothers who are obese are at an increased risk for chronic conditions in childhood and adulthood, including asthma, diabetes and heart disease.²⁹⁷ Pregnancy during the teen years is associated with a number of health concerns for children, including neonatal death, sudden infant death syndrome and child abuse and neglect.²⁹⁸ In 2019, 6% of mothers giving birth in the Pinal Region were in their teens, with 2% under age 18 (Table 23). Births to teen mothers (as a proportion of total births) have generally declined in recent years (Figure 61). In terms of specific health risks, 9% of mothers had gestational diabetes, and 35% had pre-pregnancy obesity. The proportions of Pinal mothers with these characteristics and those above closely mirrored the proportions of Arizona mothers overall with these characteristics (Table 23). Quality preconception counseling and early-onset prenatal care can help reduce some of these risks for poor prenatal and postnatal outcomes by providing information, conducting screenings, and supporting an expectant mother's health and nutrition.²⁹⁹

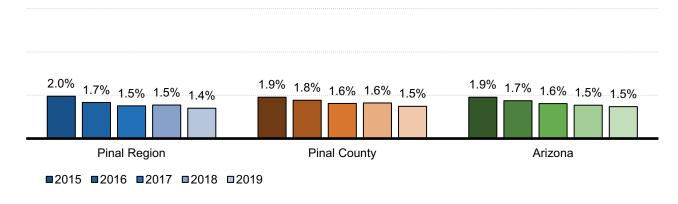
Table 23. Selected characteristics of mothers giving birth, 2018 to 2019

Geography	Calendar year	Number of births	Mother was younger than 18	Mother was younger than 20	Birth was covered by IHS or AHCCCS	Mother had gestational diabetes	Mother had pre- pregnancy obesity	Mother used tobacco during pregnancy	
Pinal Region	2018	4,456	2%	6%	50%	9%	27%	6.0%	
	2019	4,437	1%	6%	48%	9%	35%	6.4%	
Direct Country	2018	4,498	2%	6%	51%	9%	34%	5.8%	
Pinal County	2019	4,497	1%	6%	50%	9%	36%	6.4%	
Avisono	2018	80,539	2%	6%	51%	8%	29%	4.5%	
Arizona	2019	79,183	1%	5%	50%	9%	30%	4.3%	
Healthy People 2020 Target									

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

Note: Mothers of twins are counted twice in the age, payor, and tobacco columns of this table. The Healthy People 2030 target for maternal use of tobacco during pregnancy was increased to no more than 4.3% of females giving birth reporting smoking during pregnancy, or alternatively, 95.7% of females reporting abstaining from smoking during pregnancy.





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

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

The one area in which the region did look different from Arizona overall was in the proportion of mothers who report using tobacco while pregnant. In the Pinal region, 6.4% of mothers admitted to this in 2019, compared to 4.3% statewide (Table 23). Both fall more than twice as high as the Healthy People 2020 goal of no more than 1.4%. The region had been making steady progress in reducing smoking among pregnant women, but the data show a slight uptick again in 2019 (Figure 62). A mother's use of substances, such as drugs and alcohol, has implications for her baby. Babies born to mothers who smoke are more likely to be born early (pre-term), have low birth weight, die from sudden infant death syndrome (SIDS), and have weaker lungs than babies born to mothers who do not smoke. 300,301

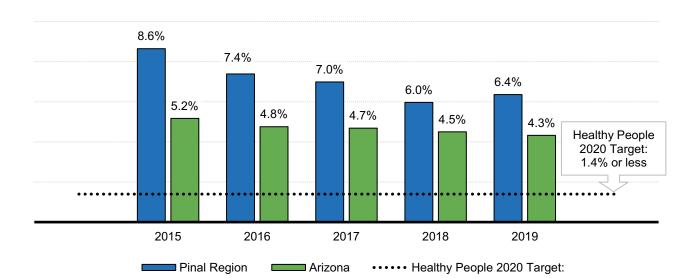


Figure 62. Births to mothers who used tobacco during pregnancy, 2014 to 2019

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

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

Birth Outcomes

Preterm birth, birth at less than 37 weeks of gestation, is associated with higher infant and child mortality and often results in longer hospitalization, increased health care costs and longer-term impacts such as physical and developmental impairments. ^{302,303} Babies born at a low birth weight (less than 5 pounds, 8 ounces) are at increased risk of infant mortality and longer-term health problems such as diabetes, hypertension and cardiac disease. ^{304,305} In the Pinal Region in 2019, 7.2% of babies were born at low birth weight. 9.5% were preterm (Figure 63). This is similar to the state as a whole (7.4% and 9.3% respectively). The Healthy People 2020 set targets of less than 7.8% of babies born at low birth weight, which the region achieved, and less than 9.4% born preterm, which the region did not achieve. There is also little variation across subregions with regard to these birth outcomes.

Newborns are admitted into neonatal intensive care units (NICUs) for numerous reasons that can vary across medical providers and have implications for the short and long-term health of babies and families. NICU stays can take a large emotional and financial toll on families, especially families living far from the hospital. However, although NICU admissions may be an indicator of important health concerns in newborns, including low birth weight, they can also be a site of family-based interventions that can positively impact infant development and parent-child relationships. The Pinal Region saw 8.7% of new babies admitted to the NICU, slightly higher than the proportion statewide (Figure 63)

7.2%
Tow birthweight (<2500g)

7.3%
Town of the second of

■Pinal Region ■Pinal County ■Arizona

Figure 63. Selected birth outcomes, 2019

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

A mother's use of substances such as drugs and alcohol also has implications for her baby. Opiate use during pregnancy, either illegal or prescribed, has been associated with neonatal abstinence syndrome (NAS), a group of conditions that causes infants exposed to these substances in the womb to be born exhibiting withdrawal symptoms.³⁰⁸ This can create longer hospital stays, increase health care costs and increase complications for infants born with NAS. Infants exposed to cannabis (marijuana) in utero often have lower birth weights and are more likely to be placed in neonatal intensive care compared to infants whose mothers had not used the drug during pregnancy.³⁰⁹ In the Pinal Region, there were 664 newborns hospitalized because of maternal drug use during pregnancy between 2016 and 2020, with an average stay of 5.2 days in the hospital (Table 24).

Table 24. Newborns hospitalized because of maternal drug use during pregnancy, Jan 2016-Jun 2020

Geography	Newborns hospitalized	Average length of stay (days)
Pinal Region	664	5.2
Pinal County	797	5.2
Arizona	11,027	6.0

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

Nutrition and Weight Status^{xxix}

After birth, a number of factors have been associated with improved health outcomes for infants and young children. One factor is breastfeeding, which has been shown to reduce the risk of ear, respiratory and gastrointestinal infections, SIDS, overweight, and type 2 diabetes.³¹⁰ The American Academy of Pediatrics recommends exclusive breastfeeding for about 6 months, and as new foods are introduced continuing to breastfeed for 1 year or longer.³¹¹ The percent of WIC-enrolled infants ever breastfed in the Pinal Region had hovered around 72% for several years, and then increased to 74% in 2020 (Figure 64). Given the supply-chain challenges during the pandemic, it is possible that more mothers attempted to breastfeed their babies as they anticipated challenges with purchasing formula or even getting to stores during quarantines.

-

xxix Due to limitations in existing data systems, data on breastfeeding and child weight status are not available at the population level. Such data are available from the WIC program, and they are presented here, but it should be noted that families served by WIC are only one segment of the families in the Pinal Region.

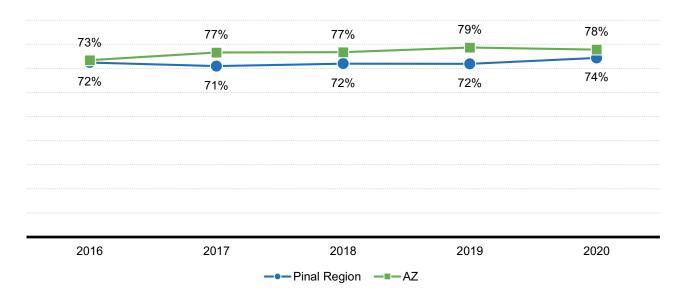


Figure 64. Percent of WIC-enrolled infants ever breastfed, 2016 to 2020

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

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

In 2020, 16% of WIC-enrolled children aged 2-4 in the Pinal Region were classified as obese, and 4% were considered underweight. The obesity rate in this population appears to be on a gradual upward trend in the region (Figure 65). The 2020 data should be considered lightly, however, because far fewer children had known weight status in 2020, likely due to fewer health visits during the pandemic.

-•-Pinal Region ---Arizona

Figure 65. Obesity rates for WIC-enrolled children ages 2-4, 2016 to 2020

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

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

Oral Health

Oral health and good oral hygiene practices are important to children's overall health. Tooth decay and early childhood cavities can have short- and long-term consequences including pain, poor appetite, disturbed sleep, lost school days and reduced ability to learn and concentrate.³¹⁸ A national study showed that low-income children were more likely than higher-income children to have untreated cavities.³¹⁹ Despite high percentages of young Arizona children who have preventative dental care visits (68.4%) compared to the national average (57.8%), there is a relatively high percentage who have had decayed teeth or cavities (11.1%) compared to those across the nation overall (7.7%).³²⁰ Low-income children in Arizona, specifically, are more likely to have untreated cavities and less likely to have had an annual dental visit than their higher-income peers.³²¹ The Pinal Region funds local partners to provide oral health education, screenings and fluoride varnish applications by a trained oral health care professional, and works with local dental providers to increase children's access to preventive dental care. Services are provided to young children at preschools, child care centers, community events and other locations by request. In FY2020, 1,731 children received a screening to detect tooth decay, and 1,070 children had protective fluoride varnishes applied to their teeth.

Immunizations and Infectious Disease

In order to attend licensed child care programs and schools, children must obtain all required vaccinations or obtain an official exemption, which can be requested based on a specific medical

condition or based on personal or religious beliefs.³²² Vaccination against preventable diseases protects children and the surrounding community from illness and potentially death.³²³

Although immunization rates vary by specific vaccine, over 90% of children in child care in the Pinal Region had completed each of the three major (DTAP, polio, and MMR) vaccine series (Figure 66). Regional rates were similar to, but slightly lower than, rates in Arizona overall the state. The Healthy People 2020 target for vaccination coverage for children ages 19-35 months for these vaccines is 90 percent. 324 Given that these rates only reflect those children in child care, where vaccination is required, the proportion of all young children who have completed these vaccine series in the region is likely lower. If that is the case, the rates for the entire population of children in these areas may be lower than the Healthy People 2020 goal.

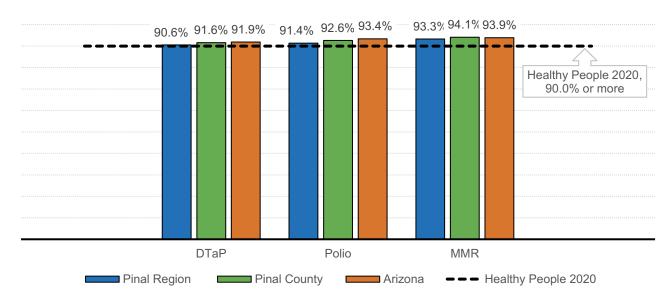
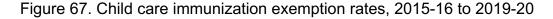
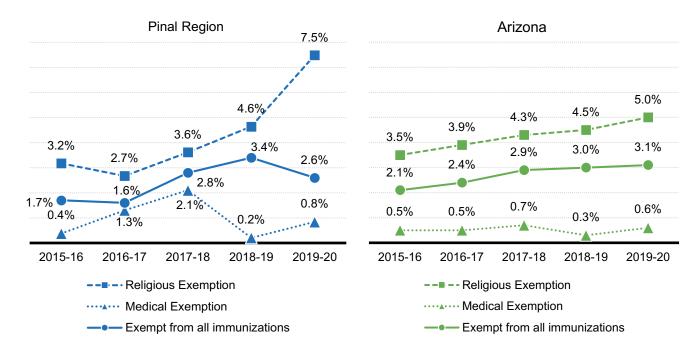


Figure 66. Children in child care with selected required immunizations, 2019-20

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

If medical conditions or religious beliefs stand in the way of a young child receiving a required vaccine, parents are able to file for an exemption. In the Pinal Region, 2.9% of children in child care in 2019-20 were exempted from all vaccines, compared to 3.1% statewide (Figure 67). Interestingly, while the proportion seeking exemptions from all vaccines dropped between 2018-19 (3.7%) and 2019-20 (2.9%) in the region, the proportion seeking religious exemptions jumped dramatically, from 4.6% to 7.5% in the course of a year. Looking by subregion, this jump is especially conspicuous in the Apache Junction-Gold Canyon subregion, where religious exemption rates have climbed from a low of 2.5% in 2015-16 to an astonishing 31.3% in 2019-20 (Table 25).





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

Table 25. Child care immunization exemption rates, 2015-16 to 2019-20

	Children	n in child ca	are with rel	igious exe	mptions	Children in child care exempt from all vaccines				
Geography	2015-16	2016-17	2017-18	2018-19	2019-20	2015-16	2016-17	2017-18	2018-19	2019-20
Pinal Region	3.2%	2.7%	3.6%	4.6%	7.5%	2.1%	1.7%	3.2%	3.7%	2.9%
Apache Junction- Gold Canyon	1.6%	2.5%	9.6%	9.5%	31.3%	1.6%	1.7%	9.9%	8.6%	6.4%
Casa Grande	2.0%	1.6%	1.2%	1.1%	1.4%	1.5%	0.7%	0.9%	0.8%	1.4%
Copper Corridor	0.0%	0.6%	1.7%	1.6%	3.7%	0.0%	0.6%	0.6%	1.6%	2.8%
Eloy-Arizona City	1.1%	1.4%	0.0%	0.0%	0.0%	0.0%	1.4%	0.5%	0.0%	0.0%
Florence- Coolidge	5.2%	2.4%	6.0%	4.3%	1.3%	0.5%	2.4%	5.2%	4.3%	1.3%
Maricopa-Ak- Chin-Stanfield	3.1%	2.7%	3.3%	1.4%	3.9%	2.2%	2.2%	2.6%	1.2%	3.3%
Red Rock- Saddlebrooke	3.1%	7.1%	7.7%	N/A	N/A	3.1%	0.0%	7.7%	N/A	N/A
San Tan Valley- Queen Creek	6.9%	5.3%	3.7%	8.4%	5.9%	7.2%	2.6%	3.2%	5.5%	3.0%
Pinal County	2.2%	2.6%	3.0%	4.2%	6.5%	1.7%	1.6%	2.8%	3.4%	2.6%
Arizona	3.5%	3.9%	4.3%	4.5%	5.0%	2.1%	2.4%	2.9%	3.0%	3.1%

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

To enroll a child in kindergarten, whether in a district, charter, private or parochial school, Arizona law requires that parents provide proof of certain required immunizations. Rates for the three major (DTaP, polio, and MMR) vaccine series for children in kindergarten (91.9%, 92.4%, 92.8%) were similar to those for children in child care (90.9%, 91.8%, 93.5%) in the region (Table 26). None of these rates met the Healthy People target of 95% of kindergarteners. As with child care, parents can request exemptions from the law. Medical exemptions were relatively rare (0.3%), but personal belief exemptions (which replaces religious exemptions available in child care settings) were on file for 5.2% of children (Table 26). Copper Corridor has notably high rates of vaccine compliance (99% for the 3 major series, 1% exemption rate), and the Casa Grande and Red Rock-Saddlebrooke subregions also had vaccination rates above 95% for all three major series. Conversely, San Tan Valley-Queen Creek has the highest rate of personal belief exemption (8.3%), and the lowest rates of vaccination (all below 90%). Interestingly (and unlike the state overall, which has trended towards more exemptions), over time, the personal belief exemption rates in the region overall and many subregions have risen and fallen, not indicating a consistent trend in either direction (Figure 68). However, before the 2019-20 year, there had been a trend of increasing rates of exemptions from *all* school required immunizations in the region (Figure

68), which mirrored statewide trends. These trends are worrisome because in order to assure community immunity of preventable infectious diseases, which helps to protect unvaccinated children and adults, vaccination rates need to remain high. 325 For measles, for example, between 90 and 95% of children need to be vaccinated in order to prevent the disease spreading if one child becomes infected.³²⁶

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

Geography	Number Enrolled	DTaP	Polio	MMR	Personal Belief Exemption	Medical Exemption	Exempt from Every Required Vaccine
Pinal Region	4,165	91.9%	92.4%	92.8%	5.2%	0.3%	3.2%
Apache Junction-Gold Canyon	250	92.4%	94.0%	94.0%	2.8%	0.0%	2.8%
Casa Grande	875	96.2%	96.0%	97.3%	2.6%	0.1%	1.5%
Copper Corridor	96	99.0%	99.0%	99.0%	1.0%	0.0%	1.0%
Eloy-Arizona City	196	91.8%	94.9%	93.4%	2.0%	1.5%	2.0%
Florence-Coolidge	417	91.1%	91.6%	91.6%	7.7%	0.2%	4.8%
Maricopa-Ak-Chin-Stanfield	887	91.8%	91.5%	93.0%	4.3%	0.7%	2.8%
Red Rock-Saddlebrooke	143	97.9%	99.3%	97.2%	2.1%	0.0%	0.0%
San Tan Valley-Queen Creek	1,301	88.0%	88.9%	88.9%	8.3%	0.2%	4.8%
Pinal County	4,241	92.2%	92.9%	93.2%	4.8%	0.3%	3.0%
Arizona	82,358	93.2%	93.8%	93.5%	5.4%	0.3%	3.4%
Healthy People 2020 Targets		95.0%	95.0%	95.0%			

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

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

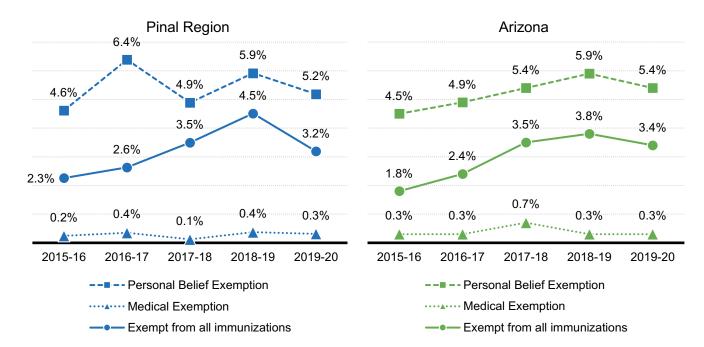


Figure 68. Kindergarten immunization exemption rates, 2015-16 to 2019-20

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

Although the COVID-19 virus has dominated headlines in recent years, there are other widely circulating viruses that commonly infect young children including influenza ("the flu") and Respiratory Syncytial Virus (RSV). Across Arizona, the 2017–18 flu season broke records for reported flu and RSV cases.³²⁷ Identified cases of RSV and flu in 2019-20 appeared to reach nearly those levels again (Table 27). Young children are at an elevated risk for complication from the flu,³²⁸ and while many cases of RSV are mild, for some children the infection becomes a more serious lower respiratory infection, requiring emergency care and/or hospitalization. Note that these case numbers likely represent more severe cases, and that the Centers for Disease Control and Prevention (CDC) notes that by the time they turn 2 years old, most children will have had an RSV infection.³²⁹

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

Geography	Season	Influenza	Respiratory Syncytial Virus (RSV) Infection
Geography	Season	IIIIuenza	(NSV) IIIIection
Pinal County	2017-18	505	391
	2018-19	461	237
	2019-20 (preliminary)	480	379
	2017-18	5,319	4,530
Arizona	2018-19	4,603	3,897
	2019-20 (preliminary)	6,612	5,351

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

Illness, Injury and Mortality

Asthma is the most common chronic illness affecting children,³³⁰ and it is more prevalent among boys, Black children, American Indian or Alaska Native children, and children in low-income households.^{331,332} The total healthcare costs of childhood asthma in the United States are estimated to be between \$1.4 billion and \$6.4 billion, but these costs could be reduced through better management of asthma to prevent hospitalizations.³³³

In the Pinal Region, between 2016 and 2020, there were 1,929 emergency room visits due to asthma for children up to age 14 (Table 28). A smaller set of children presented with cases severe enough to need hospitalization. In the region, 334 children aged birth-14 (both excluding newborns), of which 139 were children aged birth-4, were hospitalized due to asthma during the same 5-year period. The average length of a child's hospital stay was 1.8 days.

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

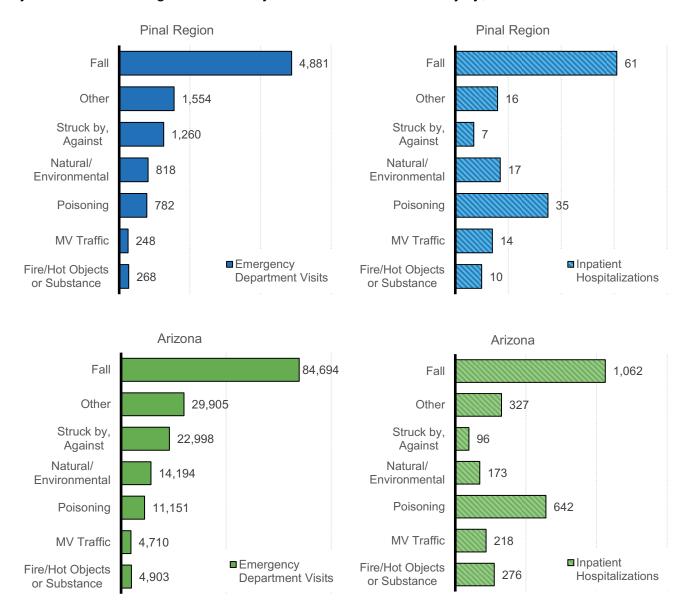
Geography	Number of inpatient asthma hospitalizations for children ages birth to 4 (except newborns)	asthma hospitalizations for children ages birth to	for asthma hospitalization for	department visits for asthma, children ages
Pinal Region	139	334	1.8	1,929
Pinal County	152	355	1.8	2,003
Arizona	2,214	5,672	2.0	41,103

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

Unintentional injuries are the leading cause of death for children in Arizona and nationwide.^{334,335} It is estimated that as many as 90% of unintentional injury-related deaths could be preventable through better safety practices, such as use of proper child restraints (i.e., car seats) in vehicles and supervision of children around water, including pools.³³⁶ Research has shown that children in rural areas are at higher risk of unintentional injuries than those who live in more urban areas, as are children in Native communities, suggesting that injury prevention is an especially salient need in these areas.^{337,338}

Between 2016 and 2020, there were 10,386 non-fatal emergency department visits, and 166 non-fatal inpatient hospitalizations for unintentional injuries in the Pinal Region among children aged birth to 4. The most common reasons for emergency departments visits was falls, accounting for nearly half of emergency department visits (Figure 69). Falls include falls from furniture, playground equipment, and those that occur during sports.³³⁹ Given the large numbers of falls, they were unsurprisingly also the most common cause of hospitalizations. However, other more rare events had higher rates of hospitalizations, suggesting more severe injuries: motor vehicle injuries (6%), poisoning events (4%), and burns (4%). The pattern of unintentional injuries and hospitalizations in the region closely resembles the same pattern seen statewide.

Figure 69. Non-fatal hospitalizations and emergency department visits due to unintentional injuries for children ages birth to 4 by selected mechanism of injury, 2016-2020 combined



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

Note: The falls category includes tripping and slipping on ice and falls from furniture, stairs, ladders, playground equipment, and those that occur while playing sports. The struck by/against category includes collisions from activities such as walking, skateboarding, sledding, swimming or being hit by objects while playing sports.

Infant mortality describes the number of deaths of children under 1 year of age relative to live births. Arizona ranks in the middle of U.S. states in terms of infant mortality, with the 20th lowest infant mortality rate nationwide in 2019.³⁴⁰ The most common causes of infant mortality in Arizona and the U.S. are congenital abnormalities, low birthweight and preterm birth, with a smaller proportion related

to maternal pregnancy complications, sudden infant death syndrome (SIDS) and unintentional injuries.^{341,342}

In the Pinal Region, 20 infants died in 2018 and 28 in 2019 (data on the cause of these deaths was not available) (Table 29). Given the number of births each year, this put the infant mortality rate at 7.2 and 6.3, respectively. These rates are both higher than those seen statewide and above the Healthy People 2020 target infant mortality rate of no more than 6.0 (Figure 70). Ensuring access to adequate and timely prenatal care and newborn screening are measures that could help the region reduce rates of infant mortality.³⁴³ The young child mortality rate in the region is also above that seen statewide (Table 29).

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

Geography	Calendar year	Number of infant deaths	Infant mortality rate (per 1,000 live births)	Number of young child deaths (ages 0-4)	Young child mortality rate (per 100,000 population)	All child deaths (0-17 years old)	All child mortality rate (per 100,000 population)
Dinal Danian	2018	32	7.2	36	N/A	49	N/A
Pinal Region	2019	28	6.3	33	N/A	45	N/A
Dinal County	2018	31	6.9	35	136.6	48	62.0
Pinal County	2019	29	6.4	35	136.2	47	60.3
Avinona	2018	447	5.6	562	127.4	824	65.2
Arizona	2019	430	5.4	513	117.4	777	61.6
Healthy People 2020 Target			6.0				

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

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

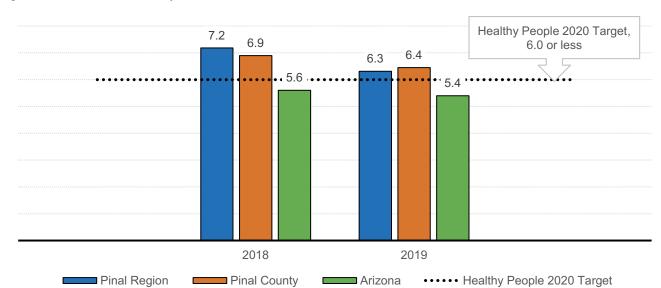


Figure 70. Infant mortality rates, 2018 to 2019

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

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



FAMILY SUPPORT AND LITERACY

FAMILY SUPPORT AND LITERACY

Why it Matters

Responsive relationships and language-rich experiences for young children help build a strong foundation for later success in school and in life. Families and caregivers play a critical role as their child's first and most important teacher. Positive and responsive early relationships and interactions support optimal brain development, academic skills and literacy during a child's earliest years and lead to better social, physical, academic and economic outcomes later in life. 344,345,346,347,348 Early literacy promotion, through singing, telling stories and reading together, is so central to a child's development that the American Academy of Pediatrics has emphasized it as a key issue in primary pediatric care, aiming to make parents more aware of their important role in literacy.³⁴⁹ Children benefit when their families have the knowledge, resources and support to use positive parenting practices that support their child's healthy development, nutrition, early learning and language acquisition. Specifically, parental knowledge of positive parenting practices and child development is one of five key protective factors that improve child outcomes and reduce the incidence of child abuse and neglect.xxx,350

Unfortunately, not all children are able to begin their lives in positive, stable, nurturing environments. Adverse childhood experiences (ACEs)xxxi have been associated with developmental disruption, mental illness, drug and alcohol use and overall increased healthcare utilization.^{351,}352 Arizona is among the top ten states with the highest proportion of children birth to 5 who have experienced at least one ACE, with nearly one in three (31.8%) young children in Arizona having one or more ACEs. 353 Future poor health outcomes are more likely as an individual's ACE score increases.³⁵⁴ Children in Arizona are nearly twice as likely to have experienced two or more ACEs (15.5%) compared to children across the country (8.6%). 355 Very young children are most at risk for extremely adverse experiences, such as child abuse, neglect and fatalities from abuse and neglect. In 2019, children ages birth to five made up more than half (55%) of child maltreatment victims in Arizona. These children and their families may require specific, targeted resources and interventions in order to reduce harm and prevent future risk.³⁵⁷

Alternatively, Positive Childhood Experiences (PCEs), including positive parent-child relationships and feelings of safety and support, have been shown to have similarly cumulative, though positive, longterm impacts on mental and relational health.³⁵⁸ Strategies for preventing ACEs include: strengthening economic supports for families; promoting social norms that protect against violence and adversity; ensuring a strong start for children; enhancing skills to help parents and children handle stress, manage

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

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

emotions, and tackle everyday challenges; connecting youth to caring adults and activities; and intervening to lessen immediate and long-term harms.³⁵⁹

What the Data Tell Us

Parent Education & Early Literacy

Families in the Pinal Region are offered a variety of parenting and caregiver education programs. The Apache Junction Public Library runs a program that is active across the Pinal Region called Fun Van. Fun Van is a free, 11-week parenting education program for parents and caregivers of children birth to 5 that uses the Raising a Reader and Early Childhood STEP (Systematic Training for Effective Parenting) materials. University of Arizona Cooperative Extension offers the 16-session Strengthening Families Program for families with children ages 3 to 5. Parent education classes such as these can help parents build their skills and confidence, provide social support, connect families with other resources and help young children build early literacy skills.

Home visiting programs are another way of bringing trained parent educators into homes, providing one-on-one coaching, guidance, and resources to parents of young children. Such programs, which include federally funded Early Head Start, as well as other evidence-based programs such as Healthy Families and Parents as Teachers, aim to bolster the skills and confidence of parents. Through parent education, and working with parents and their children in tandem, home visitation programs aim to support healthy child development and increase school readiness, including strengthening early literacy skills. Home-based literacy practices between parents and caregivers and young children, specifically, have been shown to improve children's reading and comprehension, as well as children's motivation to learn. These regular visits are also a chance for trained providers to potentially identify health and developmental concerns. Home visitation has been a major funding priority for the Pinal Region in recent years; the goal for SFY2022 is to serve 485 families. The serve of the providers of the pinal Region in recent years; the goal for SFY2022 is to serve 485 families.

Mental Health

The foundation for sound mental health is built early in life, as early experiences shape the architecture of the developing brain. Sound mental health provides an essential foundation of stability that supports all other aspects of human development—from the formation of friendships and the ability to cope with adversity to the achievement of success in school, work, and community life.³⁶³ When young children experience stress and trauma they often suffer physical, psychological and behavioral consequences and have limited responses available to react to those experiences. Mental health supports, both for children and caregivers, are often needed to address exposure to adverse childhood experiences. Understanding the mental health of mothers is also important for the well-being of Arizona's young children. Mothers dealing with mental health issues, such as depression, may struggle to perform daily caregiving activities, form positive bonds with their children, or maintain relationships that serve as family supports.³⁶⁴ Improving supports available through coordinated, collaborative efforts are key to early identification and intervention with young children and their families.^{365,366}

The COVID-19 pandemic has caused heightened stress, anxiety and depression in both children and caregivers.³⁶⁷ While the average stress level for U.S. adults as a whole was significantly higher than prepandemic, according to the Stress in AmericaTM survey, conducted annually by the American Psychological Association, a notably larger proportion of adults with children reported high levels of stress during the pandemic compared to adults without children (46% and 28%, respectively).³⁶⁸ Data from the U.S. Census Bureau's Household Pulse Survey shows that early in the pandemic (April 23-May 5, 2020) the proportion of U.S. adults with symptoms of anxiety disorder nearly tripled compared to pre-pandemic (30.8% and 8.1%, respectively), and a similar trend was seen for adults with symptoms of depressive disorder (25.3% and 6.5%, respectively). 369 While a larger proportion of Arizona adults reported symptoms of anxiety disorder (32.3%) compared to the U.S. overall (30.8%) early in the pandemic, a smaller proportion reported symptoms of depressive disorder (22.4% compared to 25.3%). Though data from spring 2021 show declines in Arizona adults with anxiety disorder symptoms (25.8%) and depression disorder symptoms (20.4%) over the course of the pandemic, these proportions are still notably higher than those seen pre-pandemic.

The stress and uncertainty of the pandemic led to an increase in overall conflict, spousal conflict and parent-child conflict during the pandemic. Low-income households and households with children with special needs, in particular, reported higher levels of children's emotional difficulties alongside greater anxiety, depression, loneliness and stress among caregivers. ^{370,371,372} Parents' and caregivers' inability to access early intervention services and well-child visits has not only impacted young children's healthy development, but also limited access to the critical emotional and mental health support caregivers and children receive from medical and social services professionals.³⁷³ Access to family support services will be all the more critical for young children and their families as the pandemic continues.

Substance Use Disorders

A mother's use of substances such as drugs and alcohol has implications for her baby. Babies born to mothers who smoke are more likely to be born early (preterm), have low birth weight, die from sudden infant death syndrome (SIDS) and have weaker lungs than babies born to mothers who do not smoke. 374,375 Opiate use during pregnancy, either illegal or prescribed, has been associated with neonatal abstinence syndrome (NAS), a group of conditions that causes infants exposed to these substances in the womb to be born exhibiting withdrawal symptoms.³⁷⁶ This can create longer hospital stays, increase health care costs and increase complications for infants born with NAS. Infants whose mothers use cannabis (marijuana) while pregnant often have lower birth weights and are more likely to be placed in neonatal intensive care compared to infants whose mothers had not used cannabis during pregnancy.³⁷⁷ As noted previously (Table 24), between 2016 and 2020, there were 664 newborns in the Pinal Region hospitalized because of maternal drug use during pregnancy.

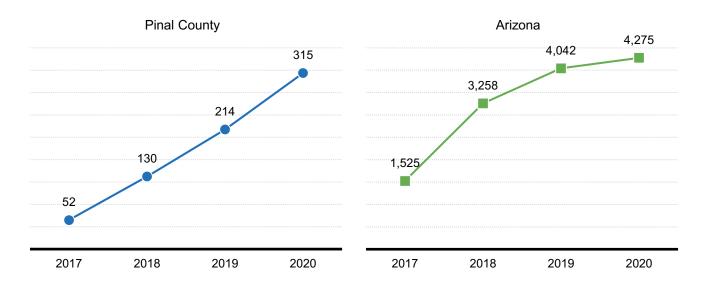
Parental substance abuse also has other impacts on family wellbeing. According to the National Survey of Children's Health, young children in Arizona are more than twice as likely to live with someone with a problem with alcohol or drugs than children in the US as a whole (9.8% compared to 4.5%).³⁷⁸ Children of parents with substance use disorders are more likely to be neglected or abused and face a higher risk of later mental health and behavioral health issues, including developing substance use

disorders themselves.^{379,380} Substance abuse treatment and supports for parents and families grappling with these issues can help to ameliorate the short and long-term impacts on young children.³⁸¹

Along with an increase in stress and mental health concerns among adults in the U.S., data from the Census Bureau's Household Pulse Survey show that more than one in 10 adults (12%) reported increases in alcohol consumption or substance use during the pandemic.³⁸² Drug overdose deaths in the early months of the pandemic, when many states instituted stay at home or lockdown orders, were notably higher than pre-pandemic levels, particularly for synthetic opioids.³⁸³ While drug overdose deaths increased across all racial and ethnic groups during the pandemic, American Indian and Alaska Native, Black and Hispanic individuals showed greater increases compared to White individuals.³⁸⁴ This rise in substance use issues coincides with a time when people of color have disproportionately dealt with negative effects of the pandemic, including stress, job loss, illness, and death.

In Pinal County, the number of non-fatal overdoses involving opioids or opiates increased six-fold between 2017 and 2020, rising to a high of 315 overdoses in 2020. These rising numbers may reflect both a rise in opioid use, but also a rise in the prevention of opioid-related deaths, thanks to a 2017 public health initiative. In November 2017, The Director of Arizona Department of Health Services (ADHS) issued a standing order allowing any Arizona-licensed pharmacist in any pharmacy to dispense naloxone (which goes by the brand name Narcan) to anyone.³⁸⁵ Naloxone is a life-saving medication that counters the effects of an opioid overdose. During the same time period, 2017-2020, there were at least 129 deaths with opioids or opiates as a contributing factor in the region, likely more (35% of overdose deaths were missing address information).

Figure 71. Number of non-fatal overdoses with opioids or opiates contributing to the overdose, 2017 to 2020



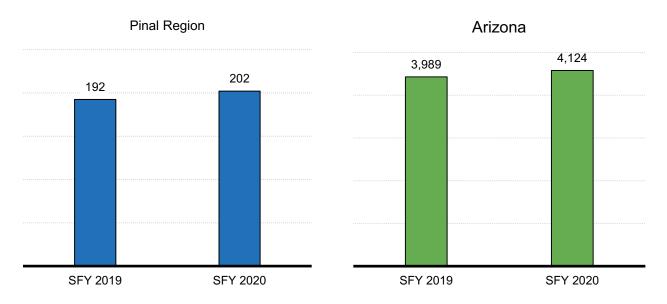
Source: Arizona Department of Health Services (2021). [Hospital Discharge dataset]. Unpublished data.

Child Removals and Foster Care

In situations where the harm in remaining with their family is determined to be too great to a child, they may be removed from their home, either temporarily or permanently. The Arizona Department of Child Safety (DCS) oversees this process. Children involved in foster care systems often have physical and behavioral health issues, in addition to the social-emotional needs brought on by being removed from a parent's care.386

In the Pinal Region, DCS has removed about 200 children a year from their homes in recent years (192 in 2019, 202 in 2020) (Figure 72). The slight increase in removals across the region in those years paralleled a slight increase seen statewide as well.

Figure 72. Number of children ages birth to 5 removed by DCS, state fiscal years 2019 to 2020

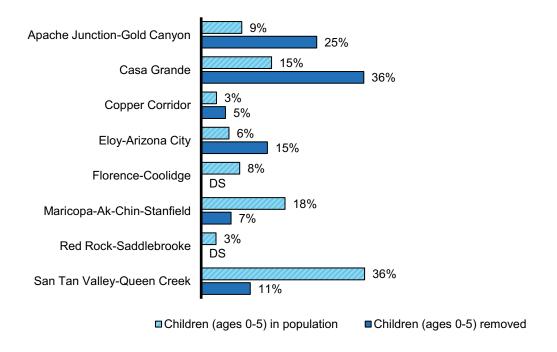


Source: Arizona Department of Child Safety (2021). [Child removal dataset]. Unpublished data.

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

The proportion of removals by subregion differs from the share of young children in each. More than twice as many removals as would be expected (based on the relative population size of young children) happened in Apache Junction-Gold Canyon, Casa Grande, and Eloy-Arizona City (Figure 73). While some of this could possibly be attributed to uncaptured growth in the overall population of young children in certain subregions, it could also highlight communities that may benefit from additional supports to families, foster care providers – including kinship caregivers, and children experiencing trauma. Figure 74 illustrates the number of children removed in 2019 and 2020 by zip code.

Figure 73. Share of children ages birth to 5 removed by DCS in the Pinal Region by subregion compared to the population ages birth to 5, state fiscal years 2019-2020 combined



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

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

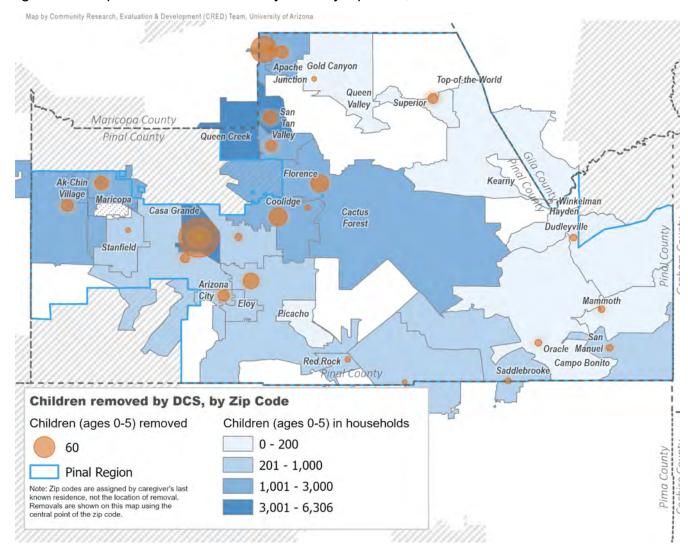


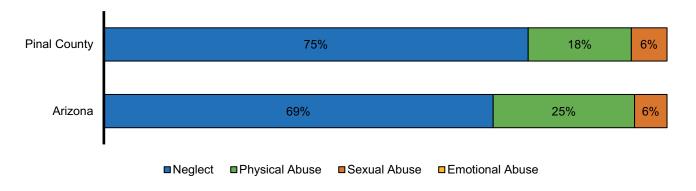
Figure 74. Map of children removed by DCS by zip code, 2019-2020 combined

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

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

The Arizona Department of Child Safety (DCS) produces a semi-annual report on child welfare services which includes types of maltreatment experienced by children involved with DCS. Of 142 substantiated maltreatment reports for children aged birth to 17 between June and December 2020, most (75%) in Pinal County were due to neglect (Figure 75). This proportion was higher than across the state (69%). The county had smaller proportion of substantiated reports due to physical abuse (18%) compared to the state (25%), and the same proportion of sexual abuse cases (6%) during that time period.

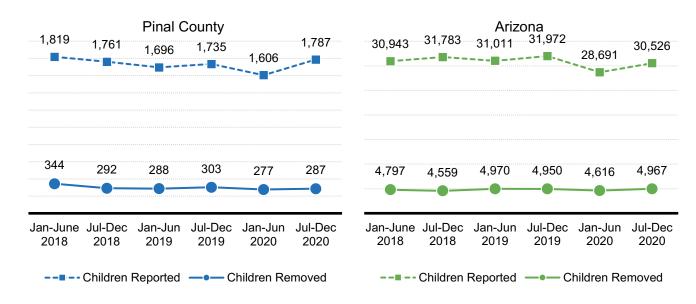
Figure 75. Substantiated maltreatment reports by type for children ages birth to 17, June-Dec 2020



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

In recent years, Pinal County has averaged about 1,700 reports of child abuse and neglect in per 6 month period (Figure 76). On average, about 300 reports are substantiated and result in child removal in that same window of time. Both Pinal County and Arizona as whole saw the lowest number of reported cases in recent years in the first half of 2020, followed by an increase in the second half of 2020.

Figure 76. Children ages birth to 17 reported to and removed by DCS, Jan 2018 to Dec 2020



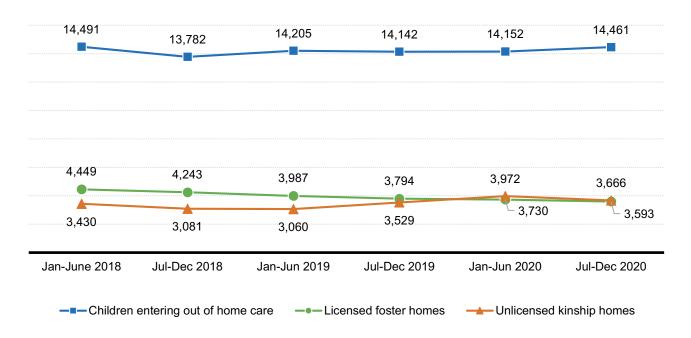
Source: Department of Child Safety (2021). Semiannual child welfare reports, Sept 2018 to March 2021. Retrieved from https://dcs.az.gov/reports

Statewide, there is a large gap between the number of children needing placements and the number of licensed foster homes and unlicensed kinship homes available (Figure 77). Key informants acknowledged that this is a problem in the Pinal Region as well. Statewide, the number of licensed foster homes has been steadily declining since 2018, whereas the number of unlicensed kinship homes appeared to have been on an increasing trend since 2019, until the pandemic. The Family First Prevention Services Act, signed into law on February 9, 2018, includes reform to child welfare policies, as well as federal investments, to keep children safely with their families and avoid the traumatic experience of entering foster care when possible.³⁸⁷ Research shows that children in kinship care placements have better wellbeing, fewer mental health disorders, fewer behavioral problems and less placement disruption than children in non-relative foster care.³⁸⁸ Kinship families may however need additional supports navigating the child welfare system and accessing resources as they support children who may have experienced trauma.³⁸⁹ Such families may benefit from nearly \$15 million in CARES Act funding for the state of Arizona for child welfare agencies, 390 issued as part of the federal response to the pandemic.

Key informants noted many reasons that families in the Pinal Region may avoid pursuing formal licensure, including: homes that wouldn't meet guidelines or would need extensive renovation in order to meet guidelines, cultural norms, a feeling that formalizing their caregiving would infringe on cultural practices, concerns about immigration documentation, and simply being overwhelmed by sudden responsibility of being a caregiver for a new child or children.

Key informants also discussed how the presence of prisons, jails, and detention facilities in the Pinal Region can impact family well-being. There is a perception that families with incarcerated loved ones are moving to be nearer to those family members, meaning that the region may have a particular need for programs that support children of incarcerated parents.

Figure 77. Children ages birth to 17 entering out-of-home care compared to the number of licensed foster homes and unlicensed kinship homes in Arizona, Jan 2018-Dec 2020



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

Additional data tables related to Family Support and Literacy can be found in Appendix 1 of this report.

SUMMARY AND CONCLUSIONS

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

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

Population Characteristics

- Some portions of the region (including areas such as San Tan Valley, Queen Creek, and Maricopa) are especially popular with young families in Arizona. While Census 2020 data is not yet available for small geographies at the time of this report, key informants expected it will show substantial growth in these areas since 2010.
- Communities have a strong sense of pride and local identity.
- Communities are ethnically, racially, and culturally diverse.
- At least 15% of residents speak multiple languages proficiently.

Economic Circumstances

- Relatively fewer young children (19%) in the Pinal Region live in poverty compared to Arizona overall (23%).
- The Summer Food Service Program in Pinal County was leveraged to support students during the pandemic, hopefully reducing food insecurity during a difficult time. In school year 2019-20, nearly 1.3 million meals were served across the county.
- Until the pandemic, the unemployment rate in Pinal County had been steadily declining over the last decade, suggesting post-Great Recession economic recovery. While the pandemic was a tremendous shock to the labor market, Pinal seems to be recovering slightly more rapidly than the state as whole.

Educational Indicators

- Charter schools are popular in the region, with about 35% of K-3 students attending a charter school. While popular with families, it should be noted that charter schools are not required to provide transportation or participate in the National School Lunch Program, which could make them less accessible for families experiencing economic hardship. They are also far less likely to serve students with special needs, such as autism, meaning that district schools remain an essential resource for serving vulnerable children.
- Passing rates for AzMERIT 3rd Grade English Language Arts have been consistently rising.

• Graduation rates have climbed, and dropout rates have declined in recent years.

Early Learning

- The Friend Family Neighbor (FFN) Caregiver Outreach Assistance Project, run by United Way of Pinal County, has grown tremendously in the past several years, reaching more than four times as many families in 2020-21 than in 2017-18. These kith and kin caregivers play an important role in caring for young children in the region, given the relatively small number of registered child care providers.
- To help communities during the pandemic, the Arizona Enrichment Center program provided funding to licensed child care facilities in order to serve the children of essential workers during the pandemic in 2020. In the Pinal Region, 15 providers became Arizona Enrichment Centers, serving 113 children through the program.
- Child care centers tend to be less costly in Pinal than elsewhere (e.g., \$700 per month for infant care vs. \$861/month in Arizona).
- A strong network of Head Start and Migrant Head Start providers support both typically developing students and students with special needs.

Child Health

- Births to teen mothers (as a proportion of total births) have generally declined in recent years.
- Public health efforts, funded by the Regional Partnership Council, to increase children's access to preventive dental care meant that in FY2020, 1,731 children received a screening to detect tooth decay, and 1,070 children had protective fluoride varnishes applied to their teeth. These services are provided to young children at preschools, child care centers, community events and other locations by request.
- The vast majority of children in child care and kindergarten in the Pinal Region are up-to-date on the three major (DTAP, polio, and MMR) vaccine series for children.

Family Support and Literacy

• Home visiting programs, including those funded by the Regional Partnership Council, support healthy child development and increase school readiness, including strengthening early literacy skills, for hundreds of young children and their families across the region.

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

The need for affordable, high quality and accessible child care – There are challenges with both the availability and affordability of child care in the region. Comparing the number of children birth to 5 to the number of available child care slots in the region overall, there are 4.4 times as many children as slots. This means that the region meets the definition of a child care desert, defined as an area where there are at least three times as many children as there are child care slots. The shortage of accessible, affordable early care and education programs may mean that fewer children reap the benefits of attending a high quality preschool, and the shortage may also be a barrier to employment for families who need affordable child care in order to work. Those who work in the child care industry describe substantial challenges with staffing.

Additionally, based on a median family income of \$66,500, families in Pinal County pay about 10-12% of their income for child care, depending on the child's age. Although this is slightly more affordable relative to other families statewide (11-15% of income a median \$70,200 income), it still puts child care as a substantial cost for families, especially for families with multiple young children needing care. The United States Department of Health and Human Services recommends that parents spend no more than 10% of their family income on child care to avoid being overburdened. Key informants noted that such cost burdens meant that many families may choose to stay out of the work force, caring for their children directly rather than paying a large portion of their income for child care. While this may make sense for a family's budget in the short term, it has long term repercussions in terms of earnings that contribute to future social security payments, for example.

The need for additional supports for the youngest children with special needs – Only 2.8% of children aged birth to 2 years in the Pinal Region are participating in services from the Arizona Early Intervention Program (AzEIP) or the Division of Developmental Disabilities, whereas research suggests about 13% of young children would typically qualify for early intervention services. The Developmental and Sensory Screening program funded by the Pinal Regional Partnership Council has screened fewer and fewer children in recent years, but over half of those screened point to some degree of developmental concern. Meanwhile, the number of young children referred to and served by AzEIP has risen consistently by about 100 children per year in recent years. Even in 2020, while statewide numbers declined, likely a result of constraints of the COVID-19 pandemic, Pinal's rose to a recent high of 1,110 referrals. These increasing numbers may speak to both a rising need and/or a growing capacity to recognize and refer children with developmental delays to AzEIP, bolstered by screening programs in the Pinal Region.

Furthermore, key informants report a shortage of occupational therapists and speech therapists in the region, meaning that there may be issues in having local capacity to meet rising demand for services.

For older children in the region (enrolled in kindergarten through third grade), the number of children enrolled in special education services in public or charter schools increased by about 100 students per year in recent years. As of October 1 in the 2019-20 school year, there were 2,297 kindergarten to 3rd grade students enrolled in special education in public and charter schools in the Pinal Region. This is nearly 5 times the number of children birth to 2 in the region being served by early intervention services (487 served by AzEIP and DDD in 2020). Even accounting for the wider age range served in elementary school, there are relatively more students being served through schools than early intervention programs. It may be that children with delays are being identified and diagnosed when they are older, potentially missing the opportunity for earlier intervention which can be more effective and less costly.

The availability of early learning opportunities and services for young children with special needs is an ongoing concern across the state, particularly in the more geographically remote communities and some tribal communities. Adding to the existing challenges in serving these students, pandemic-related school closures further impacted children with special needs. Inperson services for children through LEAs were disrupted and required transitions to remote modalities. Young children with special needs may need additional supports to compensate for the challenges faced during the pandemic.

• A continued need for services for grandparents raising grandchildren and other kinship caregivers – An estimated 4,657 grandparents in the Pinal Region are responsible for raising one or more grandchildren (up to age 17) who live with them. A third of these grandparents (33%) do not have the child's parent(s) living in the household. Six of 8 subregions have a higher proportion of young children living in multigenerational families than the state (13%) or nation (11%). The Copper Corridor subregion has the highest percentage of children aged birth to 5 living in a grandparent's household (25%), followed by the Eloy-Arizona City (21%), Florence-Coolidge (19%), Casa Grande (17%), Apache Junction-Gold Canyon (15%), and San Tan Valley-Queen Creek (14%) subregions. Key informants thought that in the Copper Corridor especially, this may represent grandparents caring for teenage parents' children.

The Friend Family Neighbor Caregiver Outreach Assistance Program by United Way of Pinal County, a funded strategy of the Regional Partnership Council, is helping to support kinship caregivers (primarily those in a child care role rather than guardianship role) and has grown tremendously in recent years, highlighting the demand. The program's reach is strongest in Casa Grande and Maricopa-Ak Chin-Stanfield subregions.

Kinship caregiving can also refer to family members who have stepped in to care for a child around-the-clock, in the event of parents being unavailable or unable. While such families could pursue becoming official foster families in many cases, which would make more resources available to them, informal arrangements are common. Key informants noted many reasons that families in the Pinal Region may avoid pursuing formal licensure, including: homes that wouldn't meet guidelines or would need extensive renovation in order to meet guidelines, cultural norms, a feeling that formalizing their caregiving would infringe on cultural practices,

concerns about immigration documentation and simply being overwhelmed by sudden responsibility of being a caregiver for a new child or children.

Grandparent-headed families in all parts of the region are likely to have unique needs related to raising young children in all parts of the region. Additional services for kinship caregivers in the region could help support these families.

Additional regional challenges highlighted in this report include:

Population Characteristics

• Although bilingualism is an asset in the region, some communities have a sizeable proportion of residents who do not speak English "very well" and/or students who are English language learners. The challenges of this include ensuring that such residents can still readily access the supports and resources available in the Pinal Region, including interactive programming such as early intervention services and parent education through home visiting programs.

Economic Characteristics

- Poverty is a problem. Nearly 1 in 5 (19%) young children ages birth to 5 live in poverty in the Pinal Region, a rate that rises to nearly 50% in the Eloy-Arizona City subregion. Furthermore, over a third of young children (age birth to 5) in the Eloy-Arizona City subregion live under 50% of the federal poverty threshold, meaning they live in homes with extremely limited economic resources.
- Food security issues were likely exacerbated by the pandemic. The Pandemic Electronic Benefit Transfer Program (P-EBT) was established to offset the loss of meals normally received for free at schools or child care settings. Eligible families included those participating in SNAP with a child under age 6 and those with a child who received free or reduced-price school lunch. In 2020, over 7,500 children under the age of 6 were participating in SNAP in the region. However, in March 2021, only 1,950 children under age 6 received P-EBT, and this number shrank in the following months, suggesting that many eligible children did not access this benefit to help ensure access to adequate food during the pandemic. The high proportions of students eligible for free and reduced-price lunches in districts across the region also raises concerns about additional hardships for these children during school closures. While many districts aimed to provide meals even while running classes remotely, families faced more logistical hurdles to acquiring those meals.
- In 2020, the region lost 7 straight years of progress as unemployment spiked as a result of the COVID-19 pandemic. The number of unemployment claims jumped substantially, from a prepandemic low of 420 in February 2020, to a high of 8,443 in April 2020. Notably, even as claims surged during the pandemic, there is a consistent and wide gap between the number of claims filed and the number of claims found eligible and paid. This suggests there may be widespread

- economic challenges in families with lost incomes who requested but did not receive unemployment benefits.
- Single-female headed households in Pinal County have a median income of \$31,518, far below the median income for married families with children in the county (\$81,054). About 31% of young children in the region live in single-parent households, most of which are single moms.
- Prior to the pandemic, 43% of renter-occupied households were housing-cost burdened (i.e., spending more than 30% of their income on housing) a percentage that likely increased during the pandemic with job losses and shifts in the housing market.

Educational Indicators

- Despite improvements, the region still consistently lags behind the state in terms of AzMERIT passing rates in both 3rd Grade English Language Arts and Math. Five districts had under 20% of 3rd grade students pass the ELA assessment, and 4 districts had under 20% of 3rd students pass the math assessment
- Several subregions have relatively large (compared to the region, state, and nation) populations of adults who have not completed a high school degree. About 1 in every 6 adults in the Eloy-Arizona City, Florence-Coolidge, Copper Corridor, and Casa Grande subregions lacks a high school diploma or equivalent.
- In both K-12 settings and early care and education programs, there are substantial reported challenges with finding, hiring, and retaining well-qualified staff to operate programs and schools.

Early Learning

- Only about 34% of 3- and 4-year-old children in the Pinal Region are enrolled in some type of school, such as nursery school, preschool or kindergarten. This is lower than Arizona overall (39%) or the nation, where nearly half of children (48%) are in preschool. Preschool enrollment is estimated to be particularly low in the Eloy-Arizona City subregion (11%). High quality early learning experiences can set a child up for success in kindergarten and beyond, and many children in the Pinal Region appear to be missing out on this opportunity.
- There are no early care and education providers in the Red Rock-Saddlebrooke subregion.
- In all other subregions, the available providers, especially those that have attained a quality rating from the Quality First program, have far fewer spots than there are young children. In the Pinal Region, the 25 3-star or higher rated programs served just over 1,000 children (1,019), a small fraction of the over 27,000 young children estimated to live in the region.
- The number of developmental screenings conducted has declined in recent years, which could mean missed opportunities for early identification and intervention for children with developmental delays or other special needs.

Child Health

- Compared to children across the U.S., young children in the Pinal Region are less likely to have health insurance. A lack of insurance may make parents hesitant to seek care, either during illness or for standard pediatric well-child visits, which are important checkpoints for child development.
- Concerningly, the proportion of women who receive no prenatal care or minimal prenatal care (fewer than 5 visits) has been on the rise in the Pinal Region since 2016.
- Tobacco use among expectant mothers is relatively high in the region. In the Pinal Region, 6.4% of babies born in 2019 had mothers who reported smoking while pregnant, compared to 4.3% statewide. Both the region and state are more than twice as high as the Healthy People 2020 goal of no more than 1.4%. Although the region had been making steady progress in reducing smoking among pregnant women, the data show a slight uptick again in 2019 (the most recent year of data available).
- More families are seeking exemptions from routine childhood vaccinations. While the proportion seeking exemptions from all vaccines dropped between 2018-19 and 2019-20, the proportion seeking religious exemptions jumped dramatically, from 4.6% to 7.1%. Looking by subregion, this jump is especially conspicuous in the Apache Junction-Gold Canyon subregion, where religious exemption rates have climbed from a low of 2.5% in 2015-16 to an astonishing 22.5% in 2019-20. These trends are worrisome because in order to assure community immunity of preventable infectious diseases, which helps to protect unvaccinated children and adults, vaccination rates need to remain high.
- In the Pinal Region, 20 infants died in 2018 and 28 in 2019. Given the number of births each year, this put the infant mortality rate at 7.2 and 6.3, respectively. These rates are both higher than those seen statewide and above the Healthy People 2020 target infant mortality rate of no more than 6.0. The young child mortality rate in the region is also above that seen statewide.

Family Support and Literacy

- In Pinal County, the number of non-fatal overdoses involving opioids or opiates increased sixfold between 2017 and 2020.
- The number of reports of child abuse and neglect that are substantiated and result in child removal had been on small but steady increase before the pandemic.

These needs are complex issues that have root causes that no single organization can tackle alone. Successfully addressing the needs outlined in this report will require the continued concentrated effort of collaboration among First Things First and other state agencies, the Pinal Regional Partnership Council and staff, local providers, and other community stakeholders in the region. Families are drawn to the Pinal Region both for the close-knit, supportive nature of many of its communities and for the increasing number of opportunities available to its residents. Continued collaborative efforts have the long-term potential to make these opportunities available to more families across the Pinal Region.

APPENDIX 1: ADDITIONAL DATA TABLES

Population Characteristics

Table 30. Number of babies born, 2015 to 2019

Goography	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019
Geography Pinal Region	4,512	4,453	4,443	4,366	4,456	4,437
Pinal County	4,490	4,454	4,471	4,384	4,498	4,497
Arizona	86,648	85,024	84,404	81,664	80,539	79,183

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

Table 31. Race and ethnicity for the mothers of babies born in 2018 and 2019

Geography	Calendar year	Number of births	Mother was non-Hispanic White	Mother was Hispanic or Latina	Mother was Black or African- American	Mother was American Indian or Alaska Native	Mother was Asian or Pacific Islander
	2018	4,456	50%	38%	5%	6%	2%
Pinal Region	2019	4,437	52%	37%	5%	4%	2%
D: 10 1	2018	4,498	49%	37%	5%	7%	2%
Pinal County	2019	4,497	50%	36%	5%	7%	2%
Arizono	2018	80,539	43%	41%	6%	6%	4%
Arizona	2019	79,183	43%	41%	6%	6%	4%

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

Note: The five percentages in each row should sum to 100%, but may not because of rounding. Mothers who report more than one race or ethnicity are assigned to the one which is smaller. Mothers of twins are counted twice in this table.

Table 32. Children ages birth to 5 living with parents who are foreign-born, 2015-2019 ACS

Geography	Estimated number of children (birth to 5 years old) living with one or two parents	Number and perce	Number and percent living with one or two foreign-born parents	
Pinal Region	27,724	4,060	15%	
Apache Junction-Gold Canyon	2,085	258	12%	
Casa Grande	5,118	1,013	20%	
Copper Corridor	703	204	29%	
Eloy-Arizona City	1,384	361	26%	
Florence-Coolidge	2,975	307	10%	
Maricopa-Ak Chin-Stanfield	4,427	710	16%	
Red Rock-Saddlebrooke	1,530	150	10%	
San Tan Valley-Queen Creek	9,502	1,057	11%	
Pinal County	28,314	4,064	14%	
Arizona	494,590	126,082	25%	
United States	22,727,705	5,631,005	25%	

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

Table 33. Language spoken at home (by persons ages 5 and older), 2015-2019 ACS

Geography	Estimated population (age 5 and older)	Speak only English at home	Speak Spanish at home	Speak languages other than English or Spanish at home
Pinal Region	400,138	79%	18%	4%
Apache Junction-Gold Canyon	62,382	91%	7%	3%
Casa Grande	62,850	72%	25%	3%
Copper Corridor	16,651	66%	31%	3%
Eloy-Arizona City	28,394	62%	35%	3%
Florence-Coolidge	50,611	71%	25%	4%
Maricopa-Ak Chin-Stanfield	53,956	77%	17%	6%
Red Rock-Saddlebrooke	23,252	88%	10%	2%
San Tan Valley-Queen Creek	102,043	85%	11%	4%
Pinal County	407,869	79%	17%	4%
Arizona	6,616,331	73%	20%	7%
United States	304,930,125	78%	13%	8%

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

Table 34. English-language proficiency (for persons ages 5 and older), 2015-2019 ACS

Geography	Estimated population (age 5 and older)	Speak only English at home	Speak another language at home, and speak English very well	Speak another language at home, and do not speak English very well
Pinal Region	400,138	79%	15%	7%
Apache Junction-Gold Canyon	62,382	91%	6%	3%
Casa Grande	62,850	72%	19%	9%
Copper Corridor	16,651	66%	25%	9%
Eloy-Arizona City	28,394	62%	21%	17%
Florence-Coolidge	50,611	71%	20%	9%
Maricopa-Ak Chin-Stanfield	53,956	77%	17%	6%
Red Rock-Saddlebrooke	23,252	88%	9%	2%
San Tan Valley-Queen Creek	102,043	85%	11%	4%
Pinal County	407,869	79%	15%	6%
Arizona	6,616,331	73%	19%	9%
United States	304,930,125	78%	13%	8%

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

Table 35. Number of English Language Learners enrolled in kindergarten to 3rd grade, 2017-18 to 2019-20

Geography	K-3 English Language Learners, 2017-18	K-3 English Language Learners, 2018-19	
Pinal Region Schools	936	1,044	1,044
Pinal County Schools	828	824	939
Arizona Schools	37,144	35,025	37,313

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

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

Table 36. Percent of kindergarten to 3rd grade students who were English Language Learners, 2017-18 to 2019-20

Geography	Percent of K-3 Students who were English Language Learners, 2017-18	who were English Language Learners,	Percent of K-3 Students who were English Language Learners, 2019-20
Pinal Region Schools	5%	5%	6%
Pinal County Schools	5%	5%	6%
Arizona Schools	11%	11%	11%

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

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

Table 37. Grandchildren ages birth to 5 living in a grandparent's household, 2015-2019 ACS

Geography	Estimated number of children (birth to 5 years old) living in households	Number and percent living in their grandparent's household		
Pinal Region	29,284	3,581	12%	
Apache Junction-Gold Canyon	2,418	351	15%	
Casa Grande	5,314	877	17%	
Copper Corridor	741	187	25%	
Eloy-Arizona City	1,522	313	21%	
Florence-Coolidge	3,194	606	19%	
Maricopa-Ak Chin-Stanfield	4,712	664	14%	
Red Rock-Saddlebrooke	1,656	109	7%	
San Tan Valley-Queen Creek	9,727	475	5%	
Pinal County	29,989	4,073	14%	
Arizona	517,483	67,495	13%	
United States	23,640,563	2,521,583	11%	

Note: This table includes all children (under six years old) living in a household headed by a grandparent, regardless of whether the grandparent is responsible for them, or whether the child's parent lives in the same household.

Economic Circumstances

Table 38. Median annual family income, 2015-2019 ACS

Geography	Median annual income for all families		Median annual income for single-male-headed families with children under 18 years old	Median annual income for single-female-headed families with children under 18 years old
Pinal County	\$66,488	\$81,054	\$50,773	\$31,518
Arizona	\$70,200	\$88,400	\$42,900	\$30,400
United States	\$77,300	\$100,000	\$45,100	\$29,000

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

Note: Half of the families in the population are estimated to have incomes above the median value, and the other half have incomes below the median.

Table 78. Rates of poverty for persons of all ages and for children ages birth to 5, 2015-2019 ACS

Geography	Estimated population for whom poverty status can be determined (all ages)	Percent of the population below the poverty level	Estimated number of children for whom poverty status can be determined (birth to 5 years old)	Percent of children below the poverty level
Pinal Region	397,274	13%	28,525	19%
Apache Junction-Gold Canyon	64,231	12%	2,339	30%
Casa Grande	66,954	16%	5,243	29%
Copper Corridor	17,178	15%	741	24%
Eloy-Arizona City	20,422	25%	1,473	49%
Florence-Coolidge	36,739	16%	3,151	20%
Maricopa-Ak Chin-Stanfield	57,487	11%	4,486	14%
Red Rock-Saddlebrooke	24,466	9%	1,530	12%
San Tan Valley-Queen Creek	109,797	8%	9,562	8%
Pinal County	405,131	13%	29,228	19%
Arizona	6,891,224	15%	508,453	23%
United States	316,715,051	13%	23,253,254	20%

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

Table 39. Children ages birth to 5 living at selected poverty thresholds, 2015-2019 ACS

	Estimated number		Percent of	Percent of	Percent of
	of children (birth to	Percent of	children	children between	children at or
	5 years old) who	children under	between 50%	100% and 184%	above 185%
	live with parents or	50% of the	and 99% of the	of the poverty	of the poverty
Geography	other relatives	poverty level	poverty level	level	level
Pinal Region	28,525	9%	10%	24%	58%
Apache Junction-Gold Canyon	2,339	15%	15%	29%	41%
Casa Grande	5,243	16%	13%	25%	46%
Copper Corridor	741	14%	10%	31%	45%
Eloy-Arizona City	1,473	35%	14%	21%	30%
Florence-Coolidge	3,151	5%	15%	19%	61%
Maricopa-Ak Chin-Stanfield	4,486	6%	8%	26%	60%
Red Rock-Saddlebrooke	1,530	5%	7%	14%	73%
San Tan Valley-Queen Creek	9,562	3%	5%	24%	68%
Pinal County	29,228	9%	10%	24%	57%
Arizona	508,453	11%	13%	22%	54%
United States	23,253,254	9%	11%	19%	60%

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

Table 40. Families with children ages birth to 5 receiving TANF, state fiscal years 2016 to 2020

	Households with one or	Number of fa	Number of families with children (ages 0-5) participating in TANF				
Geography	more children (ages 0-5)	SFY 2016	SFY 2017	SFY 2018	SFY 2019	SFY 2020	(ages 0-5) participating in TANF in SFY 2020
Pinal Region	24,027	699	683	584	519	598	2%
Pinal County	24,750	824	787	670	593	675	3%
Arizona	384,441	13,925	12,315	10,538	9,360	9,947	3%

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

Table 41. Children ages birth to 5 receiving TANF, state fiscal years 2016 to 2020

	Number of young children (ages 0-5) in	Number of	Number of young children (ages 0-5) participating in TANF					
Geography	the population	SFY 2016	SFY 2017	SFY 2018	SFY 2019	SFY 2020	participating in TANF in SFY 2020	
Pinal Region	34,984	978	986	846	772	863	2%	
Pinal County	36,181	1,177	1,132	977	902	995	3%	
Arizona	546,609	18,968	17,143	14,659	13,029	13,747	3%	

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

Table 42. Families participating in SNAP, state fiscal years 2016 to 2020

	Households with one or	1	Number of families participating in SNAP					
Geography	more children (ages 0-5)	SFY 2016	SFY 2017	SFY 2018	SFY 2019	SFY 2020	5) participating in SNAP in SFY 2020	
Pinal Region	24,027	8,834	8,698	8,123	7,689	7,592	32%	
Pinal County	24,750	9,521	9,419	8,825	8,387	8,206	33%	
Arizona	384,441	171,977	164,092	151,816	140,056	132,466	34%	

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

Table 43. Children participating in SNAP, state fiscal years 2016 to 2020

	Number of young children (ages 0-5) in	Number of children (0-5) participating in SNAP					Percent of young children (0-5) participating in
Geography	the population	SFY 2016	SFY 2017	SFY 2018	SFY 2019	SFY 2020	
Pinal Region	34,984	13,966	13,730	12,705	11,949	11,663	33%
Pinal County	36,181	15,216	14,999	13,931	13,130	12,687	35%
Arizona	546,609	258,455	247,414	229,275	211,814	198,961	36%

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

Table 44. Children ages birth to 17 and birth to 5 receiving Pandemic EBT, March to May 2021

	Children ages 0-17 receiving P-EBT			Children ages 0-5 receiving P-EBT			
Geography	March 2021	April 2021	May 2021	March 2021	April 2021	May 2021	
Pinal Region	37,107	37,108	37,115	1,950	1,726	1,490	
Pinal County	38,948	38,949	38,956	2,138	1,900	1,644	
Arizona	628,147	628,087	628,221	38,053	34,402	30,926	

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

Table 45. Women enrolled in WIC, 2016 to 2020

Geography	Enrolled women, 2016	Enrolled women, 2017	Enrolled women, 2018	Enrolled women, 2019	Enrolled women, 2020
Pinal Region	4,511	4,383	4,282	4,293	4,141
Pinal County	4,723	4,619	4,526	4,536	4,368
Arizona	80,063	75,882	72,098	68,312	63,111

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

Note: Enrolled women include both pregnant and breastfeeding women.

Table 46. Women participating in WIC, 2016 to 2020

Geography	Participating women, 2016	. •	Participating women, 2018	Participating women, 2019	Participating women, 2020
Pinal Region	4,239	4,093	4,020	4,021	3,902
Pinal County	4,437	4,305	4,251	4,257	4,117
Arizona	75,126	70,840	67,687	64,225	59,477

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

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

Table 47. Children ages birth to 4 enrolled in WIC, 2016 to 2020

Geography	Enrolled infants and children, 2016	<i>'</i>	Enrolled infants and children, 2018	and children,	Enrolled infants and children, 2020
Pinal Region	12,776	12,452	11,990	11,766	11,435
Pinal County	13,394	13,143	12,692	12,417	12,059
Arizona	206,626	196,482	187,737	178,300	167,186

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

Table 48. Children ages birth to 4 participating in WIC, 2016 to 2020

Geography	Participating infants and children, 2016		Participating infants and children, 2018	Participating infants and children, 2019	Participating infants and children, 2020
Pinal Region	11,428	11,171	10,766	10,586	10,364
Pinal County	11,978	11,784	11,398	11,179	10,939
Arizona	185,185	175,423	169,372	161,287	154,501

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

Note: Children are counted as 'participating' if they received benefits during the time period in question.

Table 49. Free and reduced-price lunch eligibility, 2017-18 to 2019-20

Geography	Students eligible for free or reduced-price lunch, 2017-18	Students eligible for free or reduced-price lunch, 2018-19	Students eligible for free or reduced-price lunch 2019-20
Pinal Region Schools	62%	60%	60%
Mary C O'Brien Accommodation District	67%	67%	67%
Florence Unified School District	57%	57%	57%
Ray Unified District	52%	52%	56%
Mammoth-San Manuel Unified District	79%	73%	77%
Superior Unified School District	>98%	74%	74%
Maricopa Unified School District	52%	53%	52%
Coolidge Unified District	77%	74%	74%
Apache Junction Unified District	60%	60%	60%
Oracle Elementary District	59%	64%	64%
J O Combs Unified School District	45%	40%	42%
Casa Grande Elementary District	78%	78%	78%
Red Rock Elementary District	53%	47%	47%
Eloy Elementary District	96%	96%	96%
Toltec School District	86%	86%	88%
Stanfield Elementary District	81%	81%	81%
Picacho Elementary District	93%	93%	93%
Casa Grande Union High School District	61%	56%	54%
Santa Cruz Valley Union High School District	86%	86%	84%
Private	77%	88%	93%
Pinal Region Charter Schools	59%	53%	52%
Pinal County Schools	64%	62%	61%
Arizona	57%	56%	55%

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

Table 50. Lunches served through the National School Lunch Program, 2017-18 to 2019-20

	Number of schools			Number of lunches served			
Geography	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20	
Pinal Region Schools	N/A	N/A	N/A	N/A	N/A	N/A	
Pinal County Schools	911	944	759	4,440,157	4,440,157	3,607,301	
Arizona Schools	18,190	18,202	14,767	101,727,112	102,012,129	76,454,370	

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

Note: Due to the COVID-19 pandemic, the USDA issued a substantial number of waivers for school nutrition programs to allow greater flexibility for schools to get meals to students in need. More information on the pandemic's effect on school nutrition can be found on the ADE website: https://www.azed.gov/hns/covid19

Table 51. Lunches served through the Child and Adult Care Feeding Program, 2017-18 to 2019-20

	Number of schools			Number of lunches served			
Geography	2017-18 2018-19 2019-20			2017-18	2018-19	2019-20	
Pinal Region Schools	N/A	N/A	N/A	N/A	N/A	N/A	
Pinal County Schools	315	322	288	296,745	313,121	253,578	
Arizona Schools	7,693	7,336	6,305	7,225,302	7,242,730	5,556,341	

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

Note: Due to the COVID-19 pandemic, the USDA issued a substantial number of waivers for school nutrition programs to allow greater flexibility for schools to get meals to students in need. More information on the pandemic's effect on school nutrition can be found on the ADE website: https://www.azed.gov/hns/covid19

Table 52. Lunches served through the Summer Food Service Program, 2017-18 to 2019-20

	Number of schools			Number of lunches served			
Geography	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20	
Pinal Region Schools	N/A	N/A	N/A	N/A	N/A	N/A	
Pinal County Schools	111	97	523	71,911	73,988	1,292,308	
Arizona Schools	2,199	1,845	9,136	1,870,111	1,868,539	21,786,393	

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

Note: Due to the COVID-19 pandemic, the USDA issued a substantial number of waivers for school nutrition programs to allow greater flexibility for schools to get meals to students in need. More information on the pandemic's effect on school nutrition can be found on the ADE website: https://www.azed.gov/hns/covid19

Table 53. Monthly unemployment insurance claims, Nov 2019 to Nov 2020

	Pinal Region			Arizona			
Month	Total Claims (All Outcomes)	Claims found eligible and paid	Percent of claims found eligible and paid	Total Claims (All Outcomes)	Claims found eligible and paid	Percent of claims found eligible and paid	
Nov 2019	540	157	29%	7,787	2,275	29%	
Dec 2019	460	123	27%	7,906	2,312	29%	
Jan 2020	529	147	28%	9,892	2,712	27%	
Feb 2020	420	124	30%	7,185	1,919	27%	
Mar 2020	4,805	2,946	61%	110,129	66,655	61%	
Apr 2020	8,443	4,443	53%	186,217	93,529	50%	
May 2020	4,781	1,650	35%	98,786	33,481	34%	
Jun 2020	5,116	1,801	35%	94,720	30,465	32%	
July 2020	4,149	1,295	31%	78,744	26,081	33%	
Aug 2020	2,649	878	33%	46,360	16,028	35%	
Sept 2020	2,267	514	23%	39,660	9,464	24%	
Oct 2020	1,618	392	24%	30,032	7,807	26%	
Nov 2020	867	75	9%	15,835	1,812	11%	

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

Table 54. Persons of all ages in households with and without computers and internet connectivity, 2015-2019 ACS

Geography	Estimated number of persons (all ages) living in households	Have a computer and internet	Have a computer but no internet	Do not have a computer
Pinal Region	398,178	88%	7%	5%
Apache Junction-Gold Canyon	64,249	86%	8%	7%
Casa Grande	66,876	86%	8%	5%
Copper Corridor	17,218	64%	22%	14%
Eloy-Arizona City	20,499	76%	14%	10%
Florence-Coolidge	36,678	87%	6%	7%
Maricopa-Ak Chin-Stanfield	57,806	90%	5%	4%
Red Rock-Saddlebrooke	24,628	93%	4%	4%
San Tan Valley-Queen Creek	110,225	94%	4%	2%
Pinal County	406,078	87%	7%	6%
Arizona	6,892,175	87%	7%	6%
United States	316,606,796	86%	7%	6%

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

Table 55. Children ages birth to 17 in households with and without computers and internet connectivity, 2015-2019 ACS

Geography	Estimated number of children (ages 0-17) living in households	Have a computer and internet	Have a computer but no internet	Do not have a computer
Pinal Region	97,225	92%	6%	2%
Apache Junction-Gold Canyon	8,652	92%	5%	3%
Casa Grande	16,803	89%	9%	2%
Copper Corridor	3,382	70%	23%	6%
Eloy-Arizona City	4,996	81%	14%	5%
Florence-Coolidge	9,411	92%	6%	3%
Maricopa-Ak Chin-Stanfield	15,736	92%	4%	4%
Red Rock-Saddlebrooke	4,343	91%	6%	3%
San Tan Valley-Queen Creek	33,902	96%	3%	1%
Pinal County	99,254	91%	6%	3%
Arizona	1,632,019	88%	8%	4%
United States	73,225,376	89%	7%	3%

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

Table 56. Persons in households by type of internet access (broadband, cellular, and dial-up), 2015-2019 ACS

Geography	Estimated number of persons (all ages) living in households with computer and internet	With fixed- broadband internet	With cellular-data internet	With only dial-up internet
Pinal Region	350,133	87%	80%	0.2%
Apache Junction-Gold Canyon	55,000	82%	79%	0.3%
Casa Grande	57,734	82%	83%	0.3%
Copper Corridor	10,980	80%	56%	0.3%
Eloy-Arizona City	15,622	77%	76%	0.3%
Florence-Coolidge	31,885	83%	82%	0.4%
Maricopa-Ak Chin-Stanfield	52,313	91%	83%	0.0%
Red Rock-Saddlebrooke	22,791	92%	80%	0.0%
San Tan Valley-Queen Creek	103,808	93%	80%	0.1%
Pinal County	354,354	87%	80%	0.2%
Arizona	5,968,639	87%	82%	0.3%
United States	273,795,622	88%	82%	0.3%

Note: The percentages in each row sum to more than 100% because many households use both fixed-broadband and cellular-data internet.

Education

Table 57. Kindergarten to 3rd grade students with chronic absences, 2018-19 to 2019-20

Geography	K-3 students enrolled, 2018-19	K-3 students with chronic absences, 2018-19	Chronic absence rate, 2018-19	K-3 students enrolled, 2019-20	K-3 students with chronic absences, 2019-20	Chronic absence rate, 2019-20
Pinal Region	17,662	2,487	14%	17,810	1,453	8%
Mary C O'Brien Accommodation District	DS	DS	11%	DS	DS	4%
Florence Unified School District	2,249	289	13%	2,349	127	5%
Ray Unified District	99	12	12%	DS	DS	9%
Mammoth-San Manuel Unified District	163	21	13%	157	24	15%
Superior Unified School District	102	23	23%	101	16	16%
Maricopa Unified School District	1,935	356	18%	2,080	237	11%
Coolidge Unified District	577	149	26%	564	68	12%
Apache Junction Unified District	936	145	15%	863	90	10%
Oracle Elementary District	145	32	22%	DS	DS	<2%
J O Combs Unified School District	1,296	173	13%	1,267	80	6%
Casa Grande Elementary District	2,651	400	15%	2,594	269	10%
Red Rock Elementary District	DS	DS	4%	DS	DS	<2%
Eloy Elementary District	349	47	13%	348	21	6%
Toltec School District	447	106	24%	437	59	14%
Stanfield Elementary District	185	58	31%	180	32	18%
Picacho Elementary District	88	28	32%	83	16	19%
Pinal Region Charter Schools	6,179	633	10%	6,450	403	6%
Pinal County Schools	11,161	1,603	14%	11,235	836	7%
Arizona Schools	326,891	43,773	13%	329,300	25,382	8%

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

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

Table 58. 4-year and 5-year graduation rates, 2019

Geography	4-Year Senior Cohort (2019)	4-Year Graduates (2019)	4-Year Graduation Rate (2019)	5-Year Graduates (2019)	5-Year Graduation Rate (2019)
Pinal Region Schools	3,669	3,006	82%	3,128	85%
Mary C O'Brien Accommodation District	29	DS	31%	13	43%
Florence Unified School District	793	696	88%	711	89%
Ray Unified District	34	30	88%	30	88%
Mammoth-San Manuel Unified District	59	52	88%	55	93%
Superior Unified School District	33	30	91%	30	91%
Maricopa Unified School District	504	405	80%	422	84%
Coolidge Unified District	159	103	65%	111	69%
Apache Junction Unified District	230	181	79%	194	84%
J O Combs Unified School District	329	290	88%	298	90%
Casa Grande Union High School District	817	693	85%	720	88%
Santa Cruz Valley Union High School District	106	83	78%	85	79%
Pinal Region Charter Schools	576	434	75%	459	79%
Pinal County Schools	3,301	2,679	81%	2,789	84%
Arizona Schools	86,355	68,393	79%	71,610	83%

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

Note: The 2019 four-year senior cohort is the number of students who are expected to graduate in 2019. It represents all students who enrolled in high school in the region or Arizona for the first time in grade 9 in the 2015-16 school year, those who enrolled in high school in the region or Arizona for the first time in grade 10 in the 2016-2017 school year, those who enrolled in high school in Arizona for the first time in grade 11 in the 2017-2018 school year, and those who enrolled in high school in the region or Arizona for the first time in grade 12 in the 2018-2019 school year. This group of students provides the denominator that can be compared to the number of graduates to in order to calculate the four-year graduation rate. Five year graduation rates are similarly calculated, but with a 5-year cohort denominator (so students who started in grade 9 in 2014-15 as well as students entering that cohort in subsequent years).

Table 59. Trends in 4-year and 5-year graduation rates, 2017 to 2019

	4-Yea	r Graduation	Rates	5-Year Graduation Rates		
Geography	2017	2018	2019	2017	2018	2019
Pinal Region Schools	79%	81%	82%	82%	85%	85%
Mary C O'Brien Accommodation District	20%	15%	31%	37%	41%	43%
Florence Unified School District	84%	84%	88%	85%	87%	89%
Ray Unified District	97%	87%	88%	100%	92%	88%
Mammoth-San Manuel Unified District	87%	91%	88%	91%	94%	93%
Superior Unified School District	89%	97%	91%	89%	97%	91%
Maricopa Unified School District	76%	75%	80%	80%	80%	84%
Coolidge Unified District	73%	78%	65%	76%	79%	69%
Apache Junction Unified District	81%	85%	79%	85%	86%	84%
J O Combs Unified School District	91%	91%	88%	94%	94%	90%
Casa Grande Union High School District	80%	83%	85%	84%	87%	88%
Santa Cruz Valley Union High School District	71%	81%	78%	75%	81%	79%
Pinal Region Charter Schools	71%	74%	75%	76%	77%	79%
Pinal County Schools	78%	80%	81%	81%	84%	84%
Arizona Schools	78%	78%	79%	82%	82%	83%

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

Table 60. 7th to 12th grade dropout rates, 2017-18 to 2019-20

Geography	Dropout Rate, 2017-18	Dropout Rate, 2018-19	Dropout Rate, 2019-20
Pinal Region Schools	3%	3%	3%
Mary C O'Brien Accommodation District	17%	13%	18%
Florence Unified School District	2%	2%	2%
Ray Unified District	2%	1%	1%
Mammoth-San Manuel Unified District	8%	3%	2%
Superior Unified School District	4%	2%	4%
Maricopa Unified School District	5%	4%	3%
Coolidge Unified District	8%	8%	9%
Apache Junction Unified District	3%	5%	3%
Oracle Elementary District	0%	1%	1%
J O Combs Unified School District	1%	1%	3%
Casa Grande Elementary District	3%	4%	6%
Red Rock Elementary District	0%	0%	0%
Eloy Elementary District	2%	1%	1%
Toltec School District	5%	2%	4%
Stanfield Elementary District	11%	5%	6%
Picacho Elementary District	0%	2%	5%
Casa Grande Union High School District	7%	4%	3%
Santa Cruz Valley Union High School District	5%	5%	5%
Pinal Region Charter Schools	2%	2%	1%
Pinal County	5%	4%	4%
Arizona Schools	5%	4%	3%

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

Note: Dropouts are defined by ADE as students who were enrolled in school at any time during the school year but were not enrolled at the end of the year and who did not transfer to another school, graduate, or die. Dropout rates are calculated by dividing the number of dropouts by the total enrollment.

Early Learning

Table 61. School enrollment for children ages 3 to 4, 2015-2019 ACS

Geography	Estimated number of children (3 or 4 years old)	Number and	percent enrolled in school
Pinal Region	10,360	3,511	34%
Apache Junction-Gold Canyon	912	383	42%
Casa Grande	1,990	550	28%
Copper Corridor	294	171	58%
Eloy-Arizona City	632	70	11%
Florence-Coolidge	1,090	393	36%
Maricopa-Ak Chin-Stanfield	1,599	638	40%
Red Rock-Saddlebrooke	594	211	36%
San Tan Valley-Queen Creek	3,248	1,096	34%
Pinal County	10,554	3,586	34%
Arizona	183,386	71,233	39%
United States	8,151,928	3,938,693	48%

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

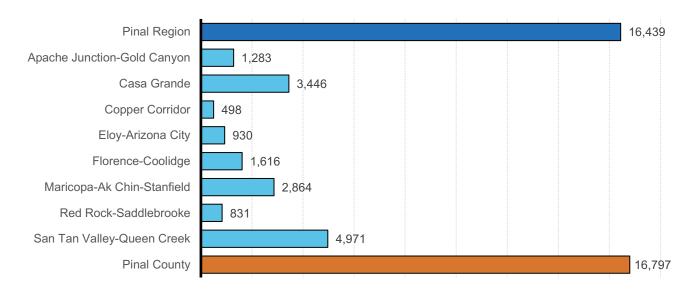
Note: In this table, "school" may include nursery school, preschool, or kindergarten.

Table 62. Number and licensed capacity of licensed or registered child care providers by type, December 2020

	All providers Nannies or i					Family child care providers		
Geography	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
Pinal Region	88	5,788	1	4	68	5,672	19	112
Apache Junction-Gold Canyon	9	593	1	4	7	585	1	4
Casa Grande	24	1,532	0	0	20	1,516	4	16
Copper Corridor	7	294	0	0	6	290	1	4
Eloy-Arizona City	8	368	0	0	6	360	2	8
Florence-Coolidge	13	664	0	0	12	654	1	10
Maricopa-Ak Chin- Stanfield	12	926	0	0	6	884	6	42
Red Rock-Saddlebrooke	0	0	0	0	0	0	0	0
San Tan Valley-Queen Creek	15	1,411	0	0	11	1,383	4	28
Pinal County	92	6,435	1	4	71	6,310	20	121
Arizona	2,521	202,010	26	89	1,909	198,100	586	3,821

Note: This table only includes data for providers listed in the National Data System for Child Care NACCRAware database. These providers are listed through the Child Care Resource & Referral Guide to allow parents and caregivers to find child care and early education providers. Providers that only provide before- and after-school care are not included in this table. Not all early care and education programs are listed through the Child Care Resource & Referral Guide; in particular, Early Head Start programs, particularly home-based programs, are often not listed.

Figure 79. Children ages birth to 5 with all parents in the labor force, 2015-2019 ACS



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

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

Table 63. Number and capacity of regulated early care and educational providers by operational status in December 2020

	All pro	viders	Providers closed		Provide	rs open	Percent of providers closed	
Geography	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
Pinal Region	88	5,788	35	2,195	53	3,593	40%	38%
Apache Junction-Gold Canyon	9	593	2	110	7	483	22%	19%
Casa Grande	24	1,532	6	482	18	1,050	25%	31%
Copper Corridor	7	294	5	247	2	47	71%	84%
Eloy-Arizona City	8	368	5	301	3	67	63%	82%
Florence-Coolidge	13	664	7	279	6	385	54%	42%
Maricopa-Ak Chin-Stanfield	12	926	4	104	8	822	33%	11%
Red Rock-Saddlebrooke	0	0	0	0	0	0	N/A	N/A
San Tan Valley-Queen Creek	15	1,411	6	672	9	739	40%	48%
Pinal County	92	6,435	37	2,665	55	3,770	40%	41%
Arizona	2,521	202,010	930	71,576	1,591	130,434	37%	35%

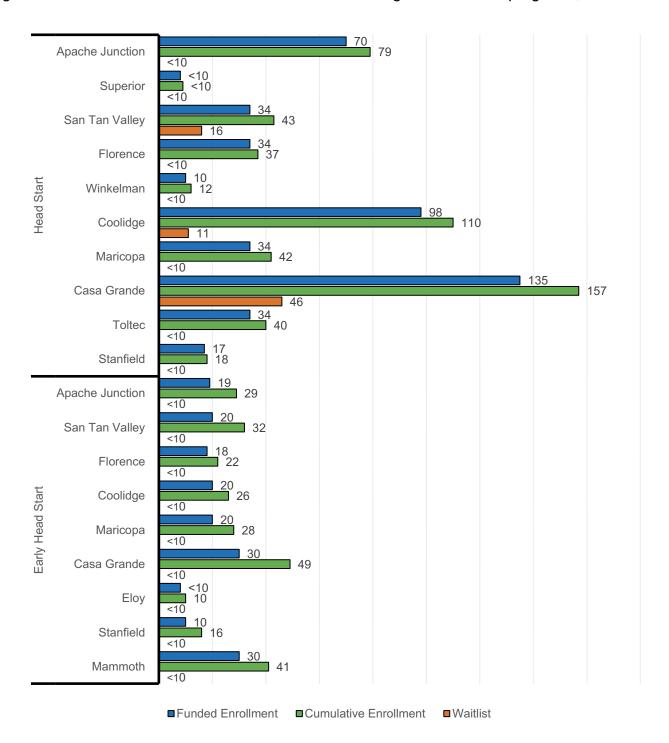
Note: This table only reflects providers registered with the Child Care Resource and Referral (CCR&R) Guide. Closure status for providers were gathered by CCR&R staff throughout the pandemic, who made a strong effort to keep this information up to date; however, these data may not reflect current closure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

Table 64. Funded and cumulative enrollment in Pinal Region Head Start programs, 2019-20

Center Name	Funded Enrollment	Cumulative Enrollment	Waitlist
Pinal Region	733	896	142
Apache Junction Head Start	70	79	<10
Apache Junction Early Head Start	19	29	<10
Superior Head Start	<10	<10	<10
San Tan Valley Head Start	34	43	16
San Tan Valley Early Head Start	20	32	<10
Florence Head Start	34	37	<10
Florence Early Head Start	18	22	<10
Winkelman Early Head Start	10	12	<10
Coolidge Head Start	98	110	11
Coolidge Early Head Start	20	26	<10
Maricopa Head Start	34	42	<10
Maricopa Early Head Start	20	28	<10
Casa Grande Head Start	135	157	46
Casa Grande Early Head Start	30	49	<10
Toltec Head Start	34	40	<10
Eloy Head Start	84	96	<10
Eloy Early Head Start	<10	10	<10
Stanfield Head Start	17	18	<10
Stanfield Early Head Start	10	16	<10
Mammoth Early Head Start	30	41	<10

Note: Cumulative enrollment is the total number of students enrolled throughout the year; this number often exceeds funded enrollment as students enter and exit a program.

Figure 80. Funded and cumulative enrollment in Pinal Region Head Start programs, 2019-20



Note: Cumulative enrollment is the total number of students enrolled throughout the year; this number often exceeds funded enrollment as students enter and exit a program.

Table 65. Funded enrollment in Pinal Region Head Start programs by type, 2019-20

Center Name	Expanded Day	Part Day	Early Head Start	Center-based Enrollment	Home-based Enrollment
Pinal Region	287	261	185	573	160
Apache Junction Head Start	0	70	N/A	70	N/A
Apache Junction Early Head Start	N/A	N/A	19	9	10
Superior Head Start	0	8	N/A	8	N/A
San Tan Valley Head Start	0	34	N/A	34	N/A
San Tan Valley Early Head Start	N/A	N/A	20	0	20
Florence Head Start	34	0	N/A	34	N/A
Florence Early Head Start	0	0	18	8	10
Winkelman Early Head Start	N/A	N/A	10	0	10
Coolidge Head Start	34	64	N/A	98	N/A
Coolidge Early Head Start	N/A	N/A	20	0	20
Maricopa Head Start	0	34	N/A	34	N/A
Maricopa Early Head Start	N/A	N/A	20	0	20
Casa Grande Head Start	135	0	N/A	135	N/A
Casa Grande Early Head Start	N/A	N/A	30	0	30
Toltec Head Start	0	34	N/A	34	N/A
Eloy Head Start	84	0	N/A	84	N/A
Eloy Early Head Start	N/A	N/A	8	8	0
Stanfield Head Start	0	17	N/A	17	N/A
Stanfield Early Head Start	N/A	N/A	10	0	10
Mammoth Early Head Start	N/A	N/A	30	0	30

Note: Cumulative enrollment is the total number of students enrolled throughout the year; this number often exceeds funded enrollment as students enter and exit a program. CCP stands for Child Care Partnership. Child Care Partnership is a program of Early Head Start that partners Early Head Start programs with child care centers and family home providers. Cumulative enrollment is the total number of students enrolled throughout the year; this number often exceeds funded enrollment as students enter and exit a program.

Table 66. Cumulative enrollment in Pinal Region Head Start programs by race, 2019-20

Center Name	Hispanic or Latino Origin	Non- Hispanic or Latino Origin	American Indian or Alaska Native	Asian	Black	Pacific Islander	White	Multi or Bi- Racial	Other or un- specified
Pinal Region	569	328	41	<10	79	<10	675	77	11
Apache Junction Head Start	40	39	<10	<10	0	0	70	<10	0
Apache Junction Early Head Start	11	18	<10	0	0	0	27	<10	0
Superior Head Start	<10	<10	0	0	0	0	<10	0	0
San Tan Valley Head Start	20	22	<10	0	<10	0	34	<10	0
San Tan Valley Early Head Start	15	17	0	0	<10	0	24	<10	<10
Florence Head Start	12	26	<10	0	<10	<10	29	<10	0
Florence Early Head Start	12	11	<10	0	0	<10	20	0	0
Winkelman Early Head Start	<10	<10	0	0	0	0	11	<10	0
Coolidge Head Start	63	48	<10	<10	27	<10	63	11	<10
Coolidge Early Head Start	17	<10	0	0	0	0	24	<10	0
Maricopa Head Start	27	15	0	0	<10	0	31	<10	<10
Maricopa Early Head Start	15	13	0	0	<10	0	19	<10	0
Casa Grande Head Start	109	48	17	<10	17	0	103	16	<10
Casa Grande Early Head Start	30	20	<10	0	<10	0	34	<10	<10
Toltec Head Start	28	12	<10	0	<10	0	28	<10	<10
Eloy Head Start	77	19	<10	0	14	0	73	<10	0

Table 67. Number of informal care providers served through the Family, Friends, and Neighbors program in the Pinal Region, 2016-17 to 2020-21

Geography	2016-17	2017-18	2018-19	2019-20	2020-21
Pinal Region	73	77	273	350	350
Apache Junction- Gold Canyon	<10	<10	25	30	33
Casa Grande	20	22	82	118	114
Copper Corridor	10	<10	<10	<10	<10
Eloy-Arizona City	<10	<10	13	15	15
Florence-Coolidge	<10	<10	15	15	15
Maricopa-Ak Chin- Stanfield	17	18	84	112	113
Red Rock-Saddlebrooke	0	0	0	0	0
San Tan Valley- Queen Creek	10	12	50	52	53
Pinal County	73	77	273	350	350
Arizona	N/A	N/A	N/A	N/A	N/A

Source: United Way of Pinal County (2021). [FFN dataset]. Unpublished data received by request.

Table 68. Number and capacity of Quality First Programs, January 2021

Geography		Total Programs	2-Star Programs	3-Star Programs	4-Star Programs	5-Star Programs	Programs not publicly rated
Pinal Region	Number	34	8	17	6	1	2
	Capacity	2,686	1,100	1,238	226	4	118
Apache Junction-Gold	Number	3	2		1		
Canyon	Capacity	254	224		30		
Casa Grande	Number	9		9			
Casa Grande	Capacity	713		713			
Copper Corridor	Number	4	2		2		
	Capacity	191	102		89		
Flav. Arimona City.	Number	2		1		1	
Eloy-Arizona City	Capacity	63		59		4	
Flamman Onelidan	Number	7	1	3	2		1
Florence-Coolidge	Capacity	374	59	159	97		59
Maricopa-Ak Chin-	Number	4	2	1	1		
Stanfield	Capacity	637	587	40	10		
Ded Dede Ceddlebasede	Number						
Red Rock-Saddlebrooke	Capacity						
San Tan Valley-Queen	Number	5	1	3			1
Creek	Capacity	454	128	267			59
Binal Causety	Number	34	8	17	6	1	2
Pinal County	Capacity	2,686	1,100	1,238	226	4	118
	Number	925	141	334	250	70	130
Arizona	Capacity	84,921	15,042	31,428	22,443	4,200	11,808

Source: First Things First (2021). Quality First Data Center [Dataset]. Retrieved from https://datacenter.azftf.gov/ in January 2021.

Note: This table reflects a snapshot of the Quality First program in January 2021.

Table 69. Quality First Programs, state fiscal year 2020

Geography	Child care providers served	Child care providers with a 3- 5 star rating	
Pinal Region	37	25	68%
Pinal County	N/A	N/A	N/A
Arizona	1,045	824	79%

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

Table 70. Median daily charge for full-time child care, 2018

	Approved family homes			Certi	fied group	homes	Lie	censed cer	nters
Geography	One infant	One 1 or 2 year old	One 3 to 5 year old	One infant	One 1 or 2 year old	One 3 to 5 year old	One infant	One 1 or 2 year old	One 3 to 5 year old
Pinal Region	\$25.50	\$25.00	\$21.50	\$26.00	\$28.00	\$25.00	\$35.00	\$31.55	\$28.50
Apache Junction-Gold Canyon	\$25.00	\$25.00	\$25.00	N/A	N/A	N/A	\$30.00	\$29.00	\$28.50
Casa Grande	\$27.50	\$20.00	\$20.00	N/A	N/A	N/A	\$35.00	\$32.00	\$26.00
Copper Corridor	\$16.00	\$17.00	\$16.00	N/A	N/A	N/A	N/A	\$32.00	\$30.00
Eloy-Arizona City	N/A	N/A	N/A	N/A	\$30.00	\$30.00	\$37.00	\$35.00	\$35.00
Florence-Coolidge	N/A	N/A	N/A	\$25.00	\$25.00	\$25.00	\$33.60	\$32.20	\$28.40
Maricopa-Ak Chin-Stanfield	\$40.00	\$40.00	\$30.00	\$30.00	\$31.00	\$30.00	N/A	\$31.55	\$31.79
Red Rock-Saddlebrooke	\$25.50	\$23.00	\$20.50	N/A	N/A	N/A	N/A	N/A	N/A
San Tan Valley-Queen Creek	\$26.00	\$24.50	\$21.50	\$23.71	\$23.00	\$19.29	\$42.60	\$28.00	\$30.00
Pinal County	\$25.50	\$25.00	\$21.50	\$26.00	\$28.00	\$25.00	\$35.00	\$31.55	\$28.50
Arizona	\$20.00	\$20.00	\$20.00	\$30.00	\$28.00	\$28.00	\$43.03	\$38.00	\$33.00

Table 71. Median monthly charge for full-time child care, 2018

	Арр	proved family	homes	Cei	rtified group l	nomes		Licensed cer	ed centers	
Geography	One infant	One 1 or 2 year old	One 3 to 5 year old	One infant	One 1 or 2 year old	One 3 to 5 year old	One infant	One 1 or 2 year old	One 3 to 5 year old	
Pinal Region	\$510	\$500	\$430	\$520	\$560	\$500	\$700	\$631	\$570	
Apache Junction- Gold Canyon	\$500	\$500	\$500	N/A	N/A	N/A	\$600	\$580	\$570	
Casa Grande	\$550	\$400	\$400	N/A	N/A	N/A	\$700	\$640	\$520	
Copper Corridor	\$320	\$340	\$320	N/A	N/A	N/A	N/A	\$640	\$600	
Eloy-Arizona City	N/A	N/A	N/A	N/A	\$600	\$600	\$740	\$700	\$700	
Florence-Coolidge	N/A	N/A	N/A	\$500	\$500	\$500	\$672	\$644	\$568	
Maricopa-Ak Chin-Stanfield	\$800	\$800	\$600	\$600	\$620	\$600	N/A	\$631	\$636	
Red Rock- Saddlebrooke	\$510	\$460	\$410	N/A	N/A	N/A	N/A	N/A	N/A	
San Tan Valley- Queen Creek	\$520	\$490	\$430	\$474	\$460	\$386	\$852	\$560	\$600	
Pinal County	\$510	\$500	\$430	\$520	\$560	\$500	\$700	\$631	\$570	
Arizona	\$400	\$400	\$400	\$600	\$560	\$560	\$861	\$760	\$660	

Table 72. Cost of center-based child care for one child as a percentage of income, 2018

Geography Pinal Region	Median family income N/A	Cost for an infant N/A	Cost for a 1 to 2 year old child N/A	· .
Pinal County	\$66,500	12.6%	11.4%	10.3%
Arizona	\$70,200	14.7%	13.0%	11.3%

Sources: Arizona Department of Economic Security (2021). [Child Care Administration dataset]. Unpublished data. & U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B19126.

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

Table 73. Children receiving DES child care subsidies

Table 76. Children receiving DEC child date Substitutes												
		Number	of childrer	n receiving	g subsidy		Percer	nt of elig	ible chil	dren rec	eiving s	ubsidy
Geography	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
Pinal Region	1,085	966	890	961	1,136	1,016	94%	92%	92%	92%	92%	80%
Apache Junction- Gold Canyon	169	164	144	160	169	175	93%	96%	97%	95%	92%	84%
Casa Grande	302	273	247	258	302	212	95%	94%	91%	93%	96%	81%
Copper Corridor	18	[1-26]	14	14	18	13	95%	DS	93%	100%	76%	76%
Eloy-Arizona City	83	67	74	86	83	72	92%	96%	91%	91%	94%	73%
Florence-Coolidge	123	124	119	136	123	140	95%	91%	94%	93%	90%	82%
Maricopa-Ak Chin- Stanfield	150	128	127	146	150	167	94%	90%	89%	90%	89%	74%
Red Rock- Saddlebrooke	17	[1-26]	19	12	17	18	100%	DS	100%	71%	91%	82%
San Tan Valley- Queen Creek	223	183	146	149	223	219	92%	89%	88%	89%	91%	81%
Pinal County	1,093	972	893	965	1,146	1,021	94%	92%	92%	92%	92%	80%
Arizona	19,040	17,784	16,922	19,813	23,155	19,909	94%	93%	93%	92%	92%	80%

Table 74. DCS-involved children receiving DES child care subsidies

	Nu	Number of DCS children receiving subsidy				idy	Percent of DCS eligible children receiving subsidy					
Geography	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
Pinal Region	713	815	678	681	696	420	93%	90%	85%	83%	82%	56%
Apache Junction- Gold Canyon	111	135	116	142	131	68	88%	89%	87%	92%	86%	65%
Casa Grande	121	136	113	94	93	71	92%	93%	85%	86%	78%	62%
Copper Corridor	[1-32]	18	[1-29]	27	17	[1-9]	DS	86%	DS	87%	85%	DS
Eloy-Arizona City	34	27	27	28	38	21	97%	93%	90%	78%	70%	38%
Florence-Coolidge	88	112	85	84	80	43	97%	92%	87%	87%	87%	52%
Maricopa-Ak Chin- Stanfield	108	114	89	97	98	64	89%	90%	78%	79%	73%	47%
Red Rock- Saddlebrooke	[1-32]	28	[1-29]	26	24	[1-9]	DS	80%	DS	93%	83%	DS
San Tan Valley- Queen Creek	218	245	218	183	215	143	94%	89%	86%	77%	85%	65%
Pinal County	718	820	678	685	705	421	90%	85%	84%	82%	56%	90%
Arizona	13,098	13,352	12,201	12,219	11,808	7,137	91%	89%	88%	82%	82%	59%

Table 75. Eligible families not using DES child care subsidies, 2015 to 2020

Geography	2015	2016	2017	2018	2019	2020
Pinal Region	5%	6%	6%	8%	8%	18%
Apache Junction-Gold Canyon	5%	2%	2%	5%	9%	19%
Casa Grande	5%	5%	7%	7%	5%	18%
Copper Corridor	0%	20%	0%	0%	DS	DS
Eloy-Arizona City	4%	5%	6%	10%	DS	30%
Florence-Coolidge	3%	6%	6%	5%	DS	20%
Maricopa-Ak Chin-Stanfield	5%	6%	10%	10%	11%	30%
Red Rock-Saddlebrooke	0%	7%	0%	17%	DS	DS
San Tan Valley-Queen Creek	8%	9%	8%	10%	9%	21%
Pinal County	5%	6%	6%	8%	8%	18%
Arizona	6%	6%	7%	8%	8%	18%

Figure 81. Eligible families not using DES child care subsidies, 2015 to 2020

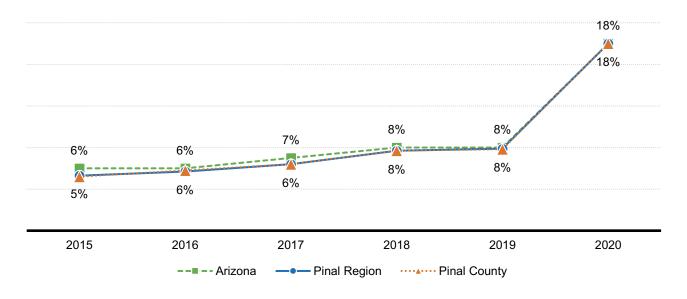
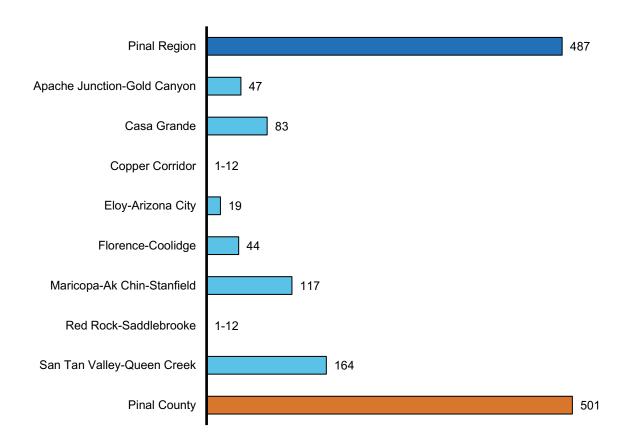


Table 76. Number of children (ages 0-5) receiving DDD services, state fiscal years 2017 to 2020

Geography	SFY 2017	SFY 2018	SFY 2019	SFY 2020	Percent change from 2017 to 2020
Pinal Region	414	419	296	314	-24%
Apache Junction-Gold Canyon	38	41	27	27	-29%
Casa Grande	49	52	36	42	-14%
Copper Corridor	[1-13]	[1-21]	[1-9]	[1-10]	N/A
Eloy-Arizona City	25	22	20	12	-52%
Florence-Coolidge	33	39	25	30	-9%
Maricopa-Ak Chin-Stanfield	109	92	66	77	-29%
Red Rock-Saddlebrooke	[1-13]	[1-21]	[1-9]	[1-10]	N/A
San Tan Valley-Queen Creek	146	151	113	115	-21%
Pinal County	423	428	299	318	-25%
Arizona	5,520	6,123	4,005	4,078	-26%

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

Figure 82. Numbers of children (ages 0-2) receiving services from AzEIP, DDD, or both; state fiscal years 2019 and 2020



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

Table 77. Preschoolers with disabilities receiving services through Local Education Authorities, 2017-18 to 2019-20

Geography	Preschoolers enrolled in special education, 2017-18	Preschoolers enrolled in special education, 2018-19	Preschoolers enrolled in special education, 2019-20
Pinal Region Schools	656	648	652
Mary C O'Brien Accommodation District	DS	DS	DS
Florence Unified School District	180	184	199
Ray Unified District	DS	DS	DS
Mammoth-San Manuel Unified District	DS	DS	DS
Superior Unified School District	DS	DS	DS
Maricopa Unified School District	95	109	114
Coolidge Unified District	14	DS	22
Apache Junction Unified District	61	45	52
Oracle Elementary District	DS	DS	DS
J O Combs Unified School District	140	121	102
Casa Grande Elementary District	DS	DS	25
Red Rock Elementary District	DS	DS	DS
Eloy Elementary District	DS	DS	DS
Toltec School District	DS	DS	15
Stanfield Elementary District	DS	DS	DS
Picacho Elementary District	DS	DS	DS
Pinal Region Head Start Centers	DS	DS	DS
Pinal Region Charter Schools	DS	DS	DS
Pinal County Schools	694	690	680
Arizona Schools	10,123	10,314	10,521

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

Table 78. Preschoolers with disabilities receiving services through Local Education Authorities by type of disability, 2019-20

Geography	Number of preschoolers enrolled	Developmental delay	Preschool severe delay	Speech or language impairment	Other disabilities
Pinal Region Schools	652	38%	18%	43%	<2%
Mary C O'Brien Accommodation District	DS	DS	DS	DS	DS
Florence Unified School District	199	34%	13%	51%	2%
Ray Unified District	DS	50%	<2%	50%	<2%
Mammoth-San Manuel Unified District	DS	>98%	<2%	<2%	<2%
Superior Unified School District	DS	DS	DS	DS	DS
Maricopa Unified School District	114	38%	20%	42%	<2%
Coolidge Unified District	22	32%	45%	23%	<2%
Apache Junction Unified District	52	40%	15%	44%	<2%
Oracle Elementary District	DS	DS	DS	DS	DS
J O Combs Unified School District	102	32%	15%	53%	<2%
Casa Grande Elementary District	25	12%	36%	52%	<2%
Red Rock Elementary District	DS	50%	25%	25%	<2%
Eloy Elementary District	DS	DS	DS	DS	DS
Toltec School District	15	47%	13%	33%	7%
Stanfield Elementary District	DS	50%	<2%	50%	<2%
Picacho Elementary District	DS	DS	DS	DS	DS
Pinal Region Head Start Centers	DS	36%	7%	57%	<2%
Pinal Region Charter Schools	DS	DS	DS	DS	DS
Pinal County Schools	680	38%	19%	42%	<2%
Arizona Schools	10,521	43%	20%	34%	3%

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

Table 79. Kindergarten to 3rd grade students enrolled in special education in public and charter schools, 2017-18 to 2019-20

Geography	K-3 students enrolled in special education, 2017-18	K-3 students enrolled in special education, 2018-19	K-3 students enrolled in special education, 2019-20
Pinal Region Schools	2,103	2,204	2,297
Mary C O'Brien Accommodation District	DS	DS	DS
Florence Unified School District	239	256	284
Ray Unified District	15	DS	DS
Mammoth-San Manuel Unified District	30	34	31
Superior Unified School District	DS	DS	DS
Maricopa Unified School District	240	242	268
Coolidge Unified District	43	46	43
Apache Junction Unified District	137	132	114
Oracle Elementary District	19	19	DS
J O Combs Unified School District	142	154	169
Casa Grande Elementary District	289	283	271
Red Rock Elementary District	18	22	23
Eloy Elementary District	27	34	30
Toltec School District	59	53	60
Stanfield Elementary District	22	18	16
Picacho Elementary District	14	DS	DS
Pinal Region Charter Schools	469	469	497
Pinal County Schools	2,071	2,124	2,216
Arizona Schools	36,807	38,115	39,071

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

Child Health

Table 80. Health insurance coverage, 2015-2019 ACS

Geography	Estimated civilian non-institutionalized population (all ages)	Without health insurance (all ages)	Estimated number of children (ages 0-5)	Without health insurance (ages 0-5)
Pinal Region	398,773	8%	29,284	7%
Apache Junction-Gold Canyon	64,325	8%	2,418	6%
Casa Grande	67,083	10%	5,314	7%
Copper Corridor	17,223	6%	741	0%
Eloy-Arizona City	20,507	10%	1,522	3%
Florence-Coolidge	37,089	9%	3,194	9%
Maricopa-Ak Chin-Stanfield	57,758	8%	4,712	7%
Red Rock-Saddlebrooke	24,665	5%	1,656	9%
San Tan Valley-Queen Creek	110,124	9%	9,727	8%
Pinal County	406,677	9%	29,989	8%
Arizona	6,941,028	10%	517,639	7%
United States	319,706,872	9%	23,653,661	4%

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

Note: This table excludes persons in the military and persons living in institutions such as college dormitories. People whose only health coverage is the Indian Health Service (IHS) are considered "uninsured" by the U.S. Census Bureau.

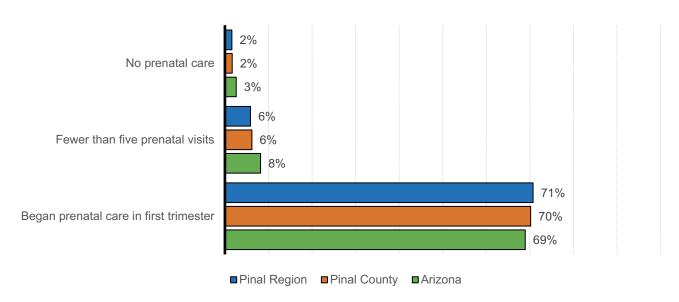
Table 81. Prenatal care for the mothers of babies born in 2018 and 2019

Geography	Calendar year	Number of births	Mother had no prenatal care	Mother had fewer than five prenatal visits	Mother began prenatal care in the first trimester		
Discal Descious	2018	4,456	1%	5%	70.9%		
Pinal Region	2019	4,437	2%	6%	70.7%		
Dinal County	2018	4,498	2%	6%	70.6%		
Pinal County	2019	4,497	2%	6%	70.2%		
Arimon	2018	80,539	3%	8%	68.8%		
Arizona	2019	79,183	3%	8%	68.9%		
Healthy People 2020	Healthy People 2020 Target 84.8%						

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

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

Figure 83. Prenatal care for the mothers of babies born in 2019



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

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

Table 82. WIC-enrolled women with pre-pregnancy obesity, 2019 to 2020

Geography	Women for whom pre- pregnancy weight is known, 2019	Women with pre-pregnancy	pre-pregnancy	weight is	Women with pre-pregnancy obesity, 2020	Percent with pre-pregnancy obesity, 2020
Pinal Region	2,153	813	38%	812	319	39%
Pinal County	2,251	842	37%	858	340	40%
Arizona	32,816	11,893	36%	14,640	5,449	37%

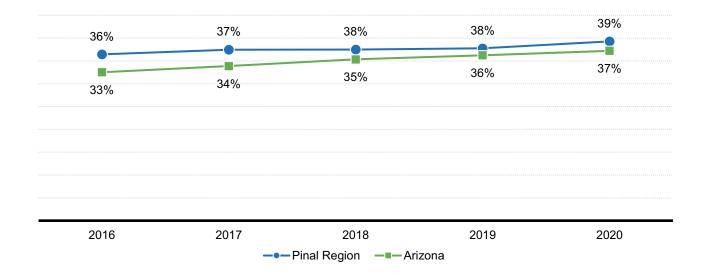
Source: Arizona Department of Health Services (2021). [WIC dataset]. Unpublished data.

Table 83. Pre-pregnancy obesity rate for WIC-enrolled women, 2016 to 2020

Geography	Pre-pregnancy obesity rate, 2016		Pre-pregnancy obesity rate, 2018	Pre-pregnancy obesity rate, 2019	Pre-pregnancy obesity rate, 2020
Pinal Region	36%	37%	38%	38%	39%
Pinal County	36%	37%	37%	37%	40%
Arizona	33%	34%	35%	36%	37%

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

Figure 84. Pre-pregnancy obesity rate for WIC-enrolled women, 2016 to 2020



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

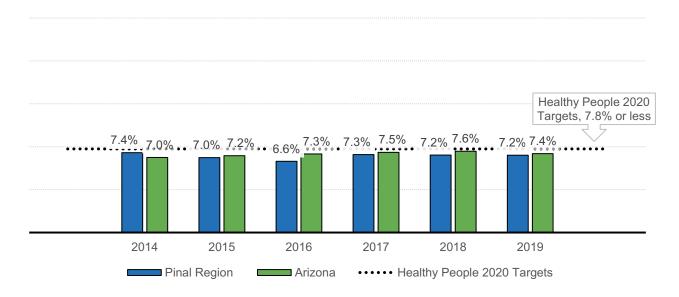
Table 84. Selected birth outcomes, 2018 to 2019

Geography	Calendar year	Number of births	Baby weighed less than 2500 grams	Baby was preterm (less than 37 weeks)	Baby was admitted to a NICU
Divel Denien	2018	2,988	7.2%	9.7%	8%
Pinal Region	2019	2,939	7.2%	9.5%	9%
Dinal County	2018	3,030	7.2%	9.9%	8%
Pinal County	2019	2,945	7.3%	9.7%	9%
Avizana	2018	80,539	7.6%	9.5%	8%
Arizona	2019	79,183	7.4%	9.3%	8%
Healthy People 20	020 Targets		7.8%	9.4%	

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

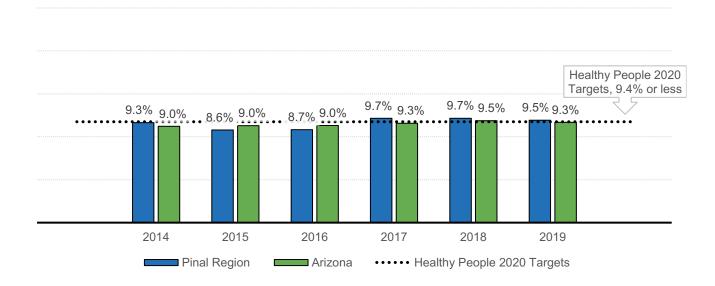
Note: The Healthy People 2030 target for preterm births remains 9.4% or fewer of live births.

Figure 85. Low birthweight births (less than 2,500 grams), 2014 to 2019



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

Figure 86. Preterm births (less than 37 weeks gestation), 2014 to 2020



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

Table 85. WIC-enrolled infants ever breastfed, 2020

Geography	Infants for whom breastfeeding status is determined	Infants ever breastfed	Percent of infants ever breastfed
Pinal Region	2,134	1,588	74%
Pinal County	2,268	1,678	75%
Arizona	32,545	25,322	78%

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

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

Geography	Breastfeeding rate, 2016		Breastfeeding rate, 2018	Breastfeeding rate, 2019	Breastfeeding rate, 2020
Pinal Region	72%	71%	72%	72%	74%
Pinal County	72%	71%	72%	72%	75%
Arizona	73%	77%	77%	79%	78%

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

Table 87. Weight status of WIC-enrolled children ages 2-4, 2020

Geography	Children ages 2-4 with known weight status	Children who are underweight	underweight		Percent obese
Pinal Region	1,626	67	4%	267	16%
Pinal County	1,704	72	4%	272	16%
Arizona	26,929	1,148	4%	4,318	16%

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

Table 88. Children ages 2-4 with obesity 2016 to 2020

	Number of children ages 2-4 with obesity					Percent of children ages 2-4 with obesity				
Geography	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
Pinal Region	717	715	725	697	267	14%	15%	16%	15%	16%
Pinal County	741	741	755	720	272	14%	14%	15%	15%	16%
Arizona	10,870	10,564	10,463	10,085	4,318	14%	14%	15%	15%	16%

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

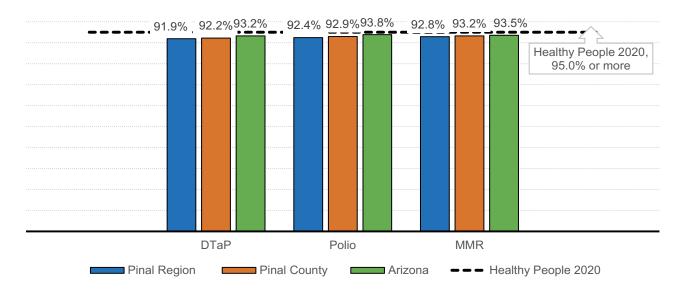
Table 89. Children in child care with selected required immunizations, 2019-20

Geography	Number Enrolled	DTaP	Polio	MMR	Religious Exemption	Medical Exemption	Exempt from Every Required Vaccine
Pinal Region	2,859	90.6%	91.4%	93.3%	7.5%	0.8%	2.9%
Apache Junction-Gold Canyon	393	86.0%	89.3%	90.3%	31.3%	1.5%	6.4%
Casa Grande	573	96.3%	97.6%	97.6%	1.4%	2.1%	1.4%
Copper Corridor	109	93.6%	96.3%	96.3%	3.7%	0.0%	2.8%
Eloy-Arizona City	43	88.4%	100.0%	100.0%	0.0%	0.0%	0.0%
Florence-Coolidge	309	88.0%	90.9%	98.1%	1.3%	0.6%	1.3%
Maricopa-Ak-Chin-Stanfield	489	90.4%	86.3%	89.6%	3.9%	0.0%	3.3%
Red Rock-Saddlebrooke	N/A	N/A	N/A	N/A	N/A	N/A	N/A
San Tan Valley-Queen Creek	943	89.6%	90.2%	91.6%	5.9%	0.4%	3.0%
Pinal County	3,260	91.6%	92.6%	94.1%	6.5%	0.8%	2.6%
Arizona	83,851	91.9%	93.4%	93.9%	5.0%	0.6%	3.1%
Healthy People 2020 Targets		90.0%	90.0%	90.0%			

Source: Arizona Department of Health Services (2021). Childcare Immunization Coverage, 2019-2020 School Year. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2020). Childcare Immunization Coverage by County, 2019-2020 School Year. Retrieved from

https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage

Figure 87. Kindergarteners with selected required immunizations, 2019-20



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

Table 90. Kindergarten immunization exemption rates, 2015-16 to 2019-20

	Kindergarteners with personal belief exemptions				Kindergarteners exempt from all vaccines					
Geography	2015- 16	2016- 17	2017- 18	2018- 19	2019- 20	2015- 16	2016- 17	2017- 18	2018- 19	2019- 20
Pinal Region	4.6%	6.4%	4.9%	5.9%	5.2%	2.3%	2.6%	3.5%	4.5%	3.2%
Apache Junction-Gold Canyon	4.7%	4.1%	7.1%	8.2%	2.8%	1.6%	0.0%	6.1%	8.2%	2.8%
Casa Grande	2.6%	2.1%	1.7%	2.8%	2.6%	2.1%	0.7%	2.3%	2.2%	1.5%
Copper Corridor	0.9%	0.0%	0.0%	1.1%	1.0%	0.0%	0.0%	0.0%	1.1%	1.0%
Eloy-Arizona City	0.7%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	2.0%
Florence-Coolidge	2.9%	7.1%	4.8%	4.1%	7.7%	2.0%	4.6%	2.3%	3.4%	4.8%
Maricopa-Ak-Chin-Stanfield	4.2%	5.6%	4.2%	5.7%	4.3%	2.2%	3.0%	3.0%	5.0%	2.8%
Red Rock-Saddlebrooke	2.1%	5.3%	0.0%	2.9%	2.1%	2.1%	2.4%	0.0%	2.2%	0.0%
San Tan Valley-Queen Creek	8.2%	11.8%	8.7%	9.0%	8.3%	3.1%	4.5%	5.4%	6.0%	4.8%
Pinal County	4.1%	6.1%	5.0%	5.5%	4.8%	1.8%	2.5%	3.4%	4.3%	3.0%
Arizona	4.5%	4.9%	5.4%	5.9%	5.4%	1.8%	2.4%	3.5%	3.8%	3.4%

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

Table 91. Confirmed and probable cases of infectious diseases in children ages birth to 4, 2018 to 2020

Geography	Calendar year	Pertussis (Whooping Cough)			_	Mumps	Measles
	2018	<6	<6	<6	0	0	0
Pinal County	2019	7	7	<6	0	0	0
	2020	<6	<6	<6	0	0	0
	2018	48	57	30	0	0	0
Arizona	2019	92	62	22	0	0	0
	2020	96	22	12	<6	<6	0

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

Table 92. Non-fatal hospitalizations and emergency department visits due to unintentional injuries for children ages birth to 4, 2016-2020 combined

Geography Pinal Region	Non-fatal inpatient hospitalizations for unintentional injuries	Non-fatal emergency department visits for unintentional injuries 10,386
Pinal County	195	10,492
Arizona	2,890	181,0135

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

Family Support and Literacy

Table 93. Number of deaths with opiates or opioids contributing, 2017 through 2020

Geography	Number of deaths with opiates or opioids contributing, 2017 through 2020
Pinal Region	129
Pinal County	218
Arizona	5,455

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

Note: Over a third (35%) of overdose deaths were missing address information, thus the discrepancy between the region and the county is predominantly due to missing addresses for deaths rather than deaths occurring in part of Pinal County not included in the Pinal Region

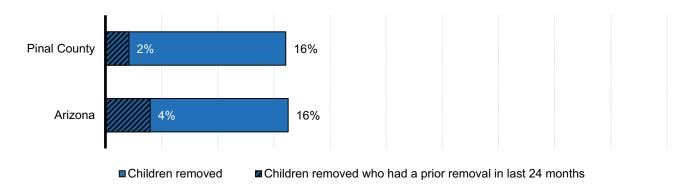
Table 94. Number of children ages birth to 5 removed by DCS, state fiscal years 2019 to 2020

Geography	Children (ages 0-5) removed (SFY 2019)	Children (ages 0-5) removed (SFY 2020)	Children (ages 0-5) removed (SFY2019-2020)	Children (ages 0- 5) in the population
Pinal Region	192	202	394	34,984
Apache Junction-Gold Canyon	27%	24%	25%	9%
Casa Grande	31%	41%	36%	15%
Copper Corridor	7%	4%	5%	3%
Eloy-Arizona City	15%	14%	15%	6%
Florence-Coolidge	DS	DS	DS	8%
Maricopa-Ak-Chin-Stanfield	9%	4%	7%	18%
Red Rock-Saddlebrooke	DS	DS	DS	3%
San Tan Valley-Queen Creek	9%	13%	11%	36%
Pinal County	N/A	N/A	N/A	N/A
Arizona	3,989	4,124	8,113	546,609

Source: Arizona Department of Child Safety (2021). [Child removal dataset]. Unpublished data. U.S. Census Bureau (2010). 2010 Decennial Census, Table P14. Retrieved from https://data.census.gov

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

Figure 88. Children ages birth to 17 removed by the Department of Child Services (DCS), June-Dec 2020



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

Table 95. Substantiated maltreatment reports by type for children ages birth to 17, June-Dec 2020

Geography Pinal Region	Total Substantiated Maltreatment Reports N/A		Physical Abuse N/A	Sexual Abuse	Emotional Abuse
Pinal County	142	75%	18%	6%	0%
Arizona	1,669	69%	25%	6%	0%

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

Table 96. Children ages birth to 17 removed by the Department of Child Services (DCS), June-Dec 2020

Geography Pinal Region	Total Reports N/A		Percent of children removed	Number of children with prior removal in last 24 months N/A	Percent of children with prior removal in last 24 months N/A
Pinal County	1,787	287	16%	6	2%
Arizona	30,526	4,967	16%	198	4%

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

APPENDIX 2: METHODS AND DATA SOURCES

The data contained in this report come from a variety of sources, including publicly available datasets and data requested from Arizona state agencies. Specific sources and methods used in this report are enumerated below.

U.S. Census and American Community Survey Data. The U.S. Census³⁹¹ is an enumeration of the population of the United States. It is conducted every ten years, and includes information about housing, race, and ethnicity. The 2010 U.S. Census data are available by census block. There are about 115,000 inhabited blocks in Arizona, with an average population of 56 people each. The Census data for the Pinal Region presented in this report were calculated by identifying each block in the region and aggregating the data over all of those blocks. The Census Bureau is expected to publish new block-level population estimates and detailed tables in 2023.

The American Community Survey (ACS)³⁹² is a survey conducted by the U.S. Census Bureau each month by mail, telephone, and face-to-face interviews. It covers many different topics, including income, language, education, employment, and housing. The ACS data are available by census tract. Arizona is divided into about 1,500 census tracts, with an average of about 4,200 people in each. The ACS data for the Pinal Region were calculated by aggregating over the census tracts which are wholly or partially contained in the region. The data from partial census tracts were apportioned according to the percentage of the 2010 Census population in that tract living inside the region. The most recent and most reliable ACS data are averaged over the past five years; those are the data included in this report. They are based on surveys conducted from 2015 to 2019. In general, the reliability of ACS estimates is greater for more populated areas. Statewide estimates, for example, are more reliable than county-level estimates.

Education Data from ADE. Education data from ADE included in this report were obtained through a custom tabulation of unredacted data files conducted by the vendor on a secure ADE computer terminal in the spring of 2021. The vendor worked with the regional director to create a list of all public and charter schools in the region based on the school's physical location within the region as well as local knowledge as to whether any schools located outside the region served a substantial number of children living within the region. This list was used to assign schools and districts to the region as well to aggregate school-level data to the region-level. This methodology differs slightly from the methods that ADE uses to allocate school-level data to counties, so county and region totals may vary in some tables. Data were presented over time where available; however, due to changes in the ADE data system and business rules over the past 3 years, some indicators could not be presented as a time series.

Child Care Capacity Calculations. Overall child care capacity estimates were compiled by merging multiple licensing and enrollment datasets from ADHS, DES, Quality First and local Head Start programs. Duplicate programs were identified and removed based on name, phone number and address. Programs that only serve children ages 5-12 were also removed, as these are typically before- & after-school programs that only serve school-age children. Providers were geocoded using addresses or coordinates provided in the various datasets to assign them to both regions and subregions. The child

care capacity estimates are meant to provide a best guess at the supply of child care slots in regulated care providers. These estimates do not reflect the capacity of unlicensed, unregulated or informal child care providers in the region. The estimated supply may also over-estimate availability in regulated care as it did not account for pandemic-related closures, child care providers that operate under licensed capacity by choice, or children who enroll in multiple facilities (e.g., a child who attends part-day Head Start or preschool in the morning and a child care center in the afternoon).

Data Suppression. To protect the confidentiality of program participants, the First Things First (FTF) Data Dissemination and Suppression Guidelines preclude our reporting social service and early education programming data if the count is less than 10 and preclude our reporting data related to health or developmental delay if the count is less than 6. In addition, some data received from state agencies are suppressed according to their own guidelines. The Arizona Department of Health Services (ADHS) does not report counts less than 6; the Arizona Department of Economic Security (DES) does not report counts between 1 and 9; and the Arizona Department of Education (ADE) does not report counts less than 11. Additionally, both ADE and DES require suppression of the second-smallest value or the denominator in tables where a reader might be able to use the numbers provided to calculate a suppressed value. Throughout this report, information which is not available because of suppression guidelines will be indicated by entries of "<6" or "<10" or "<11" for counts, or "DS" (data suppressed) for percentages. Data are sometimes not available for particular regions, either because a particular program did not operate in the region or because data are only available at the county level. Cases where data are not available will be indicated by an entry of "N/A."

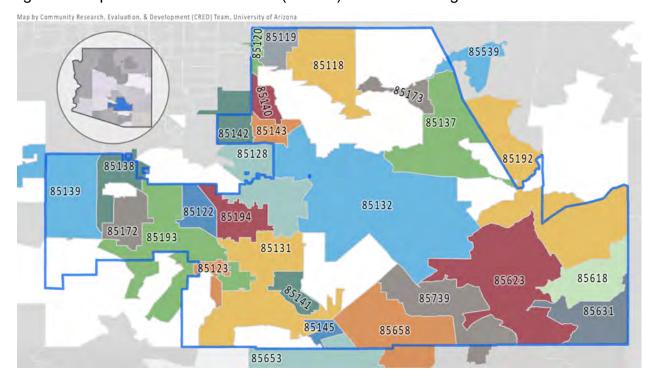
For some data, an exact number was not available because it was the sum of several numbers provided by a state agency, and some numbers were suppressed in accordance with agency guidelines or because the number was suppressed as a second-smallest value that could be used to calculate a suppressed value. In these cases, a range of possible numbers is provided, where the true number lies within that range. For example, for data from the sum of a suppressed number of children enrolled in Child-only TANF and 12 children enrolled in a household with TANF, the entry in the table would read "13 to 21." This is because the suppressed number of children in Child-only TANF is between 1 and 9, so the possible range of values is the sum of the 2 known numbers plus 1 on the lower bound to the sum of the 2 known numbers plus 9 on the upper bound. Ranges that include numbers below the suppression threshold of less than 6 or 10 may still be included if the upper limit of the range is above 6 or 10. Since a range is provided rather than an exact number, the confidentiality of program participants is preserved.

The Report Process. This report was the product of collaboration between the vendor, the regional director, the regional partnership council and the FTF Evaluation team. The vendor worked with the FTF Evaluation team to identify and review indicators for the report and prepare data requests to submit to state agencies. The regional partnership council, regional director, and the vendor worked together to define priority areas, identify local sources of data, and submit local data requests. The vendor worked to process, compile, analyze, and visualize data gathered as well as to review data for quality and accuracy. Following data analysis, visualization, and review, the vendor facilitated a data interpretation session with the regional director, the regional partnership council, and key stakeholders in the region.

This session aimed to allow participants to share their local knowledge and perspectives in interpreting the data collected. The vendor finally synthesized the data, analysis and findings from the data interpretation session in this report, which has been reviewed by the regional director and regional partnership council prior to publication.

APPENDIX 3: ZIP CODES OF THE PINAL REGION

Figure 89. Zip Code Tabulation Areas (ZCTAs) in the Pinal Region



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

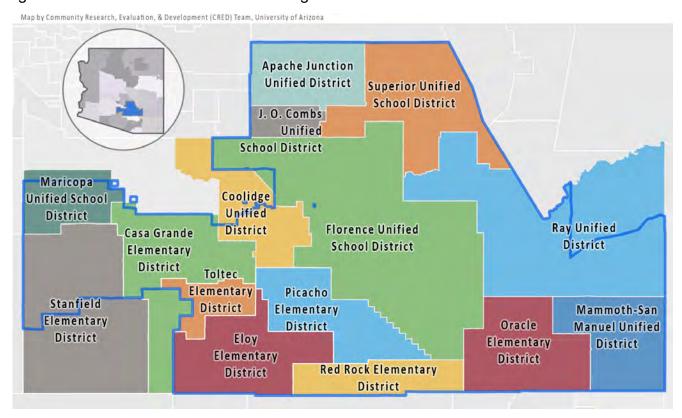
Table 97. Zip Code Tabulation Areas (ZCTAs) in the Pinal Region

Zip Code Tabulation	Population	Population	Total number	Households with young children	Percent of this ZCTA's total population living in	This ZCTA is shared
Area (ZCTA)	(all ages)	(ages 0-5)	of households	(ages 0-5)	the Pinal Region	with
Pinal Region	366,449	34,984	123,199	24,027		
85118	12,246	399	5,882	293	100%	
85119	21,219	1,246	9,271	895	100%	
85120	23,595	1,474	10,263	1,056	84%	Southeast Maricopa
85122	50,942	4,946	18,195	3,448	100%	
85123	10,663	1,132	4,008	790	100%	Tohono O'odham Nation
85128	13,633	1,568	4,506	1,012	92%	Gila River Indian Community
85131	18,017	1,176	3,412	763	100%	
85132	33,498	1,494	6,017	1,021	100%	Tohono O'odham Nation
85137	2,329	159	941	108	100%	
85138	33,614	4,247	11,204	2,960	100%	Gila River Indian Community
85139	17,855	2,044	5,798	1,386	99%	Southwest Maricopa
85140	36,711	5,468	11,068	3,661	100%	
85141	515	39	187	28	100%	
85142	16,491	2,245	5,115	1,524	34%	Southeast Maricopa
85143	35,015	4,662	10,985	3,184	100%	
85145	2,106	371	683	259	100%	
85172	1,368	184	380	125	100%	
85173	2,872	207	1,116	149	100%	
85192	1,426	91	529	68	67%	Gila
85193	4,484	422	1,477	280	91%	Tohono O'odham Nation
85194	6,721	406	2,734	291	100%	
85539	231	7	120	7	5%	Gila
85618	1,725	161	607	114	100%	
85623	4,073	249	1,676	188	100%	
85631	3,630	304	1,369	208	100%	
85653	8	0	3	0	0%	Pima North
85658	1,218	93	453	65	16%	Pima North
85739	10,182	187	5,178	141	57%	Pima North
No ZIP Code	62	3	22	3		

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

APPENDIX 4: SCHOOL DISTRICTS OF THE PINAL REGION

Figure 90. School Districts in the Pinal Region



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

Table 98. School Districts and Local Education Authorities (LEAs) in the Pinal Region

		Number of students in
Name of district or Local Education Agency (LEA)	Number of schools	
Pinal Region	115	17,810
Mary C O'Brien Accommodation District	2	DS
Florence Unified School District	14	2,349
Ray Unified District	3	DS
Mammoth-San Manuel Unified District	4	157
Superior Unified School District	3	101
Maricopa Unified School District	10	2,080
Coolidge Unified District	5	564
Apache Junction Unified District	7	863
Oracle Elementary District	1	DS
J O Combs Unified School District	8	1,267
Casa Grande Elementary District	12	2,594
Red Rock Elementary District	1	DS
Eloy Elementary District	3	348
Toltec School District	2	437
Stanfield Elementary District	1	180
Picacho Elementary District	1	83
Casa Grande Union High School District	3	N/A
Santa Cruz Valley Union High School District	2	N/A
Pinal Region Charter Schools	33	6,450
American Leadership Academy, Inc.	4	1,427
ARCHES Academy	1	16
Portable Practical Educational Preparation, Inc.	1	N/A
Southwest Education Center - Casa Grande	1	N/A
Fit Kids, Inc. dba Champion Schools	1	177
Excalibur Charter Schools, Inc.	2	161
Kaizen Education Foundation dba Vista Grove Preparatory Academy Middle School	1	N/A
American Charter Schools Foundation d.b.a. Apache Trail High School	1	N/A
Southwest Education Center	1	N/A
Pinnacle Education-Casa Grande, Inc.	1	N/A
Legacy Traditional Charter School - Maricopa	1	593
Eduprize Schools, LLC	1	876
Imagine Coolidge Elementary, Inc.	1	414
Imagine Prep Superstition, Inc.	1	N/A
Imagine Prep Coolidge, Inc.	1	N/A

Name of district or Local Education Agency (LEA)	Number of schools	Number of students in kindergarten through third grade
Imagine Superstition Middle, Inc.	1	N/A
Kaizen Education Foundation dba Mission Heights Preparatory High School	1	N/A
Leading Edge Academy Maricopa	1	390
Hope School	1	N/A
Graysmark Schools Corporation	1	N/A
Happy Valley East	1	324
Leading Edge Academy Queen Creek	1	190
Leading Edge Academy San Tan	1	N/A
Camino Montessori	1	N/A
Legacy Traditional Charter Schools - Casa Grande	1	600
Edkey, Inc Sequoia Pathway Academy	1	319
Legacy Traditional Charter School	1	616
The Grande Innovation Academy	1	347
ASU Preparatory Academy - Casa Grande	1	N/A

Source: Arizona Department of Education (2021). [Enrollment Dataset]. Received by Request. Custom tabulation of unpublished data by the University of Arizona CRED Team

Note: Schools were included in this list if they had 1 or more students enrolled in the 2019-20 school year according to the ADE enrollment dataset. NA indicates that a school reported no students in grades K-3.

APPENDIX 5: DATA SOURCES

- Arizona Department of Child Safety (2021). Semi-Annual Child Welfare Reports. Retrieved from https://dcs.az.gov/DCS-Dashboard
- Arizona Department of Child Safety (2021). [Child removal dataset]. Unpublished raw data received from the First Things First State Agency Data Request.
- Arizona Department of Economic Security. (2019). 2018 Child Care Market Rate Survey Report. Retrieved from https://des.az.gov/file/14277/download
- Arizona Department of Economic Security. (2021). [Child Care Market Rate Survey 2018, custom tabulation]. Data received from the First Things First State Agency Data Request.
- Arizona Department of Economic Security. (2021). [AzEIP Data]. Unpublished raw data received through the First Things First State Agency Data Request.
- Arizona Department of Economic Security. (2021). [Child Care Assistance Data]. Unpublished raw data received through the First Things First State Agency Data Request.
- Arizona Department of Economic Security. (2021). [DDD Data]. Unpublished raw data received through the First Things First State Agency Data Request.
- Arizona Department of Economic Security. (2021). [Division of Benefits and Medical Eligibility data set]. Unpublished raw data received from the First Things First State Agency Data Request.
- Arizona Department of Education (2021). [AzMERIT dataset]. Custom tabulation of unpublished data.
- Arizona Department of Education. (2021). [Chronic absence dataset]. Custom tabulation of unpublished data.
- Arizona Department of Education. (2021). [Graduation & dropout dataset]. Custom tabulation of unpublished data.
- Arizona Department of Education. (2019). [Health & Nutrition dataset]. Custom tabulation of unpublished data.
- Arizona Department of Education (2021). [Oct 1 enrollment dataset]. Custom tabulation of unpublished data.
- Arizona Department of Education (2021). [Special Education dataset]. Custom tabulation of unpublished data.
- Arizona Department of Health Services (2021). [Child asthma dataset]. Unpublished data received by request.
- Arizona Department of Health Services (2021). [Child diabetes dataset]. Unpublished data received by request.

- Arizona Department of Health Services (2021). [Child unintentional injuries dataset]. Unpublished data received by request.
- Arizona Department of Health Services (2021). [Child care licensing dataset]. Unpublished data received by request.
- Arizona Department of Health Services. (2021). [Immunizations dataset]. Unpublished raw data received from the First Things First State Agency Data Request.
- Arizona Department of Health Services. (2021). [Infectious disease dataset]. Unpublished raw data received from the First Things First State Agency Data Request.
- Arizona Department of Health Services (2021). [Opioid and Neonatal Abstinence Syndrome dataset]. Unpublished data received by request.
- Arizona Department of Health Services (2021). [WIC dataset]. Unpublished data received by request.
- Arizona Department of Health Services, Bureau of Public Health Statistics. (2021). [Vital Statistics Dataset]. Unpublished data received from the First Things First State Agency Data Request.
- Arizona Department of Health Services, Office of Disease Prevention and Health Promotion. (2020). Arizona Health Status and Vital Statistics, 2014-2019 Annual Reports. Retrieved from https://pub.azdhs.gov/health-stats/report/ahs/index.php
- Arizona Office of Economic Opportunity. (2020). Arizona Population Projections: 2018 to 2055, Medium Series. Retrieved from https://www.azcommerce.com/oeo/population/population-projections/
- Arizona Office of Economic Opportunity. (2021). Local area unemployment statistics (LAUS). Retrieved from https://www.azcommerce.com/oeo/labor-market/
- First Things First (2019). Quality First, a Signature Program of First Thing First. Unpublished data received by request
- U.S. Census Bureau. (2012). 2010 Decennial Census, Tables P1, P4, P11, P12A, P12B, P12C, P12D, P12E, P12F, P12G, P12H, P14, P20, P32, P41. Retrieved from https://data.census.gov/cedsci/
- U.S. Census Bureau. (2020). 2020 Decennial Census, Redistricting File. Retrieved from https://data.census.gov/cedsci/
- U.S. Census Bureau. (2019). American Community Survey 5-Year Estimates, 2014-2019, Table B05009, B09001, B10002, B14003, B15002, B16001, B16002, B16005, B17001, B17002, B17006, B17022, B19126, B23008, B23025, B25002, B25106, B27001, B28005, B28008, B28010. Retrieved from https://data.census.gov/cedsci/
- U.S. Census Bureau. (2020). 2019, 2017, & 2010 Tiger/Line Shapefiles prepared by the U.S. Census. Retrieved from http://www.census.gov/geo/maps-data/data/tiger-line.html

REFERENCES

¹ National Academies of Sciences, Engineering, and Medicine. (2016). *Parenting Matters: Supporting Parents of Children Ages 0-8*. Washington, DC: The National Academies Press. https://doi.org/10.17226/21868.

- ³ Hong, K., Dragan, K., & Glied, S. (2019). Seeing and hearing: The impacts of New York City's universal pre-kindergarten program on the health of low-income children. *Journal of Health Economics*, 64, 93-107.
- ⁴ Bakken, L., Brown, N., & Downing, B. (2017). Early childhood education: The long-term benefits. *Journal of Research in Childhood Education*, *31*(2), 255-269, DOI: 10.1080/02568543.2016.1273285
- ⁵ Rossin-Slater, M. (2013). WIC in your neighborhood: New evidence on the impacts of geographic access to clinics. *Journal of Public Economics*, 102, 51-69.
- ⁶ Campbell, F., Conti, G., Heckman, J. J., Moon, S. H., Pinto, R., Pungello, E., & Pan, Y. (2014). Early childhood investments substantially boost adult health. *Science*, *343*(6178), 1478-1485.
- ⁷ Hong, K., Dragan, K., & Glied, S. (2019). Seeing and hearing: The impacts of New York City's universal pre-kindergarten program on the health of low-income children. *Journal of Health Economics*, 64, 93-107.
- ⁸ Bakken, L., Brown, N., & Downing, B. (2017). Early childhood education: The long-term benefits. *Journal of Research in Childhood Education*, *31*(2), 255-269, DOI: 10.1080/02568543.2016.1273285
- ⁹ Rossin-Slater, M. (2013). WIC in your neighborhood: New evidence on the impacts of geographic access to clinics. *Journal of Public Economics*, 102, 51-69.
- ¹⁰ Frey, W. H. (2020). The nation is diversifying even faster than predicted, according to new census data. *Brookings*. Retrieved August 16, 2021 from https://www.brookings.edu/research/new-census-data-shows-the-nation-is-diversifying-even-faster-than-predicted/
- ¹¹ National Academies of Sciences, Engineering, and Medicine. (2016). *Parenting Matters: Supporting Parents of Children Ages 0-8*. Washington, DC: The National Academies Press. https://doi.org/10.17226/21868
- ¹² Halgunseth, L. (2009). Family engagement, diverse families and early childhood education programs: An integrated review of the literature. *Young Children*, *64*(5), 56-68.
- ¹³ National Academies of Sciences, Engineering, and Medicine. (2016). *Parenting Matters: Supporting Parents of Children Ages 0-8*. Washington, DC: The National Academies Press. https://doi.org/10.17226/21868
- ¹⁴ Pew Research Center. (2018). *The changing profile of unmarried parents*. Retrieved August 16, 2021 from https://www.pewsocialtrends.org/2018/04/25/the-changing-profile-of-unmarried-parents/
- ¹⁵ Vandivere, S., Yrausquin, A., Allen, T., Malm, K., and McKlindon, A. (2012). *Children in nonparental care: A review of the literature and analysis of data gaps*. Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Retrieved August 16, 2021 from http://aspe.hhs.gov/basic-report/children-nonparental-care-review-literature-and-analysis-data-gaps
- ¹⁶ Barnett, M. A., Yancura, L., Wilmoth, J., Sano, Y. (2016). Wellbeing among rural grandfamilies in two multigenerational household structures. *GrandFamilies: The Contemporary Journal of Research, Practice and Policy, 3* (1). Retrieved August 16, 2021 from http://scholarworks.wmich.edu/grandfamilies/vol3/iss1/4
- ¹⁷ Shonkoff, J. P., & Phillips, D. A. (Eds.). (2000). *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington, DC, US: National Academy Press.

² Campbell, F., Conti, G., Heckman, J. J., Moon, S. H., Pinto, R., Pungello, E., & Pan, Y. (2014). Early childhood investments substantially boost adult health. *Science*, *343*(6178), 1478-1485.

- ¹⁸ Taylor, Z. E., & Conger, R. D. (2014). Risk and resilience processes in single-mother families: An interactionist perspective. In Sloboda, Z. & Petras, H. (Eds.), *Defining prevention science* (pp. 195-217). Springer, Boston, MA.
- ¹⁹ Coles, R. L. (2015). Single-father families: A review of the literature. *Journal of Family Theory & Review*, 7(2), 144-166.
- ²⁰ Ellis, R. R., & Simmons, T. (2014). Coresident grandparents and their grandchildren: 2012. *Current Population Reports*, pp. 20-576. U.S. Census Bureau: Washington, DC.
- ²¹ Britto PR, Lye SJ, Proulx K, et al, and the Early Childhood Development Interventions Review Group, for the Lancet Early Childhood Development Series Steering Committee (2016). Nurturing care: promoting early childhood development. *Lancet*, 389, 91-102.
- ²² Ibid
- ²³ Harvard University, Center on the Developing Child "Serve & Return Interaction Shapes Brain Circuitry." Retrieved from http://developingchild.harvard.edu/resources/multimedia/videos/three_core_concepts/serve_and_return/
- ²⁴ Martin, J. A., Hamilton, B. E., Osterman, M. J. K., Driscoll, A. K., Schwartz, S., & Horon, I. (2021). Births: Final data for 2019. *National Vital Statistics Reports*, 70(2), 1–51.
- ²⁵ Centers for Disease Control and Prevention. (2021, July 16). *Risk for COVID-19 infection, hospitalization, and death by race/ethnicity*. Retrieved August 24, 2021 from https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html
- ²⁶ Indian Health Service. (2021, August 23). *Coronavirus (COVID-19)*. Retrieved August 24, 2021 from https://www.ihs.gov/coronavirus/
- ²⁷ Fortuny,K., Hernandez, D.J., Chaudry, A. (2010). Young children of immigrants: The leading edge of America's future. Urban Institute, Brief No. 3 (August 31, 2010). Retrieved September 14, 2021 from https://www.urban.org/research/publication/young-children-immigrants-leading-edge-americas-future
- ²⁸ Fortuny,K., Hernandez, D.J., Chaudry, A. (2010). Young children of immigrants: The leading edge of America's future. Urban Institute, Brief No. 3 (August 31, 2010). Retrieved September 14, 2021 from https://www.urban.org/research/publication/young-children-immigrants-leading-edge-americas-future
- ²⁹ Androff, D. K., Ayon, C., Becerra, D., & Gurrola, M. (2011). US immigration policy and immigrant children's well-being: The impact of policy shifts. *Journal of Sociology & Social Welfare, 38, 77*.
- ³⁰ Pedraza, F. I., Nichols, V. C., & LeBrón, A. M. (2017). Cautious citizenship: the deterring effect of immigration issue salience on health care use and bureaucratic interactions among Latino US citizens. *Journal of Health Politics, Policy and Law, 42*(5), 925-960.
- ³¹ Bernstein, H., Gonzalez, D., Karpman, M., & Zuckerman, S. (2019, May 22). One in seven adults in immigrant families reported avoiding public benefit programs in 2018. *Urban Institute*. Retrieved August 16, 2021 from https://www.urban.org/research/publication/oneseven-adults-immigrant-families-reported-avoiding-public-benefitprograms-2018
- ³² Artiga, S., & Ubri, P. (2017). *Living in an immigrant family in America: How fear and toxic stress are affecting daily life, well-being, & health.* Menlo Park, CA: Kaiser Family Foundation. Retrieved August 16, 2021 from https://www.kff.org/report-section/living-in-an-immigrant-family-in-america-issue-brief/
- ³³ Perreira, K. M., Crosnoe, R., Fortuny, K., Pedroza, J., Ulvestad, K., Weiland, C., ... Chaudry, A. (2012). *Barriers to immigrants' access to health and human services programs*. ASPE Issue Brief. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation. Retrieved August 16, 2021 from http://webarchive.urban.org/UploadedPDF/413260-Barriers-to-Immigrants-Access-to-Health-and-Human-Services-Programs.pdf
- ³⁴ Bernstein, H., McTarnaghan, S., & Gonzalez, D. (2019). Safety net access in the context of the public charge rule. *Urban Institute*. Retrieved August 16, 2021 from

https://www.urban.org/sites/default/files/publication/100754/safety_net_access_in_the_context_of_the_public_charge_rule_1_.pdf

- ³⁵ Ku, L. (2019, October 9). New evidence demonstrates that the public charge rule will harm immigrant families and others. *Health Affairs*. Retrieved September 14, 2021 from https://www.healthaffairs.org/do/10.1377/hblog20191008.70483/full/
- ³⁶ Capps, R., & Gelatt, J. (2020, May). Barriers to COVID-19 testing and treatment: Immigrants without health coverage in the United States. *Migration Policy Institute* (Fact Sheet). Retrieved August 24, 2021 from https://www.migrationpolicy.org/research/covid-19-testing-treatment-immigrants-health-insurance
- ³⁷ National Academies of Sciences, Engineering, and Medicine. (2017). Promoting the Educational Success of Children and Youth Learning English: Promising Futures. Washington, DC: The National Academies Press. https://doi.org/10.17226/24677.
- ³⁸ U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. (n.d.). The benefits of bilingualism. Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/tta-system/cultural-linguistic/docs/benefits-of-being-bilingual.pdf
- ³⁹ National Academies of Sciences, Engineering, and Medicine. (2017). Promoting the Educational Success of Children and Youth Learning English: Promising Futures. Washington, DC: The National Academies Press. https://doi.org/10.17226/24677.
- ⁴⁰ U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. (n.d.). The benefits of bilingualism. Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/tta-system/cultural-linguistic/docs/benefits-of-being-bilingual.pdf
- ⁴¹ National Academies of Sciences, Engineering, and Medicine. (2017). Promoting the Educational Success of Children and Youth Learning English: Promising Futures. Washington, DC: The National Academies Press. https://doi.org/10.17226/24677.
- ⁴² National Academies of Sciences, Engineering, and Medicine. (2017). Promoting the Educational Success of Children and Youth Learning English: Promising Futures. Washington, DC: The National Academies Press. https://doi.org/10.17226/24677.
- ⁴³ National Academies of Sciences, Engineering, and Medicine 2016. *Parenting Matters: Supporting Parents of Children Ages 0-8*. Washington, DC: The National Academies Press. https://doi.org/10.17226/21868.
- ⁴⁴ Arizona Department of Education. (2021). SEI Program Model Implementation Guide | School Year 2020-2021. Retrieved November 14, 2021 from https://www.azed.gov/sites/default/files/2020/04/SEI%20Program%20Model%20Implementation%20Guide%204-24-20 FINAL.pdf?id=5ea84cbf03e2b3109cb101d9
- ⁴⁵ Center for Translational Neuroscience. (2020, November 11). *Home alone: The pandemic is overloading single-parent families*. Medium. Retrieved August 18, 2021 from https://medium.com/rapid-ec-project/home-alone-the-pandemic-is-overloading-single-parent-families-c13d48d86f9e
- ⁴⁶ Center for Translational Neuroscience. (2020, December 1). Facing hunger: The weight of the pandemic Is falling on American families. Medium. Retrieved August 18, 2021 from https://medium.com/rapid-ec-project/facing-hunger-the-weight-of-the-pandemic-is-falling-on-american-families-1cbeb047a955
- ⁴⁷ Center for Translational Neuroscience. (2020, June 24). Flattening the other curve: Trends for young children's mental health are good for some but concerning for others. Medium. Retrieved August 18, 2021 from https://medium.com/rapid-ec-project/flattening-the-other-curve-7be1e574b340
- ⁴⁸ Center for Translational Neuroscience (2020, September 8). *Something's gotta give: Parents face an untenable set of demands as schools and child care providers begin a new academic year.* Medium. Retrieved August 18, 2021 from https://medium.com/rapid-ec-project/somethings-gotta-give-6766c5a88d18

⁴⁹ Generations United (2011). *Family Matters: Multigenerational Families in a Volatile Economy*. Retrieved October 15, 2021 from https://www.gu.org/app/uploads/2018/05/SignatureReport-Family-Matters-Multigen-Families.pdf

- ⁵⁰ Ellis, R., & Simmons, T. (2014). Co-resident Grandparents and Their Grandchildren: 2012, *Current Population Reports, P20-576*, U.S. Census Bureau: Washington, DC.
- ⁵¹ Baker, L. A., Silverstein, M., & Putney, N. M. (2008). Grandparents raising grandchildren in the United States: Changing family forms, stagnant social policies. *Journal of societal & social policy*, 7, 53.
- ⁵² Chan, K.L., Chen, M., Lo, K.M.C, Chen, Q., Kelley, S., & Ip, P. (2019). The effectiveness of Interventions for grandparents raising grandchildren: A meta-analysis. *Research on Social Work Practice*, 29,607-617.
- ⁵³ American Association for Marriage and Family Therapy. (2015). Grandparents raising grandchildren. Retrieved from http://www.aamft.org/imis15/AAMFT/Content/Consumer Updates/Grandparents Raising Grandchildren.aspx
- ⁵⁴ Department of Health and Human Services, Administration for Children and Families, and Children's Bureau. (2016). Site visit report: Arizona Kinship Navigator Project. Retrieved September 14, 2021 from https://www.childwelfare.gov/pubPDFs/azkinship.pdf
- ⁵⁵ Healthy People 2020. (n.d.). Social determinants of health. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved September 14, 2021 from https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health
- ⁵⁶ Child Trends. (2014, January 8). *5 Ways Poverty Harms Children*. Retrieved September 14, 2021 from https://www.childtrends.org/child-trends-5/5-ways-poverty-harms-children
- ⁵⁷ Hair, N. L., Hanson, J. L., Wolfe, B. L., & Pollak, S. D. (2015). Association of child poverty, brain development, and academic achievement. *JAMA pediatrics*, *169*(9), 822-829.
- ⁵⁸ Brooks-Gunn, J. & Duncan, G. (1997). The effects of poverty on children. *Children and Poverty*, 7(2), 55-71.
- ⁵⁹ McLoyd, V. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, *53*(2), 185-204. doi:10.1037/0003-066X.53.2.185
- ⁶⁰ Ratcliffe, C. & McKernan, S. (2012). Child poverty and its lasting consequences. *Low-Income Working Families Series*, The Urban Institute. Retrieved September 14, 2021 from http://www.urban.org/research/publication/child-poverty-and-its-lasting-consequence/view/full report
- ⁶¹ Duncan, G., Ziol-Guest, K., & Kalil, A. (2010). Early-childhood poverty and adult attainment, behavior, and health. *Child Development*, *81*(*1*), 306-325. Retrieved September 14, 2021 from http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8624.2009.01396.x/full
- ⁶² Gupta, R., de Wit, M., & McKeown, D. (2007). The impact of poverty on the current and future health status of children. *Pediatrics & Child Health*, *12*(8), 667-672.
- ⁶³ Jensen, S. K. G., Berens, A. E., & Nelson, C. A. (2017). Effects of poverty on interacting biological systems underlying child development. *The Lancet Child & Adolescent Health*, *1*(3), 225–239. https://doi.org/10.1016/s2352-4642(17)30024-x
- ⁶⁴ Brisson, D., McCune, S., Wilson, J. H., Speer, S. R., McCrae, J. S., & Hoops Calhoun, K. (2020). A systematic review of the association between poverty and biomarkers of toxic stress. *Journal of Evidence-Based Social Work*, 17(6), 696-713.
- ⁶⁵ Wagmiller, R. & Adelman, R. (2009). Children and intergenerational poverty: The long-term consequences of growing up poor. New York, NY: National Center for Children in Poverty. Retrieved September 14, 2021 from http://www.nccp.org/publications/pub 909.html
- ⁶⁶ Duncan, G., Ziol-Guest, K., & Kalil, A. (2010). Early-childhood poverty and adult attainment, behavior, and health. *Child Development*, 81(1), 306-325. Retrieved September 14, 2021 from http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8624.2009.01396.x/full

⁶⁷ Alaimo, K., Olson, C.M., Frongillo Jr, E.A. and Briefel, R.R., 2001. Food insufficiency, family income, and health in US preschool and school-aged children. *American Journal of Public Health*, *91*(5), p.781.

- ⁶⁸ Hill, M.S. and Duncan, G.J., 1987. Parental family income and the socioeconomic attainment of children. *Social Science Research*, *16*(1), pp.39-73.
- ⁶⁹ Larson, K. and Halfon, N., 2010. Family income gradients in the health and health care access of US children. *Maternal and child health journal*, *14*(3), pp.332-342.
- ⁷⁰ Gilman, S.E., Kawachi, I., Fitzmaurice, G.M. and Buka, S.L., 2002. Socioeconomic status in childhood and the lifetime risk of major depression. *International journal of epidemiology*, *31*(2), pp.359-367.
- ⁷¹ Coleman-Jensen, A., Rabbitt, M. P., Gregory, C. A., & Singh, A. (2021). Household food security in the United States in 2020, ERR-298. *US Department of Agriculture, Economic Research Service*.
- ⁷² Coleman-Jensen, A., Rabbitt, M. P., Gregory, C. A., & Singh, A. (2021). Household food security in the United States in 2020, ERR-298. *US Department of Agriculture, Economic Research Service*.
- ⁷³ Food Research and Action Center. (2013). SNAP and Public Health: The role of the Supplemental Nutrition Assistance Program in improving the health and well-being of Americans. Retrieved September 14, 2021 from http://frac.org/pdf/snap and public health 2013.pdf
- ⁷⁴ Cohen, J., Hecht, A. A., McLoughlin, G. M., Turner, L., & Schwartz, M. B. (2021). Universal School Meals and Associations with Student Participation, Attendance, Academic Performance, Diet Quality, Food Security, and Body Mass Index: A Systematic Review. *Nutrients*, *13*(3), 911. https://doi.org/10.3390/nu13030911
- ⁷⁵ Carlson, S., & Neuberger, Z. (2015). *WIC Works: Addressing the nutrition and health needs of low-income families for 40 years*. Washington, DC: Center on Budget and Policy Priorities. Retrieved September 14, 2021 from http://www.cbpp.org/research/food-assistance/wic-works-addressing-the-nutrition-and-health-needs-of-low-income-families
- ⁷⁶ Healthy People 2020. (n.d.). Social determinants of health. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved September 14, 2021 from https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health
- ⁷⁷ Berger, R.P., Fromkin, J.B., Stutz, H., Makoroff, K., Scribano, P.V., Feldman, K., Tu, L.C. and Fabio, A., 2011. Abusive head trauma during a time of increased unemployment: a multicenter analysis. *Pediatrics*, *128*(4), pp.637-643. Retrieved September 14, 2021 from https://pediatrics.aappublications.org/content/128/4/637.short
- ⁷⁸ Isaacs, J. (2013). Unemployment from a child's perspective. Retrieved September 14, 2021 from http://www.urban.org/UploadedPDF/1001671-Unemployment-from-a-Childs-Perspective.pdf
- ⁷⁹ McCoy-Roth, M., Mackintosh, B., & Murphey, D. (2012). When the bough breaks: The effects of homelessness on young children. *Child Health*, *3*(*1*). Retrieved September 14, 2021 from http://www.childtrends.org/wp-content/uploads/2012/02/2012-08EffectHomelessnessChildren.pdf
- ⁸⁰ Stuart Gabriel and Gary Painter. 2017. "Why Affordability Matters," 4–23. Presentation at Housing Affordability: Why Does It Matter, How Should It Be Measured, and Why Is There an Affordability Problem? American Enterprise Institute, 5–6 April 2017. Accessed 10 April 2017. Available online at: https://www.aei.org/wp-content/uploads/2017/04/CHA-Panel-1.pdf
- 81 Federal Interagency Forum on Child and Family Statistics. (2015). America's children: Key national indicators for well-being, 2015. Washington, DC: U.S. Government Printing Office. Retrieved September 14, 2021 from https://www.childstats.gov/pdf/ac2015/ac_15.pdf
- ⁸² Schwartz, M. & Wilson, E. (n.d.). Who can afford to live in a home? A look at data from the 2006 American Community Survey. U.S. Census Bureau. Retrieved September 14, 2021 from https://www.census.gov/housing/census/publications/who-can-afford.pdf
- ⁸³ U.S. Census Bureau (2021). Household Pulse Survey Data, Phases 1, 2, & 3. Retrieved from https://www.census.gov/programs-surveys/household-pulse-survey.html

⁸⁴ U.S. Department of Health & Human Services Office of the Assistant Secretary for Planning and Evaluation. (2019). *2019 Poverty Guidelines*. Retrieved August 21, 2021 from https://aspe.hhs.gov/2019-poverty-guidelines

- ⁸⁵ U.S. Department of Health & Human Services Office of the Assistant Secretary for Planning and Evaluation. (2021). *2020 Poverty Guidelines*. Retrieved August 23, 2021 from https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references/2020-poverty-guidelines
- ⁸⁶ Pearce, D. (2019) The Self-Sufficiency Standard. Retrieved September 14, 2021 from http://www.selfsufficiencystandard.org/the-standard
- ⁸⁷ Center for Women's Welfare. (2021). *Arizona* | *Self Sufficiency Standard* (Version 2021) [Dataset]. Retrieved September 14, 2021 from http://www.selfsufficiencystandard.org/arizona
- ⁸⁸ Arizona Department of Economic Security. (2021). *TANF Jobs Program*. Arizona Department of Economic Security. Retrieved September 2, 2021 from https://des.az.gov/services/employment/job-seekers/tanf-jobs-program
- 89 https://www.azleg.gov/legtext/54leg/2R/bills/HB2904H.htm
- ⁹⁰ Floyd, I. (2016, July 5). *Arizona Cuts TANF Time Limit to Shortest Nationwide*. Center on Budget and Policy Priorities. Retrieved September 2, 2021 from: https://www.cbpp.org/blog/arizona-cuts-tanf-time-limit-to-shortest-nationwide
- ⁹¹ IRS. (2021) Questions and Answers about the First Economic Impact Payment Topic A: Eligibility. Retrieved August 24, 2021 from https://www.irs.gov/newsroom/questions-and-answers-about-the-first-economic-impact-payment-topic-a-eligibility
- ⁹² USA.gov. (2021). *Advance Child Tax Credit and Economic Impact Payments Stimulus Checks*. Retrieved August 25, 2021 from https://www.usa.gov/covid-stimulus-checks
- ⁹³ Children's Action Alliance. (2021, January 27). *Immigrant families should not be excluded from COVID-19 response*. Retrieved September 14, 2021 from https://azchildren.org/news-and-events/immigrant-families-should-not-be-excluded-from-covid-19-response/
- ⁹⁴ Congressional Research Service. (2021, January 19). *Noncitizen eligibility for the second round of direct payments to individuals* (No. IN11579). Retrieved September 14, 2021 from https://www.aila.org/File/Related/20030201cn.pdf
- ⁹⁵ Protecting Immigrant Families. (2021, March 26). *Immigrant eligibility for public programs during COVID-19*. Retrieved August 24, 2021 from https://protectingimmigrantfamilies.org/immigrant-eligibility-for-public-programs-during-covid-19/
- ⁹⁶ Economic Research Service, U.S. Department of Agriculture. (2021). *Definitions of Food Security*. Retrieved August 25, 2021 from https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/
- ⁹⁷ Rose-Jacobs, R., Black, M., Casey, P., Cook, J., Cutts, D., Chilton, M., Heeren, T., Levenson, S., Meyers, A., & Frank, D. (2008). Household food insecurity: Associations with at-risk infant and toddler development. *Pediatrics, 121(1)*, 65-72. Retrieved from http://pediatrics.aappublications.org/content/121/1/65.full.pdf
- ⁹⁸ Ryan-Ibarra, S., Sanchez-Vaznaugh, E., Leung, C., & Induni, M. (2016). The relationship between food insecurity and overweight/obesity differs by birthplace and length of residence. *Public Health Nutrition*, 1-7. Retrieved from <a href="https://www.cambridge.org/core/journals/public-health-nutrition/article/div-classtitlethe-relationship-between-food-insecurity-and-overweightobesity-differs-by-birthplace-and-length-of-us-residencediv/4BEE4D6C09F9FFCABEE404F9E313BE7C
- ⁹⁹ Food and Nutrition Service, U.S. Department of Agriculture. (n.d.). *Supplemental Nutrition Assistance Program (SNAP)*. Retrieved from https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program
- ¹⁰⁰ Food and Nutrition Service, U.S. Department of Agriculture. (n.d.). *Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)*. Retrieved from https://www.fns.usda.gov/wic
- ¹⁰¹ Food and Nutrition Service, U.S. Department of Agriculture. (n.d.). *National School Lunch Program*. Retrieved from https://www.fns.usda.gov/nslp

- ¹⁰² Food and Nutrition Service, U.S. Department of Agriculture. (n.d.). *School Breakfast Program*. Retrieved from https://www.fns.usda.gov/sbp/school-breakfast-program
- ¹⁰³ Food and Nutrition Service, U.S. Department of Agriculture. (n.d.). *Summer Food Service Program*. Retrieved from https://www.fns.usda.gov/sfsp/summer-food-service-program
- ¹⁰⁴ Food and Nutrition Service, U.S. Department of Agriculture. (n.d.). *Child and Adult Care Food Program*. Retrieved from https://www.fns.usda.gov/cacfp/child-and-adult-care-food-program
- ¹⁰⁵ Coleman-Jensen, A., Rabbitt, M.P., Gregory, C.A., & Singh, A. (2020). *Household food security in the United States in 2019, ERR-275*. U.S. Department of Agriculture, Economic Research Service. Retrieved August 25, 2021 from https://www.ers.usda.gov/webdocs/publications/99282/err-275.pdf
- ¹⁰⁶ Food Research and Action Center. (2013). SNAP and Public Health: The role of the Supplemental Nutrition Assistance Program in improving the health and well-being of Americans. Retrieved from http://frac.org/pdf/snap and public health 2013.pdf
- ¹⁰⁷ Rosenbaum, D., & Keith-Jennings, B. (2019, June 6). *SNAP caseload and spending declines have accelerated in recent years*. Center on Budget and Policy Priorities. Retrieved September 8, 2021 from https://www.cbpp.org/research/food-assistance/snap-caseload-and-spending-declines-have-accelerated-in-recent-years
- ¹⁰⁸ Food Research and Action Center. (2013). SNAP and Public Health: The role of the Supplemental Nutrition Assistance Program in improving the health and well-being of Americans. Retrieved from http://frac.org/pdf/snap and public health 2013.pdf
- ¹⁰⁹ Prevalence and distribution of food insecurity status by SNAP participation and poverty level, 2019. Retrieved August 25, 2021 from: https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/interactive-charts-and-highlights/#disability
- ¹¹⁰ Feeding America . (2020). *The Impact of the Coronavirus on Food Insecurity*. Retrieved March 30, 2021 from https://www.feedingamerica.org/sites/default/files/2020-04/Brief Impact%20of%20Covid%20on%20Food%20Insecurity%204.22%20%28002%29.pdf
- ¹¹¹ Grose, J. (2020, May 6). Families Scramble to Find Baby Formula, Diapers and Wipes. *The New York Times*. Retrieved September 14, 2021 from https://www.nytimes.com/2020/03/30/parenting/coronavirus-baby-formula-shortages-wipes-diapers.html
- 112 For more information on the Arizona WIC Program, visit http://azdhs.gov/prevention/azwic/
- ¹¹³ Carlson, S., & Neuberger, Z. (2015). *WIC Works: Addressing the nutrition and health needs of low-income families for 40 years*. Washington, DC: Center on Budget and Policy Priorities. Retrieved from http://www.cbpp.org/research/food-assistance/wic-works-addressing-the-nutrition-and-health-needs-of-low-income-families
- ¹¹⁴ Arizona Department of Health Services. (2017, April). *Arizona clinic eWIC readiness toolkit*. https://azdhs.gov/documents/prevention/azwic/agencies/trainers/training-resources/ewic-clinic-readiness-toolkit.pdf
- ¹¹⁵ Vasan, A., Kenyon, C. C., Feudtner, C., Fiks, A. G., & Venkataramani, A. S. (2021). Association of WIC Participation and Electronic Benefits Transfer Implementation. *JAMA Pediatrics*, 175(6), 609. https://doi.org/10.1001/jamapediatrics.2020.6973
- ¹¹⁶ Smith, M.V., Kruse, A., Weir, A. and Goldblum, J., 2013. Diaper need and its impact on child health. *Pediatrics*, *132*(2), pp.253-259.
- ¹¹⁷ For more information see: https://www.azed.gov/hns/cacfp
- ¹¹⁸ Arizona Department of Education. (2021, June 14). *Introduction to the CACFP* [Video]. Vimeo. https://vimeo.com/562872764
- ¹¹⁹ For more information see: https://www.azed.gov/hns/sfsp

¹²⁰ United States Department of Agriculture. (n.d.). *How to participate in summer meals*. Retrieved October 26, 2021, from https://fns-prod.azureedge.net/sites/default/files/resource-files/SFSP-Fact-Sheet.pdf

- ¹²¹ National Center for Children in Poverty. (2014). *Arizona demographics for low-income children*. Retrieved from http://www.nccp.org/profiles/AZ profile 6.html
- ¹²² Isaacs, J. (2013). *Unemployment from a child's perspective*. Retrieved from http://www.urban.org/UploadedPDF/1001671-Unemployment-from-a-Childs-Perspective.pdf
- ¹²³ For a discussion of current trends in labor force participation versus employment, see <u>Uchitelle</u>, L. (July 11, 2019). "Unemployment Is Low, but That's Only Part of the Story." Retrieved from https://www.nytimes.com/2019/07/11/business/low-unemployment-not-seeking-work.html
- ¹²⁴ Arizona Department of Economic Security. (2021, September 4). *Historical context*. Unemployment Insurance Data Dashboard. Retrieved September 9, 2021 from https://des.az.gov/ui-data-dashboard
- ¹²⁵ U.S. Department of Labor. (n.d.). *Unemployment insurance relief during COVID-19 outbreak*. Retrieved September 9, 2021 from https://www.dol.gov/coronavirus/unemployment-insurance
- ¹²⁶ U.S. Department of Labor. (2021, January 11). New COVID-19 unemployment benefits: Answering common questions. U.S. Department of Labor Blog. Retrieved September 14, 2021 from https://blog.dol.gov/2021/01/11/unemployment-benefits-answering-common-questions
- ¹²⁷ Arizona Department of Economic Security. (n.d.). *Arizona's back to work program*. Retrieved September 9, 2021 from https://des.az.gov/back-to-work-program
- ¹²⁸ Office of the Governor. (2021, May 13). *Governor Ducey announces "Arizona Back to Work."* Office of the Arizona Governor. Retrieved September 14, 2021 from https://azgovernor.gov/governor/news/2021/05/governor-ducey-announces-arizona-back-work
- ¹²⁹ Center for American Progress. (2018). *Child Care Access in Arizona*. Retrieved August 31, 2021 from https://childcaredeserts.org/2018/index.html?state=AZ
- ¹³⁰ Center for American Progress. (2019). *Early learning factsheet 2019* | *Arizona*. Retrieved September 14, 2021 from https://cdn.americanprogress.org/content/uploads/2019/09/12064343/Arizona.pdf
- ¹³¹ Arizona Department of Economic Security. (n.d.). *Essential workers child care relief scholarship program*. Retrieved October 6, 2021, from https://des.az.gov/services/child-and-family/child-care/emergency-child-care-scholarship-program
- ¹³² McCoy-Roth, M., Mackintosh, B., & Murphey, D. (2012). When the bough breaks: The effects of homelessness on young children. *Child Health*, *3*(*1*). Retrieved from: http://www.childtrends.org/wp-content/uploads/2012/02/2012-08EffectHomelessnessChildren.pdf
- 133 Herbert, C., Hermann, A. and McCue, D. (2018). Measuring Housing Affordability: Assessing the 30 Percent of Income Standard. Cambridge, MA: Joint Center for Housing Studies of Harvard University. Retrieved September 14, 2021 from https://www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_Herbert_Hermann_McCue_measuring_housing_affordability_pdf
- ¹³⁴ Gabriel, S. and Painter, G. (2017). "Why Affordability Matters," 4–23. Presentation at Housing Affordability: Why Does It Matter, How Should It Be Measured, and Why Is There an Affordability Problem? American Enterprise Institute, 5–6 April 2017. Retrieved September 14, 2021 from https://www.aei.org/wp-content/uploads/2017/04/CHA-Panel-1.pdf
- ¹³⁵ Federal Interagency Forum on Child and Family Statistics. (2015). America's children: Key national indicators for wellbeing, 2015. Washington, DC: U.S. Government Printing Office. Retrieved September 14, 2021 from https://www.childstats.gov/pdf/ac2015/ac 15.pdf
- ¹³⁶ Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

- ¹³⁷ Consumer Financial Protection Bureau. (2021, March). Housing insecurity and the COVID-19 pandemic. Retrieved September 14, 2021 from https://files.consumerfinance.gov/f/documents/cfpb_Housing_insecurity_and_the_COVID-19_pandemic.pdf
- ¹³⁸ National Low Income Housing Coalition. (2021, March). American Rescue Plan Act. Retrieved September 14, 2021 from https://nlihc.org/sites/default/files/COVID-Relief-Budget Reconciliation.pdf
- ¹³⁹ Aiken, C., Reina, V., Verbrugge, J., Aurand, A., Yae, R., Gould Ellen, I., & Haupert, T. (2021, March). Learning from Emergency Rental Assistance Programs: Lessons from fifteen case studies. National Low Income Housing Coalition. Retrieved September 14, 2021 from https://nlihc.org/sites/default/files/ERA-Programs-Case-Study.pdf
- ¹⁴⁰ Snow, A. (2021, August 28). Eviction ban's end will allow pandemic lockouts to resume. Associated Press. Retrieved September 14, 2021 from https://apnews.com/article/business-health-coronavirus-pandemic-us-supreme-court-6e0841065389f4d2cf6f8b5aff38e994
- ¹⁴¹ Kinsner, K., Parlakian, R., Sanchez, G., Manzano, S., & Baretto, M. (2018). Millennial Connections: Findings from ZERO TO THREE's 2018 Parent Survey Executive Summary. *ZERO TO THREE*. Retrieved from https://www.zerotothree.org/resources/2475-millennial-connections-executive-summary
- ¹⁴² OECD. (2001). *Understanding the digital divide*. Paris, France: OECD Publications.
- ¹⁴³ OECD. (2001). *Understanding the digital divide*. Paris, France: OECD Publications.
- ¹⁴⁴ Gonzales, A. (2016). The contemporary US digital divide: from initial access to technology maintenance. *Information, Communication & Society*, 19(2), pp. 234-248, DOI: 10.1080/1369118X.2015.1050438
- ¹⁴⁵ Pew Research Center. (2019, June 12). *Internet/Broadband Fact Sheet*. Retrieved from https://www.pewresearch.org/internet/fact-sheet/internet-broadband/
- ¹⁴⁶ Prieger, J. E. (2013). The broadband digital divide and the economic benefits of mobile broadband for rural areas. *Telecommunications Policy*, *37*(6-7), 483-502.
- ¹⁴⁷ Prieger, J.E. (2013). The broadband digital divide and the economic benefits of mobile broadband for rural areas. *Telecommunications Policy*, *37*(6-7), 483-502.
- ¹⁴⁸ Sallet, J. (2017). *Better together: Broadband deployment and broadband competition*. Retrieved from https://www.brookings.edu/blog/techtank/2017/03/15/better-together-broadband-deployment-and-broadband-competition/
- ¹⁴⁹ Federal Communications Commission. (2015). 2015 Broadband progress report and notice of inquiry on immediate action to accelerate deployment. *Federal Communications Commission*. Retrieved from https://apps.fcc.gov/edocs-public/attachmatch/DOC-342358A1.pdf
- ¹⁵⁰ Prieger, J. E. (2013). The broadband digital divide and the economic benefits of mobile broadband for rural areas. *Telecommunications Policy*, *37*(6-7), 483-502.
- ¹⁵¹ Rideout, V. J. & Katz, V.S. (2016). Opportunity for all? Technology and learning in lower-income families. A report of the Families and Media Project. New York: The Joan Ganz Cooney Center at Sesame Workshop.
- ¹⁵² Chandra, S., Fazlullah, A., Hill, H., Lynch, J., McBride, L., Weiss, D., Wu, M. (2020). Connect all students: How states and school districts can close the digital divide. San Francisco, CA: Common Sense Media
- ¹⁵³ Ali, T., Chandra, S., Cherukumilli, S., Fazlullah, A., Galicia, E., Hill, H., McAlpine, N., McBride, L., Vaduganathan, N., Weiss, D., Wu, M. (2021). Looking back, looking forward: What it will take to permanently close the K–12 digital divide. San Francisco, CA: Common Sense Media.
- ¹⁵⁴ Healthy People 2020. (n.d.). *Social determinants*. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved from https://www.healthypeople.gov/2020/leading-health-indicators/2020-lhi-topics/Social-Determinants

- ¹⁵⁵ National Research Council. 2012. *Key National Education Indicators: Workshop Summary*. Washington, DC: The National Academies Press. https://doi.org/10.17226/13453
- ¹⁵⁶ Healthy People 2020. (n.d.). *Adolescent health*. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved August 20, 2021 from https://www.healthypeople.gov/2020/topics-objectives/topic/Adolescent-Health
- ¹⁵⁷ Child Trends Data Bank. (2015). Parental education: Indicators on children and youth. Retrieved September 7, 2021 from https://web.archive.org/web/20150525195005/http://www.childtrends.org/wp-content/uploads/2012/04/67-Parental Education.pdf
- ¹⁵⁸ Rathbun, A., & McFarland, J. (2017). Risk factors and academic outcomes in kindergarten through third grade. *National Center for Education Statistics*. Retrieved September 7, 2021 from https://nces.ed.gov/programs/coe/pdf/coe_tgd.pdf
- ¹⁵⁹ The Annie E. Casey Foundation. (2013). The first eight years: Giving kids a foundation for lifetime success. Retrieved from http://www.aecf.org/m/resourcedoc/AECF-TheFirstEightYearsKCpolicyreport-2013.pdf
- ¹⁶⁰ Anderson, L., Shinn, C., Fullilove, M., Scrimshaw, S., Fielding, J., Normand, J., & Carande-Kulis, V. (2003). The effectiveness of early childhood development programs: A systematic review. American Journal of Preventive Medicine, 24(3), 32-46.
- ¹⁶¹ Lesnick, J., Goerge, R., Smithgall, C., & Gwynne, J. (2010). Reading on grade level in third grade: How is it related to high school performance and college enrollment? Chicago, IL: Chapin Hall at the University of Chicago. Retrieved August 20, 2021 from https://assets.aecf.org/m/resourcedoc/aecf-ReadingonGradeLevelLongAnal-2010.PDF
- ¹⁶² Robert Wood Johnson Foundation. (2016, September). *The relationship between school attendance and health*. Retrieved August 20, 2021 from https://www.rwjf.org/en/library/research/2016/09/the-relationship-between-school-attendance-and-health.html
- ¹⁶³ Dahlin, M., & Squires, J. (2016). *Pre-K attendance: Why it's important and how to support it.* Center on Enhancing Early Learning Outcomes. Retrieved August 20, 2021 from http://nieer.org/wp-content/uploads/2016/09/ceelo fastfact state ece attendance 2016 02 01 final for web.pdf
- Santibañez, L., & Guarino, C. M. (2021). The effects of absenteeism on academic and social-emotional outcomes: Lessons for COVID-19. *Educational Researcher*. https://doi.org/10.3102/0013189X21994488
- ¹⁶⁵ Ready, D.D. (2010). Socioeconomic disadvantage, school attendance, and early cognitive development: The differential effects of school exposure. *Sociology of Education*, 83(4), 271-286.
- ¹⁶⁶ Robert Wood Johnson Foundation. (2016, September). *The relationship between school attendance and health*. Retrieved August 20, 2021 from https://www.rwjf.org/en/library/research/2016/09/the-relationship-between-school-attendance-and-health.html
- ¹⁶⁷ Lesnick, J., Goerge, R., Smithgall, C., & Gwynne, J. (2010). *Reading on grade level in third grade: How is it related to high school performance and college enrollment?* Chicago, IL: Chapin Hall at the University of Chicago. Retrieved August 20, 2021 from https://assets.aecf.org/m/resourcedoc/aecf-ReadingonGradeLevelLongAnal-2010.PDF
- ¹⁶⁸ Lesnick, J., Goerge, R., Smithgall, C., & Gwynne, J. (2010). *Reading on grade level in third grade: How is it related to high school performance and college enrollment?* Chicago, IL: Chapin Hall at the University of Chicago. Retrieved August 20, 2021 from https://assets.aecf.org/m/resourcedoc/aecf-ReadingonGradeLevelLongAnal-2010.PDF
- ¹⁶⁹ Hernandez, D. (2011). *Double jeopardy: How third-grade reading skills and poverty influence high school graduation*. New York, NY: The Annie E. Casey Foundation. Retrieved August 20, 2021 from http://files.eric.ed.gov/fulltext/ED518818.pdf
- ¹⁷⁰ Arizona Department of Education. (n.d.). Assessments. Retrieved August 20, 2021 from https://www.azed.gov/assessment

- ¹⁷¹ Altavena, L. (2021, February 8). Testing for Arizona students returns in April, with lots of unanswered questions. *Arizona Republic*. Retrieved August 20, 2021 from https://www.azcentral.com/story/news/local/arizona-education/2021/02/08/arizona-students-take-standardized-tests-april-lots-questions-unanswered/4251118001/
- ¹⁷² Office of the Governor Doug Ducey. (2020, March 27). Governor Ducey signs legislation to support schools, teachers and families [news release]. Retrieved August 20, 2021 from https://azgovernor.gov/governor/news/2020/03/governor-ducey-signs-legislation-support-schools-teachers-and-families
- ¹⁷³ For more information on Move on When Reading, visit http://www.azed.gov/mowr/
- ¹⁷⁴ Arizona Department of Education. *Move on When Reading Annual Report 2020*. Retrieved December 3, 2021 https://www.azed.gov/sites/default/files/2020/12/Move%20on%20When%20Reading%20Annual%20Report%202020.pdf
- ¹⁷⁵ National Research Council. 2012. *Key National Education Indicators: Workshop Summary*. Washington, DC: The National Academies Press. https://doi.org/10.17226/13453
- ¹⁷⁶ Healthy People 2020. (n.d.). Adolescent health. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/Adolescent-Health
- ¹⁷⁷ Carnevale, A. P., Smith, N., & Strohl, J. (2013). Recovery: Job growth and education requirements through 2020. Georgetown Public Policy Institute – Center on Education and the Workforce. Retrieved September 7, 2021 from https://lgyhoq479ufd3yna29x7ubjn-wpengine.netdna-ssl.com/wp-content/uploads/2014/11/Recovery2020.ES_.Web_.pdf
- ¹⁷⁸ Torpey, E. (2021, June). Education pays, 2020. *Career Outlook*, U.S. Bureau of Labor Statistics. Retrieved September 7, 2021 from https://www.bls.gov/careeroutlook/2021/data-on-display/education-pays.htm
- ¹⁷⁹ Annie E. Casey Foundation (2014). Creating Opportunity for Families: A Two-Generation Approach.

Retrieved from https://www.aecf.org/resources/creating-opportunity-for-families

- ¹⁸⁰ Chase-Lansdale, L. & Brooks-Gunn, J. (2014). Two-generation programs in the twenty-first century. *Future Child*, 24, 13-39.
- ¹⁸¹ Sabol, T. J., Sommer, T. E., Chase-Lansdale, P. L., & Brooks-Gunn, J. (2021). Intergenerational economic mobility for low-Income parents and their children: A dual developmental science framework. *Annual Review of Psychology*, 72(1), 265–292. https://doi.org/10.1146/annurev-psych-010419-051001
- ¹⁸² Lombardi, J., Mosle, A., Patel, N., Schumacher, R., & Stedron, J. (2014). *Gateways to Two-generations:*

The Potential for Early Childhood Programs and Partnerships To Support Children and Parents

Together. Aspen Institute: Washington, D.C. Retrieved from

http://b.3cdn.net/ascend/d3336cff8a154af047 07m6bttk2.pdf

- ¹⁸³ National Center for Education Statistics. (2021, May). Characteristics of children's families. Retrieved September 7, 2021 from https://nces.ed.gov/programs/coe/indicator/cce#fn1
- ¹⁸⁴ Sabol, T. J., Sommer, T. E., Chase-Lansdale, P. L., & Brooks-Gunn, J. (2021). Intergenerational economic mobility for low-Income parents and their children: A dual developmental science framework. *Annual Review of Psychology*, 72(1), 265–292. https://doi.org/10.1146/annurev-psych-010419-051001
- ¹⁸⁵ Halle, T., Forry, N., Hair, E., Perper, K., Wandner, L., Wessel, J., & Vick, J. (2009). Disparities in early learning and development: lessons from the Early Childhood Longitudinal Study–Birth Cohort (ECLS-B). *Washington, DC: Child Trends*, 1-7.
- ¹⁸⁶ Center on the Developing Child at Harvard University. (2010). *The foundations of lifelong health are built in early childhood.* Retrieved August 20, 2021 from http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf

- ¹⁸⁷ Kuhl, P.K. (2011). Early language learning and literacy: Neuroscience implications for education. *Mind, Brain, and Education*, *5*(3), 128-142.
- Fernald, A., Marchman, V., & Weisleder, A. (2013). SES differences in language processing skill and vocabulary are evident at 18 months. *Developmental Science*, *16*(2), 234-248. Retrieved from: http://onlinelibrary.wiley.com/doi/10.1111/desc.12019/pdf
- ¹⁸⁹ Lee., V. & Burkam, D. (2002). *Inequality at the Starting Gate: Social background Differences in Achievement as Children Begin School*. Washington, DC: Economic Policy Institute.
- NICHD Early Child Care Research Network. (2002). Early child care and children's development prior to school entry: Results from the NICHD study of early child care. *American Educational Research Journal*, 39(1), 133–164. Retrieved August 20, 2021 from http://www.jstor.org/stable/3202474
- ¹⁹¹ Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M., Espinosa, L., Gormley, W.,...Zaslow, M. (2013). Investing in our future: The evidence base on preschool education. Ann Arbor, MI: *Society for Research in Child Development*. Retrieved August 20, 2021 from https://www.fcd-us.org/assets/2013/10/Evidence20Base20on20Preschool20Education20FINAL.pdf
- ¹⁹² U.S. Department of Education. (2015). A matter of equity: Preschool in America. Retrieved August 20, 2021 from https://www2.ed.gov/documents/early-learning/matter-equity-preschool-america.pdf
- ¹⁹³ The Annie E. Casey Foundation. (2013). The first eight years: Giving kids a foundation for lifetime success. Retrieved from http://www.aecf.org/m/resourcedoc/AECF-TheFirstEightYearsKCpolicyreport-2013.pdf
- ¹⁹⁴ Gilliam, W. S., Maupin, A. N., & Reyes, C. R. (2016). Early childhood mental health consultation: Results of a statewide random-controlled evaluation. *Journal of the American Academy of Child & Adolescent Psychiatry*, 55(9), 754-761.
- ¹⁹⁵ U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. (n.d.). *Understanding and eliminating expulsion in early childhood programs*. Retrieved August 20, 2021 from https://eclkc.ohs.acf.hhs.gov/publication/understanding-eliminating-expulsion-early-childhood-programs
- ¹⁹⁶ Mortenson, J. A., & Barnett, M. A. (2016). The role of child care in supporting the emotion regulatory needs of maltreated infants and toddlers. *Children and Youth Services Review*, 64, 73-81
- ¹⁹⁷ Dinehart, L. H., Manfra, L., Katz, L. F., & Hartman, S. C. (2012). Associations between center-based care accreditation status and the early educational outcomes of children in the child welfare system. *Children and Youth Services Review, 34*, 1072-1080.
- ¹⁹⁸ U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. (2013). *The national survey of children with special health care needs: Chartbook 2009-2010.* Rockville, MD: U.S. Department of Health and Human Services. Retrieved August 20, 2021 from https://mchb.hrsa.gov/data-research-epidemiology/national-survey-publications-and-chartbooks
- ¹⁹⁹ Austin, A., Herrick, H., Proescholdbell, S., & Simmons, J. (2016). Disability and exposure to high levels of adverse childhood experiences: Effect on health and risk behavior. *North Carolina Medical Journal*, 77(1), 30-36. doi: 10.18043/ncm.77.1.30. Retrieved August 20, 2021 from http://www.ncmedicaljournal.com/content/77/1/30.full.pdf+html
- ²⁰⁰ Kistin, C., Tompson, M., Cabral, H., Sege, R., Winter, M., & Silverstein, M. (2016). Subsequent maltreatment in children with disabilities after an unsubstantiated report for neglect. *JAMA 2016*, 315(1), 85-87. doi: 10.1001/jama.2015.12912
- ²⁰¹ Montes G & Halterman JS. (2011). The impact of child care problems on employment: Findings from a national survey of US parents. Academic Pediatrics, 11(1):80-87.
- ²⁰² White House Council of Economic Advisors. (2014). *The economics of early childhood investments*. Retrieved August 20, 2021 from https://obamawhitehouse.archives.gov/sites/default/files/docs/early_childhood_report_update_final_non-embargo.pdf
- ²⁰³ Campbell, F., Conti, G., Heckman, J., Moon, S., Pinto, R., Pungello, L., & Pan, Y. (2014). *Abecedarian & health: Improve adult health outcomes with quality early childhood programs that include health and nutrition*. University of 234 Pinal Region

Chicago: The Heckman Equation. Retrieved August 20, 2021 from http://heckmanequation.org/content/resource/research-summary-abecedarian-health

- White House Council of Economic Advisors. (2014). *The economics of early childhood investments*. Retrieved August 20, 2021 from https://obamawhitehouse.archives.gov/sites/default/files/docs/early_childhood_report_update_final_non-embargo.pdf
- ²⁰⁵ Malik, R., Hamm, K., Adamu, M., & Morrissey, T. (2016). Child care deserts: An analysis of child care centers by ZIP code in 8 states. *Center for American Progress*. Retrieved August 20, 2021 from https://www.americanprogress.org/issues/early-childhood/reports/2016/10/27/225703/child-care-deserts/
- ²⁰⁶ Tanoue, K.H., DeBlois, M., Daws, J., & Walsh, M. (2017). *Child Care and Early Education Accessibility in Tucson (White Paper No. 5)*. Retrieved August 20, 2021 from https://mapazdashboard.arizona.edu/article/child-care-and-early-education-accessibility-tucson
- ²⁰⁷ Child Care Aware® of America. (2018). *Mapping the gap: Exploring the child care supply & demand in Arizona*. Arlington, VA: Child Care Aware of America. Retrieved August 20, 2021 from http://usa.childcareaware.org/wp-content/uploads/2017/10/Arizona-Infant-Toddler-Brief1.pdf
- ²⁰⁸ Smith, L. K., Bagley, A., & Wolters, B. (2020, October). Child care in 25 states: What we know and don't know (Rep.). Retrieved August 20, 2021 from https://bipartisanpolicy.org/wp-content/uploads/2020/10/BPC_Working-Family-Solutions FinalPDFV4.pdf
- ²⁰⁹ Bipartisan Policy Center (2020). The supply of, potential need for, and gaps in child care in Arizona in 2019. Retrieved August 20, 2021 from https://childcaregap.org/assets/onePagers/Arizona.pdf
- ²¹⁰ Center for American Progress. (2018). *Child Care Access in Arizona*. Retrieved August 31, 2021 from https://childcaredeserts.org/2018/index.html?state=AZ
- ²¹¹ Center for American Progress. (2019). *Early learning factsheet 2019* | *Arizona*. Retrieved September 14, 2021 from https://cdn.americanprogress.org/content/uploads/2019/09/12064343/Arizona.pdf
- ²¹² More information about Arizona's quality educational environments can be found in the DES CCDF State Plan FY2019-FY2021, available at https://des.az.gov/documents-center
- ²¹³ National Association for the Education of Young Children (2020). *Holding on until help comes: A survey reveals child care's fight to survive*. Retrieved August 20, 2021 from https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/our-work/public-policy-advocacy/holding on until help comes.survey analysis july 2020.pdf
- ²¹⁴ Child Care Aware® of America (2020). *Picking up the pieces: Building a better child care system post COVID-19*. Arlington, VA: Child Care Aware of America. Retrieved August 20, 2021 from https://www.childcareaware.org/picking-up-the-pieces/
- ²¹⁵ Center for Translational Neuroscience. (2020, June 2). Between a rock and a hard place: As the country reopens, households with young children are forced to choose between income and family safety. *Medium*. Retrieved August 20, 2021 from https://medium.com/rapid-ec-project/between-a-rock-and-a-hard-place-245857e79d9d
- ²¹⁶ Ibid.
- ²¹⁷ Office of the Governor (2020). Governor Ducey and state child care leaders announce launch of childcare for COVID-19 frontline workers. Retrieved August 20, 2021 from https://azgovernor.gov/governor/news/2020/04/governor-ducey-and-state-child-care-leaders-announce-launch-childcare-covid-19
- ²¹⁸ Arizona Early Childhood Development and Health Board, First Things First. (2020). 2020 Annual Report. Phoenix, AZ: First Things First. Retrieved August 20, 2021 from https://www.firstthingsfirst.org/wp-content/uploads/2020/09/FTF-2020-AnnualReport.pdf
- ²¹⁹ National Association for the Education of Young Children (2020). *Am I next? Sacrificing to stay open, child care providers face a bleak future without relief.* Retrieved August 20, 2021 from

https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/blog/naeyc july 2021 survey progressperil final.pdf

- ²²⁰ Workman, S., & Jessen-Howard, S. (2020, September 3). *The true cost of providing safe child care during the coronavirus pandemic*. Center for American Progress. Retrieved September 29, 2021 from https://www.americanprogress.org/issues/early-childhood/reports/2020/09/03/489900/true-cost-providing-safe-child-care-coronavirus-pandemic/
- ²²¹ National Association for the Education of Young Children (2020). *State survey data: Child care at a time of progress and peril.* Retrieved Oct 6, 2021 from https://www.naeyc.org/sites/default/files/wysiwyg/user-74/statedata_july2021_gf_092321.pdf
- ²²² National Association for the Education of Young Children (2020). *Progress and peril: Child care at a crossroads*. Retrieved Oct 6, 2021 from https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/blog/naeyc july 2021 survey progressperil final.pdf
- ²²³ Gonzalez, O. (2021, July 16). New funding set to nearly double the number of Quality First programs across Arizona. *First Things First*. Retrieved August 20, 2021 from https://www.firstthingsfirst.org/2021/07/new-funding-quality-first/
- ²²⁴ Head Start Program Facts: Fiscal Year 2019. (2021, April 20). Head Start ECLKC. Retrieved December 6, 2021, from https://eclkc.ohs.acf.hhs.gov/about-us/article/head-start-program-facts-fiscal-year-2019
- ²²⁵ The Annie E. Casey Foundation. (2013). The first eight years: Giving kids a foundation for lifetime success. Retrieved from http://www.aecf.org/m/resourcedoc/AECF-TheFirstEightYearsKCpolicyreport-2013.pdf
- ²²⁶ Epstein, D., Hegseth, D., Friese, S., Miranda, B., Gebhart, T., Partika, A., & Tout, K. (2018). Quality First: Arizona's early learning quality improvement and rating system implementation and validation study. Retrieved from https://www.firstthingsfirst.org/wp-content/uploads/2018/02/AZ QF Exec-Summary.pdf
- ²²⁷ First Things First. (2020, July 15). *Quality First*. https://www.firstthingsfirst.org/resources/quality-first/
- ²²⁸ Arizona Early Childhood Development and Health Board, First Things First. (2020). *2020 Annual Report*. Phoenix, AZ: First Things First. Retrieved August 20, 2021 from https://www.firstthingsfirst.org/wp-content/uploads/2020/09/FTF-2020-AnnualReport.pdf
- ²²⁹ Masseur, L. (2019, December 20). PDG B5 update: Letter to the field. *Arizona Department of Education*. Retrieved August 20, 2021 from https://www.azed.gov/ece/2019/12/20/letter-regarding-pdg-b-5-grant
- ²³⁰ Cagle, R. (2019, June 8). Add preschool children to the list of Arizona students being shortchanged. *AZ Central*. Retrieved August 20, 2021 from https://www.azcentral.com/story/opinion/op-ed/2019/06/08/preschool-funding-cut-hurt-arizona-students-years-come/1329883001/
- ²³¹ First Things First (2021). Preschool Development Grant FY19 sub-grantees and legislative districts. Unpublished data received through personal correspondence.
- ²³² Child Care Aware® of America. (2014). Parents and the high cost of child care: 2014 report. Retrieved from https://www.ncsl.org/documents/cyf/2014 Parents and the High Cost of Child Care.pdf
- ²³³ Child Care Aware® of America. (2018). Arizona Cost of Child Care. Retrieved from https://usa.childcareaware.org/wp-content/uploads/2018/10/Arizona2018.pdf
- ²³⁴ U.S. Census Bureau (2020) 2015-2019 ACS Estimates, Table B25064. Retrieved from https://data.census.gov
- ²³⁵ National Low Income Housing Coalition. (2021). *Out of Reach 2021 Arizona*. Retrieved September 7, 2021 from https://reports.nlihc.org/sites/default/files/oor/files/reports/state/az-2021-oor.pdf
- ²³⁶ Knueven, L. (2020, August 6). The average monthly mortgage payment by state, city, and year. *Business Insider*. Retrieved September 7, 2021 from https://www.businessinsider.com/personal-finance/average-mortgage-payment 236 Pinal Region

- ²³⁷ Child Care Aware® of America. (2020). *The US and the high cost of child care: Arizona*. Arlington, VA: Child Care Aware of America. Retrieved August 20, 2021 from https://www.childcareaware.org/our-issues/research/the-us-and-the-high-price-of-child-care-2019/ Error! Hyperlink reference not valid.
- ²³⁸ Child Care Aware® of America. (2018). *Arizona cost of child care*. Retrieved August 20, 2021 from https://usa.childcareaware.org/wp-content/uploads/2018/10/Arizona2018.pdf
- ²³⁹ U.S. Department of Health and Human Services, Child Care Bureau (2008). Child Care and Development Fund: Report of state and territory plans: FY 2008-2009. Section 3.5.5 Affordable co-payments, p. 89. Retrieved from http://www.researchconnections.org/childcare/resources/14784/pdf
- ²⁴⁰ For more information on child care subsidies see https://des.az.gov/services/child-and-family/child-care
- ²⁴¹ Center for Translational Neuroscience. (2020, June 2). Between a rock and a hard place: As the country reopens, households with young children are forced to choose between income and family safety. Medium. Retrieved August 20, 2021 from https://medium.com/rapid-ec-project/between-a-rock-and-a-hard-place-245857e79d9d
- ²⁴² Center for Translational Neuroscience. (2020, June 2). Between a rock and a hard place: As the country reopens, households with young children are forced to choose between income and family safety. Medium. Retrieved August 20, 2021 from https://medium.com/rapid-ec-project/between-a-rock-and-a-hard-place-245857e79d9d
- ²⁴³ Arizona Department of Economic Security. (n.d.). *Child care waiting list.* Retrieved August 20, 2021 from https://des.az.gov/services/child-and-family/child-care/child-care-waiting-list
- ²⁴⁴ Machelor, P. (2019, June 17). Arizona suspends child-care waiting list, increases provider reimbursements. *Arizona Daily Star*. Retrieved August 20, 2021 from https://tucson.com/news/local/arizona-suspends-child-care-waiting-list-increases-provider-reimbursements/article_a91a641f-5817-5e0d-a8c5-caaf530551ce.html
- ²⁴⁵ Walsh, M., Tanoue, K. H., & deBlois, M. (2018). Relationship of Economic Independence and Access to Childcare for Single Moms (2018 Research Brief). Tucson, AZ. Retrieved from https://www.womengiving.org/research/
- ²⁴⁶ Tanoue, K. H., deBlois, M., Daws, J., & Walsh, M. (2017). Child Care and Early Education Accessibility in Tucson (White Paper No. 5). Tucson, AZ. Retrieved from https://mapazdashboard.arizona.edu/article/child-care-and-early-education-accessibility-tucson
- ²⁴⁷ Arizona Department of Child Safety. (2021, February 1). Chapter 3: Section 8.1 Child care services. DCS Program Policy. Retrieved December 7, 2021, from <a href="https://extranet.azdcs.gov/DCSPolicy/Content/Program%20Policy/03%20Case%20Planning%20and%20Services/08%20Education%20and%20Development%20Services/CH3 S08 1%20Child%20Care%20Services.htm
- ²⁴⁸ Welch, M., & Haskins, R. (2020, April 30). *What COVID-19 means for America's child welfare system*. The Brookings Institution. https://www.brookings.edu/research/what-covid-19-means-for-americas-child-welfare-system/
- ²⁴⁹ Swedo E, Idaikkadar N, Leemis R, et al. Trends in U.S. Emergency Department Visits Related to Suspected or Confirmed Child Abuse and Neglect Among Children and Adolescents Aged <18 Years Before and During the COVID-19 Pandemic United States, January 2019–September 2020. MMWR Morb Mortal Wkly Rep 2020;69:1841–1847.</p>
 DOI: http://dx.doi.org/10.15585/mmwr.mm6949a1
- ²⁵⁰ The National Early Childhood Technical Assistance Center. (2011). The importance of early intervention for infants and toddlers with disabilities and their families. *Office of Special Education Programs and U.S. Department of Education*. Retrieved August 20, 2021 from https://whsaonline.org/2011/05/nectac-fact-sheet-on-the-importance-of-early-intervention-and-idea-part-

²⁵¹ Hebbeler, K., Spiker, D., Bailey, D., Scarborough, A., Mallik, S., Simeonsson, ... Nelson, L. (2007). *Early intervention for infants and toddlers with disabilities and their families: Participants, services, and outcomes.* Menlo Park, CA: SRI International. Retrieved August 20, 2021 from https://www.sri.com/wp-content/uploads/pdf/neils_finalreport_200702.pdf

- ²⁵² Diefendorf, M., & Goode, S. (2005). *The long term economic benefits of high quality early childhood intervention programs*. Chapel Hill, NC: National Early Childhood Technical Assistance Center (NECTAC), and Early Intervention & Early Childhood Special Education. Retrieved August 20, 2021 from http://ectacenter.org/~pdfs/pubs/econbene.pdf
- ²⁵³ Greer, M. (2021). 2020 Tipping Points Survey: Demographics and challenges. IDEA Infant & Toddler Coordinators Association. https://www.ideainfanttoddler.org/pdf/2020-Tipping-Points-Survey.pdf
- ²⁵⁴ Reynolds, A. J., Temple, J. A., Robertson, D. L., & Mann, E. A. (2001). Long-term effects of an early childhood intervention on educational achievement and juvenile arrest: A 15-year follow-up of low-income children in public schools. *JAMA*, 285(18), 2339-2346.
- ²⁵⁵ Arizona Department of Economic Security (2020). *AzEIP response to COVID-19* [Web]. Retrieved August 20, 2021 from https://des.az.gov/services/disabilities/early-intervention/azeip-response-covid-19
- ²⁵⁶ Steed, E. A., Phan, N., Leech, N., & Charlifue-Smith, R. (2021). Remote delivery of services for young children with disabilities during the early stages of the COVID-19 pandemic in the United States. *Journal of Early Intervention*. https://doi.org/10.1177/10538151211037673
- ²⁵⁷ Center for Translational Neuroscience (2020, December 17). Overloaded: Families with children who have special needs are bearing an especially heavy weight, and support is needed. *Medium*. https://medium.com/rapid-ec-project/overloaded-families-with-children-who-have-special-needs-are-bearing-an-especially-heavy-weight-4e613a7681bd
- ²⁵⁸ Center for Translational Neuroscience. (2020, May 5). The forgotten households: Households of young children with disabilities are not getting the support they need during the COVID-19 pandemic. *Medium*. Retrieved August 20, 2021 from https://medium.com/rapid-ec-project/the-forgotten-households-dfd2626098c7
- ²⁵⁹ Rosenberg, S., Zhang, D. & Robinson, C. (2008). Prevalence of developmental delays and participation in early intervention services for young children. Pediatrics, 121(6) e1503-e1509. doi:10.1542/peds.2007-1680
- ²⁶⁰ U.S. Department of Education, Office of Special Education and Rehabilitative Services (2021). 42nd Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2020. Retrieved August 20, 2021 from https://sites.ed.gov/idea/files/42nd-arc-for-idea.pdf
- ²⁶¹ Arizona Department of Education (2020). *Special education guidance for COVID-19: Spring 2020 school closure* [Web]. Retrieved August 20, 2021 from https://www.azed.gov/specialeducation/special-education-guidance-for-covid-19
- ²⁶² Arizona Department of Education. (n.d.). *Disability Categories*. Arizona Department of Education Exceptional Student Services. Retrieved December 9, 2021, from https://www.azed.gov/specialeducation/disability-categories/
- ²⁶³ Arizona Department of Education (2020). *Special education guidance for COVID-19: Spring 2020 school closure* [Web]. Retrieved August 20, 2021 from https://www.azed.gov/specialeducation/special-education-guidance-for-covid-19
- ²⁶⁴ Mortenson, J. A., & Barnett, M. A. (2016). The role of child care in supporting the emotion regulatory needs of maltreated infants and toddlers. *Children and Youth Services Review*, *64*, 73-81
- ²⁶⁵ Dinehart, L. H., Manfra, L., Katz, L. F., & Hartman, S. C. (2012). Associations between center-based care accreditation status and the early educational outcomes of children in the child welfare system. *Children and Youth Services Review, 34*, 1072-1080.
- ²⁶⁶ U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. (2013). *The national survey of children with special health care needs: Chartbook 2009-2010*. Rockville, MD: U.S. Department of Health and Human Services. Retrieved August 20, 2021 from https://mchb.hrsa.gov/data-research-epidemiology/national-survey-publications-and-chartbooks

- ²⁶⁷ Austin, A., Herrick, H., Proescholdbell, S., & Simmons, J. (2016). Disability and exposure to high levels of adverse childhood experiences: Effect on health and risk behavior. *North Carolina Medical Journal*, 77(1), 30-36. doi: 10.18043/ncm.77.1.30. Retrieved August 20, 2021 from http://www.ncmedicaljournal.com/content/77/1/30.full.pdf+html
- ²⁶⁸ Kistin, C., Tompson, M., Cabral, H., Sege, R., Winter, M., & Silverstein, M. (2016). Subsequent maltreatment in children with disabilities after an unsubstantiated report for neglect. *JAMA 2016*, 315(1), 85-87. doi: 10.1001/jama.2015.12912
- ²⁶⁹ Turner, C. (2021, June 16). After months of special education turmoil, families say schools owe them. *NPR*. Retrieved August 20, 2021 from https://www.npr.org/2021/06/16/994587239/after-months-of-special-education-turmoil-families-say-schools-owe-them
- ²⁷⁰ The Future of Children. (2015). Policies to promote child health. *Policies to Promote Child Health*, *25*(*1*), Spring 2015. Woodrow Wilson School of Public and International Affairs at the Princeton University and the Brookings Institution. Retrieved August 23, 2021 from
- https://futureofchildren.princeton.edu/sites/futureofchildren/files/media/policies_to_promote_child_health_25_full_journal.pdf
- ²⁷¹ Center on the Developing Child at Harvard University. (2010). The foundations of lifelong health are built in early childhood. Retrieved August 23, 2021 from http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf
- ²⁷² Shonkoff, J. P., Garner, A. S., Siegel, B. S., Dobbins, M. I., Earls, M. F., McGuinn, L., ... & Committee on Early Childhood, Adoption, and Dependent Care. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, *129*(1), e232-e246.
- ²⁷³ Center on the Developing Child at Harvard University. (2010). The foundations of lifelong health are built in early childhood. Retrieved August 23, 2021 from http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf
- ²⁷⁴ Center on the Developing Child. (n.d.). *Health and learning are deeply interconnected in the body*. Harvard University. Retrieved August 23, 2021 from https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2020/10/2020 WP15 actionguide FINAL.pdf
- ²⁷⁵ Case, A., Fertig, A., & Paxson, C. (2005). The lasting impact of childhood health and circumstance. *Journal of health economics*, 24(2), 365-389.
- ²⁷⁶ Eunice Kennedy Shriver National Institute of Child Health and Human Development. (2017). *What is prenatal care and why is it important?* Retrieved August 23, 2021 from https://www.nichd.nih.gov/health/topics/pregnancy/conditioninfo/prenatal-care
- ²⁷⁷ Patrick, D. L., Lee, R. S., Nucci, M., Grembowski, D., Jolles, C. Z., & Milgrom, P. (2006). Reducing oral health disparities: A focus on social and cultural determinants. *BMC Oral Health*, *6*(Suppl 1), S4. Retrieved August 23, 2021 from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2147600/
- ²⁷⁸ Council on Children with Disabilities, Section on Developmental Behavioral Pediatrics, Bright Futures Steering Committee, and Medical Home Initiatives for Children with Special Needs Project Advisory Committee. (2006). Identifying infants and young children with developmental disorders in the medical home: An algorithm for developmental surveillance and screening. *Pediatrics*, 118(1), 405-420. Doi: 10.1542/peds.2006-1231. Retrieved August 23, 2021 from http://pediatrics.aappublications.org/content/118/1/405.full
- ²⁷⁹ For more information about the Healthy People 2020 objectives, visit https://www.healthypeople.gov/2020/
- ²⁸⁰ Arizona Department of Health Services. (2017). *Advance vital statistics by county of residence: Arizona, 2019. Table 6B: Monitoring progress toward Arizona and selected national year 2020 objectives: 2017 county profiles.* Retrieved September 9, 2021 from https://pub.azdhs.gov/health-stats/menu/info/status.php

- ²⁸¹ Centers for Disease Control and Prevention. (2006). Recommendations to improve preconception health and health care—United States: A report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. *MMWR*, 55(RR-06):1-23.
- ²⁸² U.S. Department of Health and Human Service. (2017). *What is prenatal care and why is it important?* Retrieved from https://www.nichd.nih.gov/health/topics/pregnancy/conditioninfo/prenatal-care
- ²⁸³ Yeung, L., Coates, R., Seeff, L., Monroe, J., Lu, M., & Boyle, C. (2014). Conclusions and future directions for periodic reporting on the use of selected clinical preventive services to improve the health of infants, children, and adolescents—United States. *MMWR*, 63(Suppl-2), 99-107. Retrieved from https://www.cdc.gov/MMWR/pdf/other/su6302.pdf
- ²⁸⁴ Yeung, L., Coates, R., Seeff, L., Monroe, J., Lu, M., & Boyle, C. (2014). Conclusions and future directions for periodic reporting on the use of selected clinical preventive services to improve the health of infants, children, and adolescents—United States. *Morbidity and Mortality Weekly Report 2014*, 63(Suppl-2), 99-107. Retrieved from http://www.cdc.gov/mmwr/pdf/other/su6302.pdf
- ²⁸⁵ The Henry J. Kaiser Family Foundation. (2016). *Key facts about the uninsured population*. The Kaiser Commission on Medicaid and the Uninsured. Retrieved from http://kff.org/uninsured/fact-sheet/key-facts-about-the-uninsured-population/
- ²⁸⁶ Child Trends Databank. (2016). Health care coverage: Indicators on children and youth. *Health Care Coverage*, 2016. Retrieved September 10, 2021 from https://web.archive.org/web/20161015012130/http://www.childtrends.org/wpcontent/uploads/2016/05/26 Health Care Coverage.pdf
- ²⁸⁷ For additional information, please see: Keisler-Starkey, K., & Bunch, L. (2021, September). *Health insurance coverage in the United States: 2020*. U.S. Census Bureau.
- https://www.census.gov/content/dam/Census/library/publications/2021/demo/p60-274.pdf and *Health insurance coverage and access to care for American Indians and Alaska Natives: Current trends and key challenges* (HP-2021-18). (2021, July). U.S. Department of Health and Human Services. https://aspe.hhs.gov/sites/default/files/2021-07/aspe-aian-health-insurance-coverage-ib.pdf
- ²⁸⁸ U.S. Census Bureau. (2020). *American Community Survey and Puerto Rico Community Survey 2019 subject definitions*. Retrieved September 10, 2021 from https://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2019_ACSSubject_Definitions.pdf
- ²⁸⁹ Gee, E., & Waldrop, T. (2021, March 11). Policies To Improve Health Insurance Coverage as America Recovers From COVID-19. *Center for American Progress*. Retrieved September 10, 2021 from https://www.americanprogress.org/issues/healthcare/reports/2021/03/11/497019/policies-improve-health-insurance-coverage-america-recovers-covid-19/
- ²⁹⁰ Agarwal, S. D., & Sommers, B. D. (2020). Insurance Coverage after Job Loss The Importance of the ACA during the Covid-Associated Recession. *New England Journal of Medicine*, 383(17), 1603–1606. https://doi.org/10.1056/nejmp2023312
- ²⁹¹ Centers for Disease Control and Prevention. (2006). Recommendations to improve preconception health and health care—United States: A report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. *MMWR*, 55(RR-06):1-23.
- ²⁹² Partridge, S., Balayla, J., Holcroft, C. A., & Abenhaim, H. A. (2012). Inadequate prenatal care utilization and risks of infant mortality and poor birth outcome: a retrospective analysis of 28,729,765 U.S. deliveries over 8 years. American Journal of Perinatology, 29(10), 787–793. https://doi.org/10.1055/s-0032-1316439
- ²⁹³ U.S. Department of Health and Human Services, Office of Surgeon General. (2020). *The Surgeon General's Call to Action to Improve Maternal Health*. Retrieved September 7, 2021 from https://www.hhs.gov/sites/default/files/call-to-action-maternal-health.pdf
- ²⁹⁴ Osterman MJK, Martin JA. (2018). Timing and adequacy of prenatal care in the United States, 2016. *National Vital Statistics Reports*, vol 67 no 3. Hyattsville, MD: National Center for Health Statistics.

- ²⁹⁵ Declercq, E., MacDorman, M., Cabral, H., & Stotland, N. (2016). Prepregnancy body mass index and infant mortality in 38 U.S. States, 2012-2013. Obstetrics and *Gynecology*, *127*(2), 279-287. doi: 10.1097/AOG.0000000000001241. Retrieved September 10, 2021 from https://www.ncbi.nlm.nih.gov/pubmed/26942355
- ²⁹⁶ Tyrrell, J., Richmond, R., Palmer, T., Feenstra, B., Rangarajan, J., Metrustry, S., ... Freathy, R. (2016). Genetic evidence for causal relationships between maternal obesity-related traits and birth weight. *JAMA 2016*, 315(11), 1129-1140. doi:10.1001/jama.2016.1975. Retrieved September 10, 2021 from http://jamanetwork.com/journals/jama/fullarticle/2503173
- ²⁹⁷ Godfrey, K. M., Reynolds, R. M., Prescott, S. L., Nyirenda, M., Jaddoe, V. W., Eriksson, J. G., & Broekman, B. F. (2017). Influence of maternal obesity on the long-term health of offspring. The Lancet. *Diabetes & Endocrinology*, *5*(1), 53–64. https://doi.org/10.1016/S2213-8587(16)30107-3
- ²⁹⁸ Hoffman, S.D., & Maynard, R.A. (Eds.). (2008). *Kids having kids: Economic costs and social consequences of teen pregnancy (2nd ed.)*. Washington, DC: Urban Institute Press.
- ²⁹⁹ Centers for Disease Control and Prevention. (2006). Recommendations to improve preconception health and health care—United States: A report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. *MMWR*, 55(RR-06):1-23.
- ³⁰⁰ U.S. Department of Health and Human Service. (2010). *A Report of the Surgeon General: How Tobacco Smoke Causes Disease: What It Means to You*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. Retrieved September 10, 2021 from https://www.ncbi.nlm.nih.gov/books/NBK53017/
- ³⁰¹ Anderson, T.M., Lavista Ferres, J.M., You Ren, S., Moon, R.Y., Goldstein, R.D., Ramirez, J., Mitchell, E.A. (2019). Maternal smoking before and during pregnancy and the risk of sudden unexpected infant death. *Pediatrics*, *143*(4). PMID: 30848347
- ³⁰² Beam, A. L., Fried, I., Palmer, N., Agniel, D., Brat, G., Fox, K., ... & Armstrong, J. (2020). Estimates of healthcare spending for preterm and low-birthweight infants in a commercially insured population: 2008–2016. *Journal of Perinatology*, 40(7), 1091-1099.
- ³⁰³ Luu, T. M., Mian, M. O. R., & Nuyt, A. M. (2017). Long-term impact of preterm birth: neurodevelopmental and physical health outcomes. *Clinics in perinatology*, *44*(2), 305-314.
- ³⁰⁴ Petrou, S., Sach, T., & Davidson, L. (2001). The long-term costs of preterm birth and low birth weight: Results of a systematic review. *Child: care, health and development, 27*(2), 97-115.
- ³⁰⁵ Goldenberg, R. L., & Culhane, J. F. (2007). Low birth weight in the United States. *The American journal of clinical nutrition*, 85(2), 584S-590S.
- ³⁰⁶ Harrison, W., & Goodman, D. (2015). Epidemiologic trends in neonatal intensive care, 2007-2012. *JAMA pediatrics*, 169(9), 855-862.
- ³⁰⁷ Lean, R. E., Rogers, C. E., Paul, R. A., & Gerstein, E. D. (2018). NICU Hospitalization: Long-Term Implications on Parenting and Child Behaviors. *Current treatment options in pediatrics*, *4*(1), 49–69.
- ³⁰⁸ Arizona Department of Health Services. (2015). *Arizona Maternal Child Health Needs Assessment*. Retrieved from http://azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/title-v/needs-assessment2015.pdf
- ³⁰⁹ Gunn, J., Rosales, C., Center, K., Nunez, A., Gibson, S., Christ, C., & Ehiri, J. (2016). Prenatal exposure to cannabis and maternal and child health outcomes: A systematic review and meta-analysis. *BMJ Open*, 6(4). PMID: 27048634.
- ³¹⁰ Arizona Department of Health Sciences. (2015). *Arizona Maternal Child Health Needs Assessment*. Retrieved from http://azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/title-v/needs-assessment2015.pdf
- ³¹¹ Eidelman, A., Schanler, R., Johnston, M., Landers, S., Noble, L., Szucs, K., & Viehmann, L. (2012). Breastfeeding and the use of human milk. *Pediatrics*, *129*(3), e827-e841.

- ³¹² Fryar, C. D., Carroll, M. D., & Afful, J. (2020). Prevalence of underweight among children and adolescents aged 2–19 years: United States, 1963–1965 through 2017–2018. NCHS Health E-Stats. Retrieved September 10, 2021 from https://www.cdc.gov/nchs/data/hestat/underweight-child-17-18/underweight-child.htm
- ³¹³ Fryar, C. D., Carroll, M. D., & Afful, J. (2020). Prevalence of overweight, obesity, and severe obesity among children and adolescents aged 2–19 years: United States, 1963–1965 through 2017–2018. NCHS Health E-Stats. Retrieved September 10, 2021 from https://www.cdc.gov/nchs/data/hestat/obesity-child-17-18/obesity-child.htm
- 314 Chaput, J.P., & Tremblay, A. (2012). *Obesity at an early age and its impact on child development*. Child Obesity: Encyclopedia on Early Childhood Development. Retrieved September 10, 2021 from http://www.child-encyclopedia.com/sites/default/files/textes-experts/en/789/obesity-at-an-early-age-and-its-impact-on-child-development.pdf
- ³¹⁵ Robert Wood Johnson Foundation. (2016). The impact of the first 1,000 days on childhood obesity. *Healthy Eating Research: Building evidence to prevent childhood obesity*. Retrieved September 10, 2021 from http://healthyeatingresearch.org/wp-content/uploads/2016/03/her_1000_days_final-1.pdf
- ³¹⁶ Center on the Developing Child at Harvard University. (2010). *The foundations of lifelong health are built in early childhood.* Retrieved September 10, 2021 from http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf
- ³¹⁷ World Health Organization. (2021, June 9). *Malnutrition*. Retrieved September 13, 2021 from https://www.who.int/news-room/fact-sheets/detail/malnutrition
- ³¹⁸ Çolak, H., Dülgergil, Ç.T., Dalli, M., & Hamidi, M.M. (2013). Early childhood caries update: A review of causes, diagnoses, and treatments. *Journal of Natural Science, Biology, and Medicine, 4*(1), 29-38. http://doi.org/10.4103/0976-9668.107257
- ³¹⁹ Gupta, N., Vujicic, M., Yarbrough, C., & Harrison, B. (2018). Disparities in untreated caries among children and adults in the US, 2011-2014. *BMC Oral Health*, *18*(1), 30.
- ³²⁰ First Things First. (2019). Building bright futures 2019: Arizona's early childhood opportunities report. *First Things First*. Retrieved October 22, 2021 from https://www.firstthingsfirst.org/wp-content/uploads/2019/12/NA Report 2019.pdf
- ³²¹ First Things First. (2016). Taking a bite out of school absences: Children's oral health report 2016. *First Things First*. Retrieved from http://azftf.gov/WhoWeAre/Board/Documents/FTF Oral Health Report 2016.pdf
- ³²² Arizona Department of Health Services (2019, July). *The Arizona Immunization Handbook for School and Childcare Programs*. Retrieved September 10, 2021 from https://azdhs.gov/documents/preparedness/epidemiology-disease-control/immunization/school-childcare/nofollow/school-childcare-immunization-guide.pdf
- ³²³ Rodrigues, C. M. C., & Plotkin, S. A. (2020). Impact of vaccines; Health, economic and social perspectives. *Frontiers in Microbiology*, *11*(1526). doi: 10.3389/fmicb.2020.01526. Retrieved August 24, 2021 from https://www.frontiersin.org/articles/10.3389/fmicb.2020.01526/full
- ³²⁴ Healthy People 2020. (2015). Immunization and infectious diseases. Washington, DC: U.S. Department of Health and Human Services. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases/objectives
- ³²⁵ Arizona Department of Health Sciences. (2015). *Arizona Maternal Child Health Needs Assessment*. Retrieved from http://azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/title-v/needs-assessment2015.pdf
- ³²⁶ Office of Disease Prevention and Health Promotion. (2019). IID-10.2 Maintain the vaccination coverage level of 2 doses of measles-mumps-rubella (MMR) vaccine for children in kindergarten. *Data Details* | *Healthy People 2020*. Retrieved September 10, 2021 from https://www.healthypeople.gov/node/4649/data_details
- ³²⁷ Arizona Department of Health Services. (n.d.). *Influenza and RSV Summary (2018-2019)*. Retrieved December 10, 2021 from https://www.azdhs.gov/documents/preparedness/epidemiology-disease-control/flu/surveillance/2017-2018-influenza-summary.pdf

- ³²⁸ U.S. Department of Health & Human Services. (2021, October 25). *Children & influenza (flu)*. Centers for Disease Control and Prevention. Retrieved December 13, 2021, from https://www.cdc.gov/flu/highrisk/children.htm
- ³²⁹ U.S. Department of Health & Human Services. (2020, December 18). *Symptoms and care for RSV*. Centers for Disease Control and Prevention. Retrieved December 13, 2021, from https://www.cdc.gov/rsv/about/symptoms.html
- ³³⁰ Miller, G., Coffield, E., Leroy, Z., & Wallin, R. (2016). Prevalence and costs of five chronic conditions in children. *The Journal of School Nursing*, 32(5):357-364.
- ³³¹ Zahran, H.S., Bailey, C.M., Damon, S.A., Garbe, P.L., & Breysse, P.N. (2018). Vital Signs: Asthma in Children—United States, 2001-2016. *MMWR Morbidity and Mortality Weekly Report*, 67(5): 149-155.
- ³³² Brim, S.N., Rudd, R.A., Funk, R.H., & Callahan. (2008). Asthma prevalence among US children in underrepresented minority populations: American Indian/Alaska Native, Chinese, Filipino, and Asian Indian. *Pediatrics*, 122(1):e217-222.
- ³³³ Perry, R., Braileanu, G., Pasmer, T., & Stevens, P. (2019). The economic burden of pediatric asthma in the United States: Literature review of current evidence. *PharmacoEconomics*, *37*(2): 155-167.
- ³³⁴ Arizona Department of Health Services. (2019). *Childhood injury fact sheet (2019)*. Retrieved October 22, 2021 from https://www.azdhs.gov/prevention/womens-childrens-health/reports-fact-sheets/index.php#injury-prevention
- ³³⁵ Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2018). *10 Leading causes of death by age group, United States 2018*. Retrieved from https://www.cdc.gov/injury/wisqars/pdf/leading-causes of death by age group 2018-508.pdf
- ³³⁶ Rimsza, M.E., Shackner, R.A., Bowen, K.A., & Marshall, W. (2002). Can child deaths be prevented? The Arizona Child Fatality Review Program experience. *Pediatrics*, 110(1 Pt 1): e11. PMID: 12093992
- ³³⁷ West, B. A., Rudd, R. A., Sauber-Schatz, E. K., & Ballesteros, M. F. (2021). Unintentional injury deaths in children and youth, 2010–2019. *Journal of safety research*, 78, 322-330.
- ³³⁸ Möller, H., Falster, K., Ivers, R., & Jorm, L. (2015). Inequalities in unintentional injuries between indigenous and non-indigenous children: a systematic review. *Injury Prevention*, 21:e144-e152. PMID: 24871959.
- ³³⁹ National Center for Health Statistics. (2021, October 4). ICD Injury Codes and Matrices. Retrieved May 31, 2022 from https://www.cdc.gov/nchs/injury/injury_matrices.htm
- National Center for Health Statistics. (2021, December 3). Stats of the States Infant Mortality. Centers for Disease Control and Prevention. Retrieved September 10, 2021 from https://www.cdc.gov/nchs/pressroom/sosmap/infant_mortality_rates/infant_mortality.htm
- Arizona Department of Health Services. (2019). Number of deaths for selected leading causes of infant mortality by year. *Population Health and Vital Statistics*. Retrieved October 11, 2021 from https://pub.azdhs.gov/health-stats/menu/info/trend/index.php?pg=infant-deaths
- ³⁴² Ely, D. M. & Driscoll, A. K. (2020, July 16). Infant morality in the United States, 2018: Data from the period linked birth/infant death file. *National Vital Statistics Reports*, 69(7). Retrieved October 11, 2021 from https://www.cdc.gov/nchs/data/nvsr/nvsr69/NVSR-69-7-508.pdf
- ³⁴³ Bellazaire, A. & Skinner, E. (2019, July 3). Preventing infant and maternal mortality: State policy options. *National Conference of State Legislatures*. Retrieved October 12, 2021 from https://www.ncsl.org/research/health/preventing-infant-and-maternal-mortality-state-policy-options.aspx
- ³⁴⁴ Van Voorhis, F., Maier, M., Epstein, J., & Lloyd, C. (2013). The impact of family involvement on the education of children ages 3 to 8: A focus on the literacy and math achievement outcomes and social-emotional skills. *MDRC: Building Knowledge to Improve Social Policy*. Retrieved August 18, 2021 from http://www.p2presources.com/uploads/3/2/0/2/32023713/family_outcomes.pdf

³⁴⁵ Evans, G., & Kim, P. (2013). Childhood poverty, chronic stress, self-regulation, and coping. *Child Development Perspectives*, 7(1), 43-48. Retrieved August 18, 2021 from https://srcd.onlinelibrary.wiley.com/doi/full/10.1111/cdep.12013

- ³⁴⁶ Shonkoff, J.P., & Fisher, P.A. (2013). Rethinking evidence-based practice and two-generation programs to create the future of early childhood policy. *Development and Psychopathology*, *25*, 1635- 1653. Retrieved August 18, 2021 from http://journals.cambridge.org/download.php?file=%2FDPP%2FDPP25_4pt2%2FS0954579413000813a.pdf&code=aeb62de3e0ea8214329e7a33e0a9df0e
- ³⁴⁷ Magnuson, K., & Duncan, G. (2013). Parents in poverty. In Bornstein, M. (Ed.), *Handbook of parenting: Biology and ecology of parenting vol. 4: Social conditions and applied parenting*. New Jersey: Lawrence Erlbaum.
- ³⁴⁸ Center on the Developing Child at Harvard University. (2010). *The foundations of lifelong health are built in early childhood*. Retrieved August 18, 2021 from http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf
- American Academy of Pediatrics. (2014). *Literacy promotion: An essential component of primary care pediatric practice*. Retrieved August 18, 2021 from https://pediatrics.aappublications.org/content/134/2/404
- ³⁵⁰ Browne, C. (2014). The strengthening families approach and protective factors framework: Branching out and reaching deeper. *Center for the Study of Social Policy*. Retrieved August 18, 2021 from https://cssp.org/wp-content/uploads/2018/11/Branching-Out-and-Reaching-Deeper.pdf
- ³⁵¹ Merrick, M. T., Ports, K. A., Ford, D. C., Afifi, T. O., Gershoff, E. T., & Grogan-Kaylor, A. (2017). Unpacking the impact of adverse childhood experiences on adult mental health. *Child Abuse & Neglect*, 69, 10-19.
- ³⁵² Kalmakis, K. A., & Chandler, G. E. (2015). Health consequences of adverse childhood experiences: a systematic review. *Journal of the American Association of Nurse Practitioners*, 27(8), 457-465.
- 353 Child and Adolescent Health Measurement Initiative (n.d). National Survey of Children's Health 2018-2019. Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). Indicator 6.13: Has this child experienced one or more adverse childhood experiences from the list of 9 ACEs? Retrieved October 13, 2021 from www.childhealthdata.org
- ³⁵⁴ Hughes, K., Bellis, M.A., Hardcastle, K.A., Sethi, D., Butchart, A., Mikton, C., ... Dunne, M.P. (2017). The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *The Lancet Public Health*, *2*(8), e356-e366.
- ³⁵⁵ Keating, K., Cole, P., & Schneider, A. (221). *State of Babies Yearbook: 2021*. Washington, DC: ZERO TO THREE and Bethesda MD: Child Trends. Retrieved August 18, 2021 from https://stateofbabies.org/wp-content/uploads/2021/04/State-of-Babies-2021-Full-Yearbook.pdf
- 356 U.S. Department of Health & Human Services, Administration for Children & Families, Children's Bureau. (2019). Child Welfare Outcomes Report Data for Arizona. Retrieved August 18, 2021 from https://cwoutcomes.acf.hhs.gov/cwodatasite/childrenReports/index
- ³⁵⁷ Centers for Disease Control and Prevention. (n.d.). *Preventing child abuse & neglect*. Retrieved August 18, 2021 from https://www.cdc.gov/violenceprevention/childabuseandneglect/fastfact.html
- ³⁵⁸ Bethell, C., Jones, J., Gombojav, N., Linkenbach, J., & Sege, R. (2019). Positive childhood experiences and adult mental and relational health in a statewide sample: Associations across adverse childhood experiences levels. *JAMA Pediatrics*, *173*(11), e193007-e193007.
- 359 National Center for Injury Prevention and Control. (2020, September). *Adverse Childhood Experiences prevention strategy*. Center for Disease Control and Prevention. Retrieved August 18, 2021 from https://www.cdc.gov/injury/pdfs/priority/ACEs-Strategic-Plan Final 508.pdf

- ³⁶⁰ Hood, M., Conlon, E., & Andrews, G. (2008). Preschool home literacy practices and children's literacy development: A longitudinal analysis. *Journal of Educational Psychology*, 100, 252-271.
- ³⁶¹ Fantuzzo, J., McWayne, C., Perry, M.A., & Childs, S. (2004). Multiple dimensions of family involvement and their relations to behavioral and learning competencies for urban, low-income children. *School Psychology Review, 33*, 467-480.
- ³⁶² Pinal Regional Partnership Council. (2021). Regional Allocation and Proposed Funding Plan Summary SFY19 SFY22. https://files.firstthingsfirst.org/regions/Publications/Funding%20Plan%20Summary%20Table%20-%20FY2022%20-%20Pinal.pdf
- ³⁶³ National Scientific Council on the Developing Child. (2012). Establishing a level foundation for life: Mental health begins in early childhood. Harvard University, Center on the Developing Child. Retrieved August 18, 2021 from https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2008/05/Establishing-a-Level-Foundation-for-Life-Mental-Health-Begins-in-Early-Childhood.pdf
- ³⁶⁴ Healthy People 2020. (n.d.). *Maternal, infant, and child health: Life stages and determinants*. Retrieved August 18, 2021 from https://www.healthypeople.gov/2020/leading-health-indicators/2020-lhi-topics/Maternal-Infant-and-Child-Health/determinants
- ³⁶⁵ Zero to Three. (2017). *The basics of infant and early childhood mental health: A briefing paper*. Retrieved August 18, 2021 from https://www.zerotothree.org/resources/1951-the-basics-of-infant-and-early-childhood-mental-health-a-briefing-paper
- ³⁶⁶ Center on the Developing Child. (n.d.). *Early childhood mental health*. Harvard University. Retrieved August 18, 2021 from https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2015/05/InBrief-Early-Childhood-Mental-Health-1.pdf
- ³⁶⁷ Center for Translational Neuroscience (2020, July 30). A hardship chain reaction: Financial difficulties are stressing families' and young children's wellbeing during the pandemic, and it could get a lot worse. *Medium*. Retrieved September 10, 2021 from https://medium.com/rapid-ec-project/a-hardship-chain-reaction-3c3f3577b30
- ³⁶⁸ American Psychological Association (2020). *Stress in America* TM 2020: A National Mental Health Crisis. Retrieved October 14, 2021 from https://www.apa.org/news/press/releases/stress/2020/report-october
- ³⁶⁹ U.S. Census Bureau (2021). Household Pulse Survey Data, Phases 1 & 3. Retrieved from https://www.cdc.gov/nchs/covid19/pulse/mental-health.htm
- ³⁷⁰ Center for Translational Neuroscience (2020, June 24). Flattening the other curve: Trends for young children's mental health are good for some but concerning for others. *Medium*. Retrieved September 10, 2021 from https://medium.com/rapidec-project/flattening-the-other-curve-7be1e574b340
- ³⁷¹ Center for Translational Neuroscience (2020, June 30). Flattening the other curve, part 2: Trends for parental well-being are improving overall, but not for everyone. *Medium*. Retrieved September 10, 2021 from https://medium.com/rapid-ec-project/flattening-the-other-curve-part-2-5661a2d36a82
- ³⁷² Center for Translational Neuroscience (2020, May 5). The forgotten households: Households of young children with disabilities are not getting the support they need during the COVID-19 pandemic. *Medium*. Retrieved September 10, 2021 https://medium.com/rapid-ec-project/the-forgotten-households-dfd2626098c7
- ³⁷³ Center for Translational Neuroscience (2020, May 26). Health, interrupted: Well-child visits are declining during the COVID-19 pandemic. *Medium*. Retrieved September 10, 2021 https://medium.com/rapid-ec-project/health-interrupted-a463733ce3c5
- ³⁷⁴ U.S. Department of Health and Human Service. (2010). *A Report of the Surgeon General: How Tobacco Smoke Causes Disease: What It Means to You*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. Retrieved from: https://www.ncbi.nlm.nih.gov/books/NBK53017/

- ³⁷⁵ Anderson, T.M., Lavista Ferres, J.M., You Ren, S., Moon, R.Y., Goldstein, R.D., Ramirez, J., Mitchell, E.A. (2019). Maternal smoking before and during pregnancy and the risk of sudden unexpected infant death. *Pediatrics*, *143*(4). PMID: 30848347
- ³⁷⁶ Arizona Department of Health Services. (2015). *Arizona Maternal Child Health Needs Assessment*. Retrieved from http://azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/title-v/needs-assessment2015.pdf
- ³⁷⁷ Gunn, J., Rosales, C., Center, K., Nunez, A., Gibson, S., Christ, C., & Ehiri, J. (2016). Prenatal exposure to cannabis and maternal and child health outcomes: A systematic review and meta-analysis. *BMJ Open*, 6(4). PMID: 27048634.
- ³⁷⁸ Child and Adolescent Health Measurement Initiative. (2018). *National Survey of Children's Health 2016-2017*. Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). Retrieved from www.childhealthdata.org
- ³⁷⁹ Young, N.K., Boles, S.M., & Otero, C. (2007). Parental Substance Use Disorders and child maltreatment: overlap, gaps, and opportunities. *Child Maltreatment*, *12*(2): 137-149.
- ³⁸⁰ Smith, V., & Wilson. R. (2016). Families affected by parental substance use. *Pediatrics*, 138(2). PMID: 27432847
- ³⁸¹ Smith, V., & Wilson. R. (2016). Families affected by parental substance use. *Pediatrics*, 138(2). PMID: 27432847
- ³⁸² Panchal, N., Kamal, R., Cox, C., & Garfield, R. (2021, Feb 10). The implications of COVID-19 for mental health and substance abuse. *KFF*. Retrieved October 25, 2021 from https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/
- ³⁸³ Health Alert Network. (2020, Dec 17). Increase in fata drug overdoses across the United States driven by synthetic opioids before and during the COVID-19 pandemic. *Centers for Disease Control and Prevention*. Retrieved October 25, 2021 from https://emergency.cdc.gov/han/2020/han00438.asp?ACSTrackingID=USCDC_511-DM44961
 DM44961&ACSTrackingLabel=HAN%20438%20-%20General%20Public&deliveryName=USCDC_511-DM44961
- ³⁸⁴ Panchal, N. Garfield, R., Cox, C., & Artiga, S. (2021, Aug 12). Substance use issues are worsening alongside access to care. *KFF*. Retrieved October 25, 2021 from https://www.kff.org/policy-watch/substance-use-issues-are-worsening-alongside-access-to-care/
- ³⁸⁵ AHCCCS. (n.d.). Preventing an overdose. Retrieved December 9, 2021, from https://www.azahcccs.gov/Members/BehavioralHealthServices/OpioidUseDisorderAndTreatment/Overdose_Prevention.html
- ³⁸⁶ Turney, K., & Wildeman, C. (2016). Mental and physical health of children in foster care. *Pediatrics*, 138(5), e20161118.
- ³⁸⁷ Children's Defense Fund. (n.d.) *Family First Prevention Services Act.* Retrieved August 18, 2021 from https://www.childrensdefense.org/policy/policy-priorities/child-welfare/family-first/
- ³⁸⁸ Winokur, M., Holtan, A., & Batchelder, K. E. (2014). Kinship care for the safety, permanency, and well-being of children removed from the home for maltreatment. *Cochrane Library*, 2014(1), CD006546–CD006546.
- ³⁸⁹ Children's Defense Fund. (2020, February). *Implementing the Family First Prevention Services Act: A technical guide for agencies, policymakers and other stakeholders*. Retrieved September 10, 2021 from https://www.childrensdefense.org/wp-content/uploads/2020/07/FFPSA-Guide.pdf
- ³⁹⁰ Government Accountability Office. (2021, July). Pandemic posed challenges, but also created opportunities for agencies to enhance future operations (GAO-21-483). Retrieved September 10, 2021 from https://www.gao.gov/assets/gao-21-483.pdf
- ³⁹¹ U.S. Census Bureau. (May, 2000). Factfinder for the Nation. Retrieved from http://www.census.gov/history/pdf/cff4.pdf
- ³⁹² U.S. Census Bureau. (April, 2013). American Community Survey Information Guide. Retrieved from http://www.census.gov/content/dam/Census/programs-surveys/acs/about/ACS Information Guide.pdf