

FIRST THINGS FIRST

Coconino



2020 NEEDS AND ASSETS REPORT

Coconino Regional Partnership Council

2020

Needs and Assets Report

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

Funded by

First Things First Coconino Regional Partnership Council

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
<http://ag.arizona.edu/fcs/>

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 arrive at 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 of our communities and our state.

This Needs and Assets Report for the FTF Coconino Region helps community leaders and decision-makers understand the needs of young children in the region, the resources available to meet those needs and gaps that may exist in those resources. Data collection and analysis for the 2020 report were completed prior to the COVID-19 pandemic and, therefore, do not reflect the impact of COVID-19 on families with young children and the services that support them. The report is organized by topic areas pertinent to young children in the region, such as the 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 FTF Coconino 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 of young children in their care. It is our sincere hope that this information also will help guide community conversations about how we can best support school readiness for all children in the Coconino Region. To that end, this information may be useful to stakeholders in the area 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 Coconino Regional Council wants to thank the Arizona Department of Economic Security, the Arizona Department of Health Services, the Arizona Department of Education and the U.S. Census Bureau, for their contributions of data for this report and their ongoing support and partnership with FTF on behalf of young children.

To the current and past members of the Coconino Regional Council, your vision, dedication and passion have been instrumental in improving outcomes for young children and families within the region. Our future efforts will build upon those successes with the ultimate goal of building a comprehensive early childhood system for the betterment of young children within the region and the entire state.

LETTER FROM THE CHAIR

May 8, 2020

Message from the Chair:

Since the inception of First Things First, the Coconino Regional Partnership Council has taken great pride in supporting evidence-based and evidence informed early childhood programs that are improving outcomes for young children. Through both funded and unfunded approaches, the early childhood programs and services supported by the regional council have strengthened families, improved the quality of early learning, and enhanced the health and well-being of children birth to 5 years old in our community.

This impact would not have been possible without data to guide our discussions and decisions. One of the primary sources of that data is our regional Needs and Assets report, which provides us with information about the status of families and young children in our community, identifies the needs of young children, and details the supports available to meet those needs. Along with feedback from families and early childhood stakeholders, the report helps us to prioritize the needs of young children in our area and determine how to leverage First Things First resources to improve outcomes for young children in our communities.

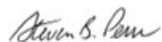
The Coconino Regional Council would like to thank our Needs and Assets vendor, University of Arizona Norton School, for their knowledge, expertise and analysis of the Coconino region. Their partnership has been crucial to our development of this report and to our understanding of the extensive information contained within these pages.

As we move forward, the First Things First Coconino Regional Partnership Council remains committed to helping more children in our community arrive at kindergarten prepared to be successful by funding high-quality early childhood services, collaborating with system partners to maximize resources, and continuing to build awareness across all sectors of the importance of the early years to the success of our children, our communities and our state.

Thanks to our dedicated staff, volunteers and community partners, First Things First has made significant progress toward our vision that all children in Arizona arrive at kindergarten healthy and ready to succeed.

Thank you for your continued support.

Sincerely,



Steve Peru, Chair



COCONINO REGIONAL PARTNERSHIP COUNCIL

405 North Beaver Street, Suite 1
Flagstaff, Arizona 86001
Phone: 928.637.0412
Fax: 928.774.5563

Steve Peru, Chair

Beth Frost, Vice Chair

Kelly Bernard

Beth Johndrow

Cindy May

Kelly McCue

Noreen Sakiestewa

Paula Stefani

Carletta Tilousi

Debbie Winlock

Report 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



Table of Contents

Introduction	2
Acknowledgements.....	3
Letter from the Chair	4
Table of Contents.....	6
List of Tables	8
List of Figures	10
Executive Summary.....	11
Regional Description	11
Population Characteristics	11
Economic Circumstances	12
Educational Indicators.....	13
Early Learning.....	14
Child Health.....	15
Family Support and Literacy	17
Systems Coordination among Early Childhood Programs and Services	18
Communication, Public Information and Awareness	19
The Coconino Region	21
Regional Boundaries	21
Data Sources	22
Population Characteristics	24
Why it Matters	24
What the Data Tell Us.....	26
Population, Race, and Ethnicity	28
Immigrant Families and Language Use	31
Family and Household Composition	33
Economic Circumstances	35
Why it Matters	35
What the Data Tell Us.....	38
Poverty	40
Food Insecurity.....	43
Employment.....	44
Housing Instability.....	46
Educational Indicators	49
Why it Matters	49
What the Data Tell Us.....	51
School Attendance and Absenteeism	53
Achievement on Standardized Testing	55
Graduation Rates and Adult Educational Attainment	58
Early Learning.....	61
Why it Matters	61
What the Data Tell Us.....	65

Access to Early Care and Education	67
High Quality Early Care and Education	71
Young Children with Special Needs	73
Child Health.....	76
Why it Matters	76
What the Data Tell Us	79
Access to Health Services.....	82
Maternal, Infant, and Child Health	84
Substance Use Disorders	86
Nutrition and Weight Status	87
Oral Health	88
Child Immunizations	89
Illness and Injury	92
Family Support and Literacy	94
Why it Matters	94
What the Data Tell Us	96
Home Visitation	97
Child Removals and Foster Care	98
Systems Coordination among Early Childhood Programs and Services	100
Why it Matters	100
What the Data Tell Us	101
Communication, Public Information and Awareness	103
Why it Matters	103
What the Data Tell Us	104
Appendix 1: Map of zip codes of the Coconino Region	108
Appendix 2: Zip Codes of the Coconino Region	109
Appendix 3: School Districts in the Coconino Region	111
Appendix 4: Data Sources	113
References	116

List of Tables

Table 1. Population and households, 2010.....	28
Table 2. Population of children by single year of age, 2010	28
Table 3. Race and ethnicity of the adult population (ages 18 and older), 2010.....	29
Table 4. Race and ethnicity of the population of young children (ages 0-4), 2010	30
Table 5. Race and ethnicity of mothers giving birth in calendar year 2017.....	30
Table 6. Children (ages 0-5) living with parents who are foreign-born	31
Table 7. Language spoken at home by persons ages 5 and older.....	31
Table 8. English-language proficiency for persons ages 5 and older	32
Table 9. Limited-English-speaking households	32
Table 10. Living arrangements for children (ages 0-5).....	33
Table 11. Heads of households in which children (ages 0-5) live, 2010	33
Table 12. Children (ages 0-5) living in the household of a grandparent, 2010.....	34
Table 13. Grandparents responsible for grandchildren (ages 0-17) living with them	34
Table 14. Median annual family income.....	40
Table 15. Families with young children (ages 0-5) living at various poverty thresholds	41
Table 16. Families participating in the TANF program, Fiscal Years 2015 to 2018	42
Table 17. Children participating in the TANF program, Fiscal Years 2015 to 2018.....	42
Table 18. Families participating in the SNAP program, Fiscal Years 2015 to 2018	43
Table 19. Children participating in the SNAP program, Fiscal Years 2015 to 2018.....	43
Table 20. Percent of students (all grades) eligible for free or reduced-price lunch, 2015-16 to 2018-19	43
Table 21. Adult population (ages 16 and older) who are employed, unemployed, or not in the labor force.....	44
Table 22. Parents of young children (ages 0-5) who are or are not in the labor force.....	45
Table 23. Households who are paying thirty percent or more of their income for housing	46
Table 24. Households with and without computers and smartphones.....	46
Table 25. Persons (all ages) in households with and without computers and internet connectivity	47
Table 26. Children (ages 0-17) in households with and without computers and internet connectivity	47
Table 27. Households by type of internet access (broadband, cellular data, and dial-up)	48
Table 28. Students enrolled in preschool through 3rd grade, 2018-19.....	53
Table 29. Chronic absence rates, Kindergarten through 3rd grade, 2015-16 to 2018-19	53
Table 30. Chronic absence rates, Kindergarten through 3rd grade, 2018-19.....	54
Table 31. Chronic absence rates for students by grade (Grade K-3), 2018-19	54
Table 32. AzMERIT Assessment Results: 3rd Grade English Language Arts, 2017-18.....	55
Table 33. AzMERIT Assessment Results: 3rd Grade Math, 2017-18	56
Table 34. Graduation and dropout rates, 2017	58
Table 35. Trends in four-year graduation rates, 2015 to 2017	58
Table 36. Trends in five-year graduation rates, 2015 to 2017	59
Table 37. Trends in 7th-12th grade dropout rates, 2015-16 to 2017-2018.....	59
Table 38. Level of education for mothers giving birth during calendar year 2017.....	60

Table 39. School enrollment for children (ages 3 and 4).....	67
Table 40. Number and licensed capacity of licensed or registered child care providers by type, 2018	67
Table 41. Number and licensed capacity of nationally accredited child care providers, 2018	68
Table 42. Median monthly charge for full-time child care, 2018	68
Table 43. Cost of center-based child care as a percentage of income, 2018	69
Table 44. Children receiving DES child care subsidies, 2015 to 2018.....	69
Table 45. DCS-involved children receiving DES child care subsidies, 2015 to 2018.....	69
Table 46. Eligible families not using DES child care subsidies, 2015 to 2018.....	70
Table 47. Children in quality educational environments, 2017 and 2018.....	71
Table 48. First Things First Quality First child data, State Fiscal Year 2019.....	71
Table 49. First Things First Quality First child care provider data, State Fiscal Year 2019	72
Table 50. Number of children birth to five years old receiving subsidy expelled from an early learning program or expulsion was prevented, 2017 and 2018.....	72
Table 51. Children (ages 3-5) enrolled in special education, 2015-16 to 2018-19	73
Table 52. Children (ages 3-5) enrolled in special education by type of disability, 2018-19	73
Table 53. Students (grades 1-3) enrolled in special education, 2018-19	73
Table 54. Percent of students (grades 1-3) enrolled in special education, 2015-16 to 2018-19 .	74
Table 55. Children referred to and found eligible for AzEIP, Federal Fiscal Years 2016 and 2017	74
Table 56. AzEIP caseloads, calendar years 2017 and 2018.....	74
Table 57. Children (ages 0-2) receiving services from DDD, State Fiscal Years 2015 to 2018	75
Table 58. Children (ages 3-5) receiving services from DDD, State Fiscal Years 2015 to 2018	75
Table 59. Health insurance coverage.....	82
Table 60. Payors for births during calendar year 2017.....	83
Table 61. Prenatal care for mothers giving birth during calendar year 2017.....	84
Table 62. Various risk factors for births during calendar year 2017.....	84
Table 63. Infant mortality, calendar year 2017	84
Table 64. Neonatal abstinence syndrome, calendar years 2016 and 2017.....	85
Table 65. Opioid overdoses and deaths, June 2017 to June 2018	86
Table 66. Breastfeeding rates for infants in the WIC program, calendar year 2018.....	87
Table 67. First Things First oral health strategy data, 2019.....	88
Table 68. Cases of infectious diseases among young children (ages 0-5), 2015-2018 cumulative	89
Table 69. Children in child care with required immunizations, 2018-19	89
Table 70. Kindergarteners with required immunizations, 2018-19	90
Table 71. Child care immunization exemption rates, 2016-17 to 2018-19	91
Table 72. Kindergarten immunization exemption rates, 2016-17 to 2018-19	91
Table 73. Non-fatal hospitalizations of young children (ages 0-5) for unintentional injuries, 2015-2018 cumulative	92
Table 74. Non-fatal emergency-room visits by young children (ages 0-5) for unintentional injuries, 2015-2018 cumulative.....	92
Table 75. Asthma hospitalizations and emergency-room visits, 2015-2017 cumulative	92
Table 76. Child mortality, 2015-2017 cumulative, 2015-2017 cumulative.....	93

Table 77. First Things First-funded home visiting program data, State Fiscal Year 2019..... 97
 Table 78. Substantiated maltreatment reports by type, January to June, 2018..... 98
 Table 79. Children removed by the Department of Child Safety (DCS), 2014 to 2017..... 98
 Table 80. Children removed by the Department of Child Safety (DCS), January to June, 2018 .. 99
 Table 81. Number of foster placements, 2015 to 2018..... 99
 Table 82. Number of licensed foster homes, 2015 to 2018 99
 Table 83. First Things First media awareness campaign impressions, SFY17-SFY19 105
 Table 85. FTF engagement of early childhood supporters and champions, SFY19 107
 Table 86. Zip Code Tabulation Areas in the Coconino Region..... 109
 Table 87. School Districts/Local Education Authorities in the Coconino Region..... 112

List of Figures

Figure 1. The First Things First Coconino Region 22
 Figure 2. Population projections for young children (ages 0-5) in Coconino County, 2020 to 2050
 29
 Figure 3. Percent of population (all ages) and young children (ages 0-5) living in poverty..... 40
 Figure 4. Families with young children (ages 0-5) living at various poverty thresholds 41
 Figure 5. Annual unemployment rates, not seasonally adjusted, 2015 to 2018 44
 Figure 6. AzMERIT Assessment Results: 3rd Grade English Language Arts, 2017-18 55
 Figure 7. Trends in passing rates for 3rd-grade English Language Arts AzMERIT, 2015-16 to 2017-
 18.....56
 Figure 8. AzMERIT Assessment Results: 3rd Grade Math, 2017-18..... 57
 Figure 9. Trends in passing rates for 3rd-grade Math AzMERIT, 2015-16 to 2017-18..... 57
 Figure 10. Level of education for the adult population (ages 25 and older) 60
 Figure 11. Health insurance coverage for the population (all ages) and for young children (ages
 0 to 5) 82
 Figure 12. Children removed by the Department of Child Safety (DCS), 2014 to 2017..... 98
 Figure 13. Map of the ZIP codes in the Coconino Region 108
 Figure 14. Map of school districts in the Coconino Region 111

Executive Summary

Regional Description

The First Things First Coconino Region includes most but not all of Coconino County and parts of neighboring Mohave and Navajo counties. The region includes the lands belonging to the Hopi Tribe (including the part in Navajo County), the Kaibab-Paiute Tribe (which is mostly in Mohave County), and the Havasupai Tribe, as these three tribes have chosen to participate as part of the Coconino Region. This decision must be ratified every two years, and each of these tribes have opted to continue as part of the region, with the opportunity to be represented on the Regional Partnership Council. The region does not include the lands belonging to the Navajo Nation or the Hualapai Tribe. In the southern part of the county, the city of Sedona is assigned to the Yavapai Region and the Forest Lakes community is assigned to the Navajo/Apache Region. The city of Winslow is assigned to the Coconino Region, although it is located in Navajo County.

Population Characteristics

According to the U.S. Census, the Coconino Region had a population of 124,238 in 2010, of whom 9,652 (8%) were children ages birth to 5. Sixteen percent of households in the region included a young child, which is the same as proportions in the county (16%) and the state (16%). Population projections for Coconino County show that the population of young children (ages 0-5) is projected to be about 9,183 by 2020, a decrease from 2010 (10,777). The projections show that the population of young children in Coconino County is expected to continue to decrease between 2020 and 2050.

In the Coconino Region, 16 percent of adults and 28 percent of young children are American Indian, much higher than percentages in the state (4% and 6%, respectively), but lower than proportions in the county (23% and 39%, respectively). Over a quarter of young children (27%) and 14 percent of adults in the region are Hispanic, whereas in the state, nearly half of young children (45%) and 25 percent of adults are Hispanic. The proportions of adults (2%) and young children (1%) who are Black or African American in the region are similar to rates in the county (1% for each), but lower than those in the state (4% and 5%, respectively) and substantially lower than the United States overall (12% and 14%, respectively). The percentages of Asian or Pacific Islander adults (2%) and young children (1%) in the Coconino Region are lower than those in the state (3% for each) and in the nation overall (5% and 5%, respectively). The race and ethnicity of mothers giving birth in the Coconino Region differ notably from those seen in the county or the state. The proportion of births to mothers who are Hispanic or Latina is higher in the region (16%) than the county (13%) but lower than in the state overall (41%), while the proportion of births to mothers who are American Indian or Alaskan is lower in the region (31%) than the county (40%) but substantially higher than in the state (6%).

One in ten children (10%) in the Coconino Region live with one or two foreign-born parents; this is comparable to the county (9%) but much lower than the state overall (26%). One in five (20%) people ages 5 and older in the region speak a language other than English at home, a proportion that is lower than that seen in the county (24%) and state overall (27%). Households in both the region (8%) and the county (7%) less frequently reported speaking Spanish at home than in the state (21%) but more frequently reported speaking other languages at home (12% in the region; 17% in the county) than in the state overall (6%).

A majority of children living in the Coconino Region live in two-parent households; 61 percent of young children in the region live with two parents or stepparents, compared to 57 percent in the county and 59 percent in Arizona. However, higher proportions of children live with relatives in both the region (3%) and county (4%) than in the state as a whole (2%). The proportion of households with young children that are single-female households in the region and the county (26% for both) is slightly higher than the state overall (24%). The percentage of young children living in a grandparent's household is higher for the region (16%) compared to the state (14%) but lower than the percentage in the county (21%). Of the 2,861 children in the Coconino Region living in a grandparent's household, 41 percent live with a grandparent who is responsible for them.

Economic Circumstances

About one of every five residents (20%) in the Coconino Region and Coconino County (21%) lives in poverty, which is higher than the rate in the state (17%). When it comes to young children, over one in four (27%) lives in poverty in the Coconino Region. While this percentage is higher than that of the total (all-age) population in the region living in poverty (20%), it is similar to the rates of children ages 0-5 living in poverty across the county (27%) and state (26%). Across all household types, median annual family income is higher in Coconino County than in Arizona overall. Median income for married couple families with children in Coconino County (\$84,099) is nearly three times the median income for single female headed families (\$30,412)

Eligibility for some public assistance programs is determined by different poverty thresholds. For example, family income at or below 141 percent of the federal poverty threshold is one criterion for eligibility for the Arizona Health Care Cost Containment System (AHCCCS)ⁱ for children ages 1 to 5, and at or below 147 percent of the federal poverty threshold for children under 1 year old. In the Coconino Region, the percentage of families with young children who may qualify for AHCCCS (those under 130% of FPL and between 130% and 149% of FPL) is slightly lower than the state overall (37% and 38%, respectively). Between 2015 and 2018, the number of both families and young children receiving Temporary Assistance for Needy Families (TANF) declined over time and the percentages of families receiving TANF in 2018 were low for

ⁱ AHCCCS is Arizona's Medicaid agency

the region (2%), county (1%), and state (3%). While participation in the Supplemental Nutrition Assistance Program (SNAP) by families and young children also declined between 2015 and 2018, participation in SNAP was still relatively high in the region for families (40%) and young children (42%), with comparable participation in the state (39% and 42%, respectively) and county (39% and 42%, respectively). Since the 2015-2016 school year, the percentage of students eligible for free or reduced-price lunch in the Coconino Region has steadily increased, from 51 percent in 2015-2016 to 57 percent in 2018-2019. A similar increasing trend has been seen in Coconino County, in contrast to statewide trends of declining eligibility rates.

Rates of adult employment in Coconino (60%) are slightly higher than rates in the county (58%), state (55%), and the US as a whole (59%). From 2015 to 2018, adult unemployment rates declined from 6.5 to 5.5 percent for Coconino County, while the state overall saw unemployment fall from 6.1 to 4.8 percent in the same period. In the Coconino Region, nearly two-thirds of households with young children (65%) have all present parents in the labor force. Overall, 88 percent of young children in the region have at least one parent in the labor force, which matches the statewide rate (89%).

About one-third of households (34%) in the Coconino Region are spending 30 percent or more of their income on housing, a proportion comparable at the county (33%), state (31%), and national (32%) levels. More than two-thirds of households (71%) in the region have both a smartphone and computer, which is higher than both state (67%) and national (66%) percentages. In the region, the majority (81%) of residents live in households with a computer and internet. This is slightly lower than state (82%) and national (83%) proportions. For children specifically, household access to a computer and internet in the region is slightly higher (82%). Of people living in households with a computer and internet in the region, more than one in ten (12%) rely solely on a cellular data plan.

Educational Indicators

In the 2018-2019 school year, 305 children were enrolled in preschool at public and charter schools in the Coconino Region. Kindergarten through third grade enrollments for the region were all relatively similar, ranging from 1,254 to 1,383 children enrolled in each grade. Kindergarten through 3rd grade chronic absence rates steadily increased from 2015-2016 to 2018-2019 at the regional, county, and state level. During the 2018-2019 school year, the Coconino Region had a 16 percent chronic absence rate, with 1,049 kindergarten through 3rd grade students in the region chronically absent. By grade level, chronic absences ranged from 14 percent to 20 percent in the Coconino Region. In the region and county, chronic absences were highest among kindergarteners (20% and 24%, respectively), similar to, but higher than, state-level chronic absences rates among kindergarteners (13%).

Fewer than half of 3rd grade students are meeting or exceeding proficiency expectations for 3rd grade literacy or math. Arizona's Measurement of Educational Readiness to Inform

Teaching (AzMERIT) 3rd Grade English Language Arts passing rate for the Coconino Region (39%) was lower than the statewide passing rate (44%) in 2017-2018. AzMERIT 3rd Grade English Language Arts passing rates have increased slightly at the region, county, and state levels, with the regional passing rate increasing from 34 percent in 2015-2016 to 39 percent in 2017-2018. The AzMERIT 3rd Grade Math passing rate for the Coconino Region (46%) was also lower than the statewide passing rate (53%) in 2017-2018. AzMERIT 3rd Grade Math passing rates have improved over time at the region, county, and state level, with regional passing rates increasing from 40 percent in 2015-2016 to 46 percent in 2017-2018.

In 2017, the four-year graduation rate for the Coconino Region was 83 percent and the five-year graduation rate was 87 percent, which exceeded both the four-year graduation and five-year graduation rates in the state (78% and 82%, respectively). Since 2015, both the four-year and five-year graduation rates have increased slightly in the Coconino Region. The 7th-12th grade dropout rate for the Coconino Region decreased from 5 percent in 2016-2017 to 3 percent in 2017-2018. A larger proportion of adults have more than a high-school education in the Coconino Region (71%) than in Coconino County (68%), Arizona (62%), and the United States overall (60%). This difference in educational attainment is also seen in mothers giving birth, with a larger proportion of births to mothers in the Coconino Region with more than a high-school education (61%) than the county (59%) and state (56%).

Early Learning

In the Coconino Region, 48 percent of children (ages 3 and 4) are enrolled in nursery school, preschool, or kindergarten. This is a larger proportion than the county (44%) and state (38%) and matches the national enrollment rate (48%). In the Coconino Region, nearly all (99.6%) of licensed child care capacity is provided by child care centers, with a small proportion provided by family child care providers and nannies/individual providers (<1%). The Coconino Region has a lower percentage of providers who are accredited (4%) than the state (10%), as well as a much lower percentage of potential child care slots (provider capacity) with accredited providers (5%) than the state (12%).

Median monthly child care costs for certified group homes and licensed centers are lower by between \$50 to \$110 in the region and county compared to statewide median costs. Licensed centers are the most expensive and approved family homes the least expensive for all ages in the region. Child care costs are relatively less expensive in Coconino County than in the state overall. At median levels, sending an infant to a licensed center requires over a tenth (13%) of a family's income in the region, compared to 16 percent in the state overall.

Most children (90%) who are not involved with the Department of Child Safety (DCS) and are eligible for Department of Economic Security (DES) child care subsidies in the Coconino Region have received them in recent years. This proportion is slightly lower than the state overall, where 92 percent of eligible children received child care subsidies in 2018. For Department of

Child Safety (DCS)-involved children specifically, the proportion of eligible children receiving subsidies in the region is lower than for all eligible children and declined sharply from 93 percent in 2017 to 76 percent in 2018. A declining trend in percent of DCS-involved children receiving subsidies was also seen at the state level, with 82 percent of eligible children receiving subsidies in 2018 compared to 91 percent in 2015. The proportion of eligible families not using Department of Economic Security (DES) child care subsidies has increased slightly over time at the region, county, and state level. In 2018, nine percent of eligible families in the Coconino Region did not use their child care subsidies.

From 2017 to 2018, the number of children who were receiving child care subsidies and were enrolled in quality environments,ⁱⁱ and particularly the number of subsidy-receiving DCS children in quality environments, increased at the regional, county, and state levels. In 2019, a total of 28 child care providers in the Coconino Region participated in Quality First, 75 percent of which were quality-level settings (public 3-5 stars), and 1,110 children were enrolled at a Quality First provider site in the Coconino Region. Of all children enrolled at a Quality First provider site in the region, 70 percent were enrolled at a quality-level setting (public 3-5 stars). In 2019, 189 children received Quality First scholarships.

The number of young children (ages 3-5) enrolled in special education increased slightly from 236 in 2015-2016 to 278 in 2018-2019 in the Coconino Region. The largest proportion of young children (ages 3-5) enrolled in special education in the region have a speech or language impairment (40%) or developmental delay (33%). Thirteen percent of students (grades 1-3) are enrolled in special education in the region, a rate slightly higher than the state (12%). Special education enrollment rates for this age group have increased from 2015-2016 to 2018-2019 at the region, county, and state levels. From 2016 to 2017, the percentage of children (ages 0-2) who were referred to the Arizona Early Intervention Program (AzEIP) and found eligible decreased from 55 percent to 52 percent in the Coconino Region. The number of children receiving services from the Division of Developmental Disabilities (DDD) has increased over time at the region and state levels since 2015. In Coconino, the number of children ages 0-2 receiving DDD services have increased by 23 percent over four years.

Child Health

In the Coconino Region, thirteen percent of the population do not have health insurance coverage, which is higher than the rate in both the state (12%) and the nation (10%). For young children specifically, health insurance coverage is slightly better than the overall population in the region but worse than the national rate, with six percent of young children uninsured in the Coconino Region and four percent of young children uninsured nationally. Over half of births (56%) in the Coconino Region were covered by AHCCCS in 2017, a percentage slightly higher

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

than the state rate (53%). The proportion of births covered by the Indian Health Service (IHS) and self-paid births were comparable between the region (6%) and the state (6%) in 2017.

While the percent of births to mothers with no prenatal care or fewer than five prenatal visits were similar in the region, county, and state, the Coconino Region had a lower proportion of births to mothers with no prenatal care in the first trimester (21.9%) than seen in Arizona overall (26.4%). The region met the Healthy People 2020 target of at least 77.9 percent of births to mothers who received prenatal care in the first trimester, whereas both the county and state did not. The proportion of babies born at low birth weight is much higher in the region (9.8%) than the county (9.0%) and state (7.5%), so the region did not meet the Healthy People 2020 target of keeping rates of low birth weight babies below 7.8 percent. Rates of preterm birth in both the region (10.6%) and the county (11.0%) also did not meet the Healthy People 2020 target of no more than 9.4 percent of births before 37 weeks gestation. The Coconino Region did not meet the Healthy People 2020 target for maternal use of tobacco during pregnancy (not to exceed 1.4%), with 2.4 percent of births to mothers using tobacco while pregnant. However, rates of tobacco use during pregnancy in both the region (2.4%) and the county (1.8%) were substantially lower than rates in the state as a whole (4.7%). In 2017, Coconino County had an infant mortality rate (4.0 per 1,000 live births) that met the Healthy People 2020 target (6.0 per 1,000 live births) and was lower than the state rate (5.6 per 1,000 live births).

In 2016 and 2017 combined, the rate of neonatal abstinence syndrome (i.e., opioid-addicted babies) in Coconino County (2.2 per 1,000 live births) was less than a third of the statewide rate (7.4 per 1,000 live births). Between June 2017 and June 2018, there were 75 suspected opioid overdoses among people of all ages in Coconino County. In 2017, there were 10 deaths directly attributed to opioids in Coconino County; this accounted for only one percent of opioid-related deaths across the state.

In Coconino County, rates of breastfeeding for infants in the WIC (Special Supplemental Nutrition Program for Women, Infants, and Children) program are much higher than the state rates. While 87 percent of WIC infants in the county were breastfed at some point in infancy, rates of breastfeeding decline with the baby's age. Although the American Academy of Pediatrics recommends exclusive breastfeeding until six months of age, at six months of age, less than half of WIC infants (44%) were ever breastfed and only 8 percent were exclusively breastfed in Coconino County. Even at three months old, only about one in three WIC infants (32%) were exclusively breastfed. However, rates of exclusive breastfeeding at both three and six months were more than double the rates seen statewide (13% and 3%, respectively).

In 2019, 483 children received at least one fluoride varnish and 773 children received at least one oral health screening in the Coconino Region as a result of the work of First Things First.

Between 2015 and 2018, Coconino County had 294 cases of influenza, 180 cases of respiratory syncytial virus (RSV), and fewer than six cases of varicella ("chickenpox"), pertussis, or mumps in young children. Across all required immunizations, children in child care in the Coconino

Region had slightly higher vaccination rates than the state as a whole and met the Healthy People 2020 targets during the 2018-2019 school year. However, the region trailed statewide kindergarten immunization rates and did not meet any of the Healthy People 2020 targets for kindergarten immunizations during the same school year. In terms of immunization exemptions among children in child care, in 2016-2017 and 2017-2018 the region had higher rates of children receiving religious exemptions and exemptions from all required vaccines compared to the state. However, during the 2018-2019 school year, 4.4 percent of children in child care received a religious exemption in Coconino compared to 4.5 percent of children statewide. Similarly, 3.2 percent of children in child care during the same school year received exemptions from all required vaccines in Coconino compared to 3.0 percent of children statewide. The Coconino Region had much higher rates of children in kindergarten receiving personal belief exemptions and exemptions from all required vaccinations than rates seen statewide between 2016-2017 and 2018-2019.

Between 2015 and 2018, reasons for non-fatal hospitalizations of young children for unintentional injuries in the Coconino Region aligned with the state, with falls (26%) and poisoning (20%) the most common. Reasons for non-fatal emergency room visits were also similar between region, county, and state, with falls (43%) and being 'struck by or against' an object or person (15%) the most common. Between 2015 and 2017, there were 55 emergency room visits and 16 inpatient hospitalizations for asthma for young children, excluding newborns, in the Coconino Region. The average length of stay for asthma hospitalization (3.2 days) was higher for the region than the state (1.9 days). Between 2015 and 2017, there were 44 deaths of children in the Coconino Region, 57 percent of which were young children (25 deaths). The proportion of child deaths that involved young children was much lower in the Coconino Region (56%) and Coconino County (57%) than in the state (71%).

Family Support and Literacy

In 2019, 52 families in the Coconino Region received First Things First-funded home visitation services, including one family who successfully completed and graduated from home visitation programs in 2019.

Between January 2018 and June 2018, there were 55 substantiated maltreatment reports in Coconino County. Of those substantiated reports, the majority were related to neglect (80%), with a smaller proportion related to physical abuse (13%) and sexual abuse (5%). These proportions mirror the statewide proportions for Arizona during this time period (83%, 13% and 4%, respectively). The statewide number of child removals by the Department of Child Safety (DCS) declined from 2014 to 2017. Between January 2018 and June 2018, 10 percent of DCS reports resulted in a child removal in Coconino County, with 53 children removed. While the percentage of children removed overall was lower in the county than the state (16%), there was a much higher percentage of children with a prior removal in the last 24 months in Coconino

County (17%) than the state (9%). While the number of foster placements declined from 2015 to 2018, the statewide number of licensed foster homes steadily increased during this time.

Systems Coordination among Early Childhood Programs and Services

Through continued partnership with LAUNCH Flagstaff, the Coconino Regional Partnership Council is able to advance coordination and collaboration in the early education system in the Region. LAUNCH Flagstaff is currently working to establish its Preschool Expansion project that aims to provide full-day, year-round, high-quality preschool free of charge to all four-year-olds living in households with income between 130 and 200 percent of the federal poverty level. LAUNCH Flagstaff was able to secure funding from the City of Flagstaff, Coconino County and the Wharton Foundation to continue to advance its preschool expansion project. The funding served as a milestone for the expansion project, allowing it to move forward into the next stage of its implementation. Additionally, through an in-kind donation from Association for Supportive Child Care, LAUNCH was able to create a regional lead supervisor position. This position will be responsible for the coordination and implementation of the expansion project, including working to ensure each classroom of the expansion provides a high-quality care and education. Though the work of LAUNCH expansion project is currently limited to the city of Flagstaff, it is being developed in a manner to support future development of the work into the rural communities of Coconino County.

Furthermore, as part of its goal to increase collaboration of literacy resources in the community, LAUNCH Flagstaff applied for and was subsequently selected as a Read-On Arizona Acceleration Zone. As a result, LAUNCH's executive director received training in the Lectio Literacy program analysis tool which has been used to form a literacy coordination team comprised of representatives from the Flagstaff Library, the Literacy Center, Flagstaff Unified School District, Northern Arizona University, Parenting Arizona, Coconino County School Superintendent's office, First Things First, the Association for Supportive Child Care, United Way of Northern Arizona, and Reach out and Read. The team has completed an initial program analysis of the literacy landscape in Flagstaff and is determining strategies for improved alignment and coordination of these existing resources in conjunction with Flagstaff Unified School District's literacy plan.

To further inform the system building work within the region, in SFY2019 the Regional Partnership Council convened community conversations with local representatives in the city of Page to identify the greatest needs for children birth to five and their families in the community and surrounding areas. These meetings were structured to support the work of the Page Childcare Partnership in identifying coordination and collaboration strategies for improving access to high quality child care in the region. Through these discussions and the work of the Page Childcare Partnership, the Coconino Regional Partnership Council was able to identify early childhood needs in Page that are universal to rural communities in the region and as a result was able begin to establish priorities for coordination and collaboration work for the

Coconino Region. In addition to the expansion of high quality early education programs in the region, it is of note that professional development for early childhood professionals was identified as a strong need in rural communities to support access to high quality education. Programs in rural communities often struggle to recruit qualified professionals to staff their classrooms and providing greater access to educational opportunities was identified as a strategy that could address that need. Collaborations have resulted in some additional direction for the work of the council with many more opportunities likely in the future.

Communication, Public Information and Awareness

First Things First regularly measures their progress toward building support for children birth to age 5 through statewide surveys targeting both the general population and parents of young children. Their most recent statewide survey conducted in September 2018 found that, compared to previous surveys in 2012 and 2016, there was increased agreement in the general public and parents of young children with statements about the importance of early childhood health and development. These include: the state should ensure all children have access to early childhood services, a child who received early education and healthcare services before age 5 is more likely to succeed in school and beyond, and the state should put the same priority on early education as it does on K-12 education. While the survey also showed that awareness of First Things First has increased over time, there are still large portions of the general public (87%) and parents of young children (66%) who have never heard of First Things First.

In SFY 2019, First Things First secured 11 million advertising impressions through traditional media strategies, including television, radio, cinema, and billboard ads, and 76 million digital advertising impressions through digital media strategies, including online ads on desktop and smartphone devices. Particular success has been seen in the growth of Facebook Page Likes for FTF, which grew from just 3,000 in 2012 to 142,600 in SFY19. Additional digital marketing content in SFY19 included 40 original, high quality digital marketing pieces and the creation of an online searchable database of early childhood programs, which logged over 24,187 visits in its first six months. Specifically, in the Coconino Region, digital advertising led to a total of 8,670 click-throughs to the FTF website where families could access more information and resources.

Because Arizona is so vast – with more than 500,000 children under age 6 and nearly 400,000 households with kids under age 6 – engaging others in spreading the word about early childhood is critical to reaching across diverse geographic areas and expanding our reach. Supporters and Champions are trained in early childhood messaging and effective ways to share early childhood information, and the Coconino Region had 522 Supporters and 83 Champions in 2019. These Supporters and Champions reported a total of 48 positive actions taken on behalf of young children throughout the Coconino Region in 2019. These actions range from leading presentations in support of early childhood to sharing FTF's early childhood resources with parents at community events.

First Things First has also led a concerted effort to build awareness among policymakers at all levels (federal, tribal, state, and municipal) of the importance of early childhood. In SFY19, FTF also launched ACT4KIDS, a text-based system that alerts participants to timely developments in early childhood policy and opportunities to engage with policymakers. In its first nine months of implementation, more than 700 Arizonans had signed up to participate in ACT4KIDS. In addition, FTF actively participates in the Arizona Early Childhood Alliance, comprised of more than 50 early childhood system leaders, which represents a united voice of the early childhood community in advocating for early childhood programs and services. For the past three years, the Alliance has also led an annual Early Childhood Day at the legislature, which draws hundreds of Arizonans to the state Capitol to engage with policymakers and show their support for early childhood development and health.

The Coconino Region

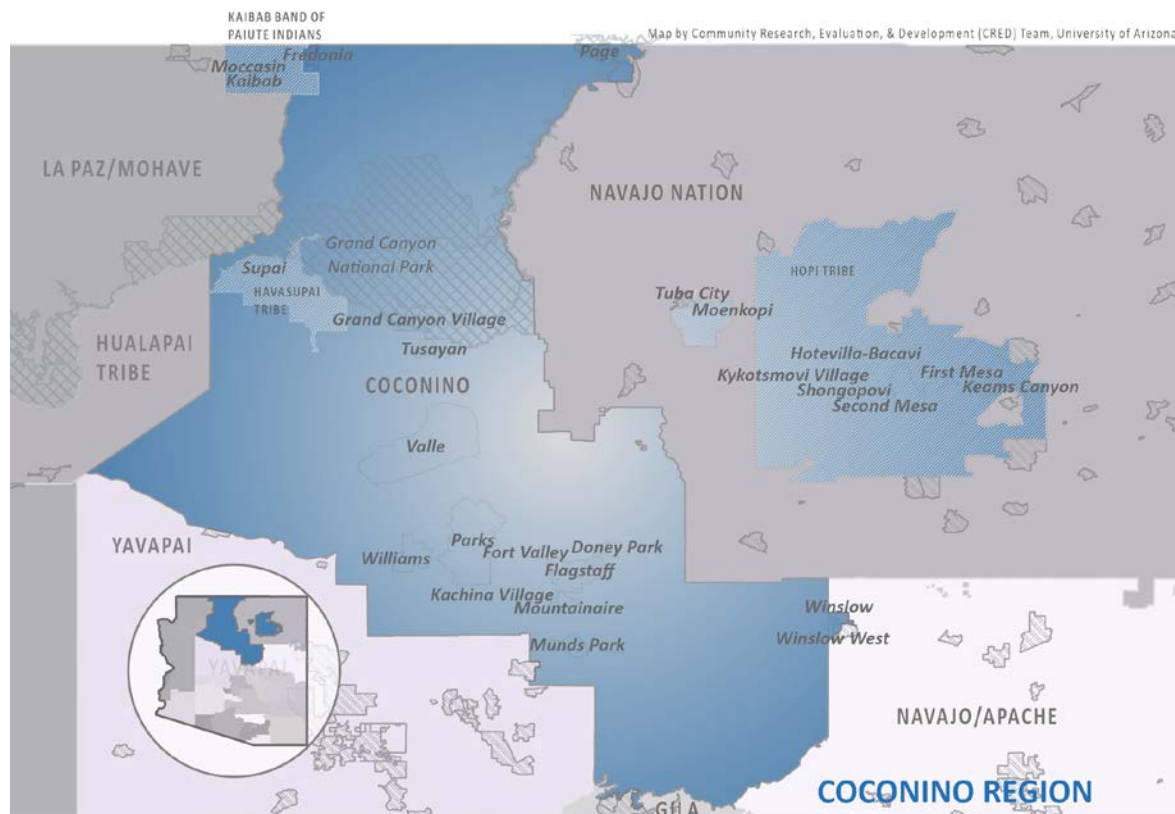
Regional Boundaries

The First Things First regional boundaries were established to create regions that (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, (d) facilitate the ability to convene a Regional Partnership Council, and (e) allow for the collection of demographic and indicator data.

The First Things First Coconino Region includes most but not all of Coconino County and parts of neighboring Mohave and Navajo counties. The region includes the lands belonging to the Hopi Tribe (including the part in Navajo County), the Kaibab-Paiute Tribe (which is mostly in Mohave County), and the Havasupai Tribe, as these three tribes have chosen to participate as part of the Coconino Region. This decision must be ratified every two years, and each of these tribes have opted to continue as part of the region, with the opportunity to be represented on the Regional Partnership Council. The region does not include the lands belonging to the Navajo Nation or the Hualapai Tribe. In the southern part of the county, the city of Sedona is assigned to the Yavapai Region and the Forest Lakes community is assigned to the Navajo/Apache Region. The city of Winslow is assigned to the Coconino Region, although it is located in Navajo County.

Figure 1 below shows the geographical area covered by the Coconino Region. Additional information available at the end of this report includes a map of the region by zip code in Appendix 1, a table listing zip codes for the region in Appendix 2, and a map of school districts in the region in Appendix 3.

Figure 1. The First Things First Coconino 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>)

Data Sources

The data contained in this report come from a variety of sources. Some data were provided to First Things First by state agencies, such as the Arizona Department of Economic Security (DES), the Arizona Department of Education (ADE), and the Arizona Department of Health Services (ADHS). Other data were obtained from publicly available sources, including the 2010 U.S. Census, the American Community Survey (ACS), the Arizona Department of Administration (ADOA), and the Department of Child Safety (DCS).

The U.S. Census¹ 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 Coconino Region presented in this report were calculated by identifying each block in the region and aggregating the data over all of those blocks.

The American Community Survey² 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 Coconino 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 Coconino 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 2013 to 2017. In general, the reliability of ACS estimates is greater for more populated areas. Statewide estimates, for example, are more reliable than county-level estimates.

To protect the confidentiality of program participants, the First Things First Data Dissemination and Suppression Guidelines preclude our reporting social service and early education programming data if the count is less than ten and preclude our reporting data related to health or developmental delay if the count is less than six. In addition, some data received from state agencies may be suppressed according to their own guidelines. The Arizona Department of Health Services does not report counts less than six; the Arizona Department of Economic Security does not report counts between one and nine; and the Arizona Department of Education does not report counts less than eleven. 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. 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 ages 0-12 months, 13 children ages 13-24 months, and 12 children ages 25-35 months, the entry in the table would read “26 to 34.” This is because the suppressed number of children ages 0-12 months is between one and nine, so the possible range of values is the sum of the two known numbers plus one to the sum of the two known numbers plus nine. Ranges that include numbers below the suppression threshold of less than six or ten may still be included if the upper limit of the range is above six or ten. Since a range is provided rather than an exact number, the confidentiality of program participants is preserved.

Population Characteristics

Why it Matters

To support the healthy development and learning of young children across Arizona, advocates and decision makers need to understand who those children and their families are.³ Although parents are a child's first and most important teachers, families of young children often use community resources to help them promote positive outcomes for their children.⁴ The number and characteristics of young children and families in a region can inform the range of services needed in a community, helping to guide where to locate child care, health care, and social services so that they are accessible to those who need them.^{5,6}

Immigrant families. Families in the US are becoming more diverse. Knowing how local communities are changing can help ensure families have access to the services and supports they need to thrive.⁷ Children of foreign-born parents represent one of the fastest growing groups of young children in the country.⁸ Recent changes in national immigration policy have led some immigrant families to avoid using social services for which they legally qualify due to fear of deportation or jeopardizing their legal status in the country.^{9,10,11} Policy changes at a national level, such as the “public charge rule”ⁱⁱⁱ set to be enacted in October 2019, may deter families—particularly those with a recent history of immigration—from using available supports for which they legally qualify.^{12,13} Children in these families may be at particular risk of reduced access to medical care and increased food insecurity.^{14,15,16}

Language use. Households with multiple languages spoken pose a unique balance of benefits for child learning and barriers to parental engagement, which counties with high rates of other languages spoken should specifically consider. Acknowledging and valuing linguistic heritage (such as through language preservation efforts) and recognizing needs for resources and services in languages other than English should remain important considerations for organizations and agencies across Arizona.^{17,18,19,20} Awareness of the levels of English proficiency and of other home languages spoken within a region provides information about a community's assets and allows for identifying relevant supports. Young children can benefit from 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.^{21,22,23,24} Although dual language learning is an asset, limited English speaking households (that is, households where none of the adult members speak English well) can face challenges. These families may experience barriers to accessing health care and social service information, as well as barriers to engaging in important parent-teacher interactions, all of which can impede their child's health and development.^{25,26}

ⁱⁱⁱ U.S. Citizenship and Immigration Services defines “public charge” as an individual who is likely to become “primarily dependent on the government for subsistence, as demonstrated by either the receipt of public cash assistance for income maintenance, or institutionalization for long-term care at government expense.”

Providing information about resources and services in languages accessible to families in the region can help remove those barriers. Although Spanish is the most common second language spoken, Arizona is also home to a large number of Native communities, with Native languages spoken by families in those communities. Language preservation and revitalization are critical to strengthening culture in Native communities, addressing issues of educational equity, and to the promotion of social unity, community well-being, and Indigenous self-determination.^{27, 28} Special consideration should be given to respecting and supporting the numerous Native American languages spoken, particularly in tribal communities around the state.

Family and household composition. In addition to growing racial, ethnic and social diversity, US and Arizona families are becoming more diverse in terms of family structure.^{29,30,31,32}

Understanding the makeup of families in a region can help better prepare child care, school and agency staff to engage with families in ways that support positive interactions both within families and with staff to enhance each child's early learning and development.³³

Multi-generational households, particularly those where grandparents live in the home with the child and parents, are traditional in some communities and cultures and can provide financial and social benefits.³⁴ However, parents are not always in the picture in these homes. Care of children by someone other than their parents, such as relatives or close friends, is known as kinship care and is increasingly common.³⁵ Children living in kinship care 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. Understanding who is caring for children can help in identifying and creating specific supports for these families. Children in kinship care often face special needs as a result of trauma, and therefore these families often require additional support and assistance to help children adjust and provide the best possible home environment.³⁶ A child's risk of living in poverty is also higher for those living with grandparents, adding to the family stress.³⁷ These families are likely to require access to information on resources, support services, benefits, and policies available to aid in their caregiving role.³⁸

What the Data Tell Us

Population, Race, and Ethnicity

- According to the U.S. Census, the Coconino Region had a population of 124,238 in 2010, of whom 9,652 (8%) were children ages birth to 5. Sixteen percent of households in the region included a young child, which is the same as proportions in the county (16%) and the state (16%) (Table 1).
- Population projections for Coconino County show that the population of young children (ages 0-5) is projected to be about 9,183 by 2020, a decrease from 2010 (10,777). The projections show that the population of young children in Coconino County is expected to continue to decrease between 2020 to 2050 (Figure 2).
- In the Coconino Region, 16 percent of adults and 28 percent of young children are American Indian, much higher than percentages in the state (4% and 6%, respectively), but lower than proportions in the county (23% and 39%, respectively). Over a quarter of young children (27%) and 14 percent of adults in the region are Hispanic, whereas in the state, nearly half of young children (45%) and 25 percent of adults are Hispanic. The proportions of adults (2%) and young children (1%) who are Black or African American in the region are similar to rates in the county (1% for each), but lower than those in the state (4% and 5%, respectively) and substantially lower than the United States overall (12% and 14%, respectively). The percentages of Asian or Pacific Islander adults (2%) and young children (1%) in the Coconino Region are lower than those in the state (3% for each) and much lower than national proportions (5% and 5%, respectively) (Table 3 & Table 4).
- The race and ethnicity of mothers giving birth in the Coconino Region notably differ from those seen in the county or the state. The proportion of births to mothers who are Hispanic or Latina is higher in the region (16%) than the county (13%) but lower than in the state overall (41%), while the proportion of births to mothers who are American Indian or Alaskan is lower in the region (31%) than the county (40%) but substantially higher than in the state (6%) (Table 5).

Immigrant Families & Language Use

- One in ten children (10%) in the Coconino Region live with one or two foreign-born parents; this is comparable to the county (9%) but much lower than the state overall (26%) (Table 6).
- One in five (20%) people ages 5 and older in the region speak a language other than English at home, a proportion that is lower than that seen in the county (24%) and state overall (27%). Households in both the region (8%) and the county (7%) less frequently reported speaking Spanish at home than in the state (21%) but more frequently

reported speaking other languages at home (12% in the region; 17% in the county) than in the state overall (6%) (Table 7).^{iv}

- There is a lower percentage of limited-English-speaking households in the region (2%) and county (3%) than in the state or the United State overall (4% in both) (Table 9).

Family & Household Composition

- A majority of children living in the Coconino Region live in two-parent households; 61 percent of young children in the region live with two parents or stepparents, compared to 57 percent in the county and 59 percent in Arizona. However, higher proportions of children live with relatives in both the region (3%) and county (4%) than in the state as a whole (2%) (Table 10).
- The proportion of households with young children that are single-female households in the region and the county (26% for both) is slightly higher than the state overall (24%) (Table 11).
- The percentage of young children living in a grandparent's household is higher for the region (16%) compared to the state (14%) but lower than the percentage in the county (21%). Of the 2,861 children in the Coconino Region living in a grandparent's household, 41 percent live with a grandparent who is responsible for them (Table 12 & Table 13).

^{iv} Please note that the most recent estimates from the American Communities Surveys (ACS) no longer specify what those other languages are. Based on ACS data included in previous Needs and Assets Reports for the Coconino Region, it is likely that the other languages spoken at home in the region are Native North American languages. See

<https://files.firstthingsfirst.org/regions/Publications/Regional%20Needs%20and%20Assets%20Report%20-%202018%20-%20Coconino.pdf>

Population, Race, and Ethnicity

Table 1. Population and households, 2010

GEOGRAPHY	TOTAL POPULATION	POPULATION (AGES 0-5)	TOTAL NUMBER OF HOUSEHOLDS	HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5)	PERCENT OF HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5)
Coconino Region	124,238	9,652	43,764	6,795	16%
Coconino County	134,421	10,777	46,711	7,474	16%
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%

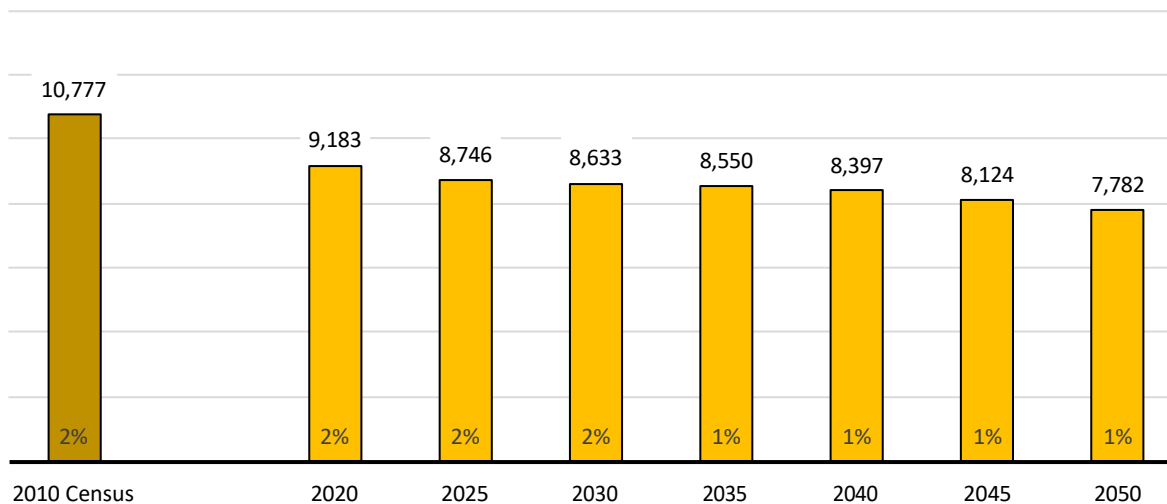
Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Tables P1, P4, & P20

Table 2. Population of children by single year of age, 2010

GEOGRAPHY	POPULATION (AGES 0-5)	AGE 0	AGE 1	AGE 2	AGE 3	AGE 4	AGE 5
Coconino Region	9,652	1,547	1,572	1,640	1,687	1,548	1,658
Coconino County	10,777	1,732	1,773	1,845	1,882	1,713	1,832
Arizona	546,609	87,557	89,746	93,216	93,880	91,316	90,894
United States	24,258,220	3,944,153	3,978,070	4,096,929	4,119,040	4,063,170	4,056,858

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

Figure 2. Population projections for young children (ages 0-5) in Coconino County, 2020 to 2050



Source: Arizona Office of Economic Opportunity. (2018). Arizona Population Projections: 2018 to 2055, Medium Series

Note: The numbers in the base of each bar indicate the county's population as a percentage of the state's population of young children.

Table 3. Race and ethnicity of the adult population (ages 18 and older), 2010

GEOGRAPHY	POPULATION 18 YEARS AND OVER	HISPANIC	WHITE, NOT HISPANIC	BLACK OR AFRICAN- AMERICAN, NOT HISPANIC	AMERICAN INDIAN, NOT HISPANIC	ASIAN OR PACIFIC ISLANDER, NOT HISPANIC	OTHER, NOT HISPANIC
Coconino Region	96,015	14%	65%	2%	16%	2%	2%
Coconino County	102,633	12%	60%	1%	23%	2%	2%
Arizona	4,763,003	25%	63%	4%	4%	3%	1%
United States	234,564,071	14%	67%	12%	1%	5%	1%

Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P11

Table 4. Race and ethnicity of the population of young children (ages 0-4), 2010

GEOGRAPHY	POPULATION (AGES 0-4)	HISPANIC	WHITE, NOT HISPANIC	BLACK OR AFRICAN- AMERICAN	AMERICAN INDIAN	ASIAN OR PACIFIC ISLANDER
Coconino Region	7,994	27%	42%	1%	28%	1%
Coconino County	8,945	22%	36%	1%	39%	1%
Arizona	455,715	45%	40%	5%	6%	3%
United States	20,201,362	25%	51%	14%	1%	5%

Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Tables P12B-H

Table 5. Race and ethnicity of mothers giving birth in calendar year 2017

GEOGRAPHY	TOTAL NUMBER OF BIRTHS IN 2017	MOTHER WAS HISPANIC OR LATINA	MOTHER WAS WHITE, NOT HISPANIC	MOTHER WAS BLACK OR AFRICAN- AMERICAN	MOTHER WAS AMERICAN INDIAN OR ALASKAN	MOTHER WAS ASIAN OR PACIFIC ISLANDER
Coconino Region	1,415	16%	50%	1%	31%	2%
Coconino County	1,506	13%	45%	1%	40%	2%
Arizona	81,664	41%	44%	6%	6%	4%

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Immigrant Families and Language Use

Table 6. Children (ages 0-5) living with parents who are foreign-born

GEOGRAPHY	YOUNG CHILDREN (AGES 0-5) LIVING IN FAMILIES OR SUBFAMILIES	YOUNG CHILDREN (AGES 0-5) LIVING IN FAMILIES OR SUBFAMILIES WITH ONE OR TWO FOREIGN-BORN PARENTS	PERCENT OF YOUNG CHILDREN (AGES 0-5) LIVING IN FAMILIES OR SUBFAMILIES WITH ONE OR TWO FOREIGN-BORN PARENTS
Coconino Region	8,309	849	10%
Coconino County	9,003	798	9%
Arizona	498,102	130,705	26%
United States	22,939,897	5,730,869	25%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B05009

Note: Children living in subfamilies are children who live together with one or two of their parents in a relative's household (such as a grandparent or aunt or uncle).

Table 7. Language spoken at home by persons ages 5 and older

GEOGRAPHY	POPULATION (AGES 5 AND OLDER)	POPULATION (AGES 5+) WHO SPEAK ONLY ENGLISH AT HOME	POPULATION (AGES 5+) WHO SPEAK SPANISH AT HOME	POPULATION (AGES 5+) WHO SPEAK OTHER LANGUAGES AT HOME
Coconino Region	121,281	80%	8%	12%
Coconino County	130,648	76%	7%	17%
Arizona	6,375,189	73%	21%	6%
United States	301,150,892	79%	13%	8%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B16001

Note: The most recent estimates from the American Community Survey (ACS) no longer specify the proportion of the population who speak a Native North American language for geographies smaller than the state.

Table 8. English-language proficiency for persons ages 5 and older

GEOGRAPHY	POPULATION (AGES 5 AND OLDER)	POPULATION (AGES 5+) WHO SPEAK ONLY ENGLISH AT HOME	POPULATION (AGES 5+) WHO SPEAK ANOTHER LANGUAGE AT HOME, AND SPEAK ENGLISH "VERY WELL"	POPULATION (AGES 5+) WHO SPEAK ANOTHER LANGUAGE AT HOME, BUT DO NOT SPEAK ENGLISH "VERY WELL"
Coconino Region	121,281	80%	16%	4%
Coconino County	130,648	76%	19%	5%
Arizona	6,375,189	73%	18%	9%
United States	301,150,892	79%	13%	9%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B16005

Table 9. Limited-English-speaking households

GEOGRAPHY	TOTAL NUMBER OF HOUSEHOLDS	NUMBER OF "LIMITED ENGLISH SPEAKING" HOUSEHOLDS	PERCENT OF HOUSEHOLDS WHICH ARE "LIMITED ENGLISH SPEAKING"
Coconino Region	43,991	798	2%
Coconino County	47,588	1,393	3%
Arizona	2,482,311	108,133	4%
United States	118,825,921	5,305,440	4%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B16002

Family and Household Composition

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

GEOGRAPHY	CHILDREN (0-5) LIVING IN HOUSEHOLDS	CHILDREN (0-5) LIVING WITH TWO PARENTS OR STEPPARENTS	CHILDREN (0-5) LIVING WITH ONE PARENT OR STEPPARENT	CHILDREN (0-5) LIVING WITH RELATIVES (NOT PARENTS)	CHILDREN (0-5) LIVING WITH NON- RELATIVES
Coconino Region	8,693	61%	35%	3%	1%
Coconino County	9,495	57%	38%	4%	1%
Arizona	520,556	59%	37%	2%	2%
United States	23,817,787	62%	34%	2%	2%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Tables B05009, B09001, & B17006

Table 11. Heads of households in which children (ages 0-5) live, 2010

GEOGRAPHY	HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5)	MARRIED FAMILY HOUSEHOLDS	SINGLE-MALE HOUSEHOLDS	SINGLE-FEMALE HOUSEHOLDS
Coconino Region	6,795	62%	11%	26%
Coconino County	7,474	63%	11%	26%
Arizona	384,441	65%	11%	24%
United States	17,613,638	67%	9%	24%

Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Tables P20 & P32

Table 12. Children (ages 0-5) living in the household of a grandparent, 2010

GEOGRAPHY	POPULATION (AGES 0-5)	CHILDREN (0-5) LIVING IN A GRANDPARENT'S HOUSEHOLD	PERCENT OF CHILDREN (0-5) WHO LIVE IN A GRANDPARENT'S HOUSEHOLD
Coconino Region	9,652	1,508	16%
Coconino County	10,777	2,210	21%
Arizona	546,609	74,153	14%
United States	24,258,220	2,867,165	12%

Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P41

Table 13. Grandparents responsible for grandchildren (ages 0-17) living with them

GEOGRAPHY	GRANDCHILDREN UNDER 18 LIVING WITH GRANDPARENT HOUSEHOLDER	PERCENT OF GRANDCHILDREN UNDER 18 LIVING WITH A GRANDPARENT HOUSEHOLDER WHO IS RESPONSIBLE FOR THEM
Coconino Region	2,861	41%
Coconino County	4,434	47%
Arizona	147,707	51%
United States	5,781,786	49%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B10002

Note: This table includes both (a) grandchildren living with grandparents with no parent present and (b) grandchildren who live in multigenerational homes where the grandparent has assumed responsibility for the child, despite the presence of a parent.

Economic Circumstances

Why it Matters

A family's economic stability is a powerful predictor of child well-being and is one of the key social determinants of health.³⁹ Factors contributing to economic stability—or lack thereof—include **poverty, food insecurity, employment, and housing instability.**⁴⁰

Poverty. Childhood poverty can negatively affect the way children's bodies grow and develop, including fundamental changes to the architecture of the brain.⁴¹ Children raised in poverty are at a greater risk of a host of negative outcomes including low birth weight, lower school achievement, and poor health.^{42,43,44,45,46} They are also more likely to remain poor later in life.^{47,48} As a benchmark, the 2019 Federal Poverty Guideline—the criterion used for establishing eligibility for some safety net programs—for a family of four was \$25,750.⁴⁹ However, the federal poverty guideline definition of poverty was developed in the 1950s, and estimates only what a family would need to earn to afford basic nutrition, without taking into account other costs of living; it is widely considered to be well below what a family actually needs to earn to make ends meet. The “self-sufficiency standard” attempts to estimate how much families need to earn to fully support themselves, accounting for local costs of housing, transportation, and child care, and other budget items.⁵⁰ The 2018 self-sufficiency standard for an Arizona family with two adults, one preschooler, and one school-age child was \$56,143—over twice the poverty threshold.⁵¹

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 support services to children and families. Eligibility is based on citizenship or qualified resident status, Arizona residency, and limits on resources and monthly income.

Food insecurity. A limited or uncertain availability of food is negatively associated with many markers of health and well-being for children, including heightened risks for developmental delays⁵² and being overweight or obese.⁵³ To help reduce food insecurity, there are a variety of federally-funded programs including the Supplemental Nutrition Assistance Program (SNAP),⁵⁴ the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC),⁵⁵ the National School Lunch Program,⁵⁶ the School Breakfast Program,⁵⁷ the Summer Food Service Program,⁵⁸ and the Child and Adult Care Food Program (CACFP).⁵⁹ However, only about 58 percent of food insecure households nationwide report participating in federally-funded nutrition assistance programs.⁶⁰

SNAP. Administered by the Arizona Department of Economic Security and also referred to as “Nutrition Assistance” and “food stamps,” SNAP has been shown to help reduce hunger and improve access to healthier food.⁶¹ 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 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.⁶²

WIC. Administered by the Arizona Department of Health Services, this federally-funded program serves pregnant, postpartum, and breastfeeding women, as well as infants and young children (under the age of five) who are economically disadvantaged (i.e., family incomes at or below 185 percent of the federal poverty level). The program offers funds for nutritious food, breastfeeding and nutrition education, and referrals to health and social services.⁶³

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.⁶⁴

National School Lunch Program. Administered by the Arizona Department of Education, the National School Lunch Program provides free and reduced-price meals at school for students whose family incomes are at or less than 130 percent of the federal poverty level for free lunch, and 185 percent of the federal poverty level for reduced-price lunch.

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.⁶⁵ Unemployment can also put families at greater risk for stress, family conflict, and homelessness.⁶⁶ Note that this does 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.⁶⁷

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.⁶⁸ Traditionally, housing has been deemed affordable for a family if it costs less than 30 percent of their annual income.⁶⁹ High housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health, and homelessness.^{70,71}

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. 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.⁷² The term "digital divide" refers to disparities in

communication and information technologies,⁷³ and the lack of sustained access to information and communication technologies in low-income communities is associated with economic and social inequality.⁷⁴ 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).⁷⁵ Nationally, 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.⁷⁶ 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.^{77,78,79}

What the Data Tell Us

Poverty

- About one of every five residents (20%) in the Coconino Region and Coconino County (21%) lives in poverty, which is higher than the rate in the state (17%). When it comes to young children, over one in four (27%) lives in poverty in the Coconino Region. While this percentage is higher than that of the total (all-age) population in the region living in poverty (20%), it is similar to the rates of children age 0-5 living in poverty across the county (27%) and state (26%) (Figure 3).
- Across all household types, median annual family income is higher in Coconino County than in Arizona overall. Median income for married couple families with children in Coconino County (\$84,099) is nearly three times the median income for single female headed families (\$30,412) (Table 14).
- Eligibility for some public assistance programs is determined by different poverty thresholds. For example, family income at or below 141 percent of the federal poverty threshold is one criterion for eligibility for the Arizona Health Care Cost Containment System (AHCCCS)^v for children ages 1 to 5, and at or below 147 percent of the federal poverty threshold for children under 1 year old.⁸⁰ In the Coconino Region, the percentage of families with young children who may qualify for AHCCCS (those under 130% of FPL and between 130% and 149% of FPL) is slightly lower than the state overall (37% and 38%, respectively) (Table 15 & Figure 4).
- Between 2015 and 2018, the number of both families and young children receiving Temporary Assistance for Needy Families (TANF) declined over time and the percentages of families receiving TANF in 2018 were low for the region (2%), county (1%), and state (3%) (Table 16 & Table 17).^{vi}

Food Insecurity

- While participation in the Supplemental Nutrition Assistance Program (SNAP) by families and young children also declined between 2015 and 2018, participation in SNAP was still relatively high in the region for families (40%) and young children (42%), with comparable participation in the state (39% and 42%, respectively) and county (39% and 42%, respectively) (Table 18 & Table 19).
- Since the 2015-2016 school year, the percentage of students eligible for free or reduced-price lunch in the Coconino Region has steadily increased, from 51 percent in 2015-2016 to 57 percent in 2018-2019. A similar trend has been seen in Coconino County, whereas eligibility rates have been declining statewide (Table 20).

^v AHCCCS is Arizona's Medicaid agency

^{vi} Please note that these numbers do not include families and children receiving TANF benefits from the Hopi Family Assistance Program (TANF).

Employment

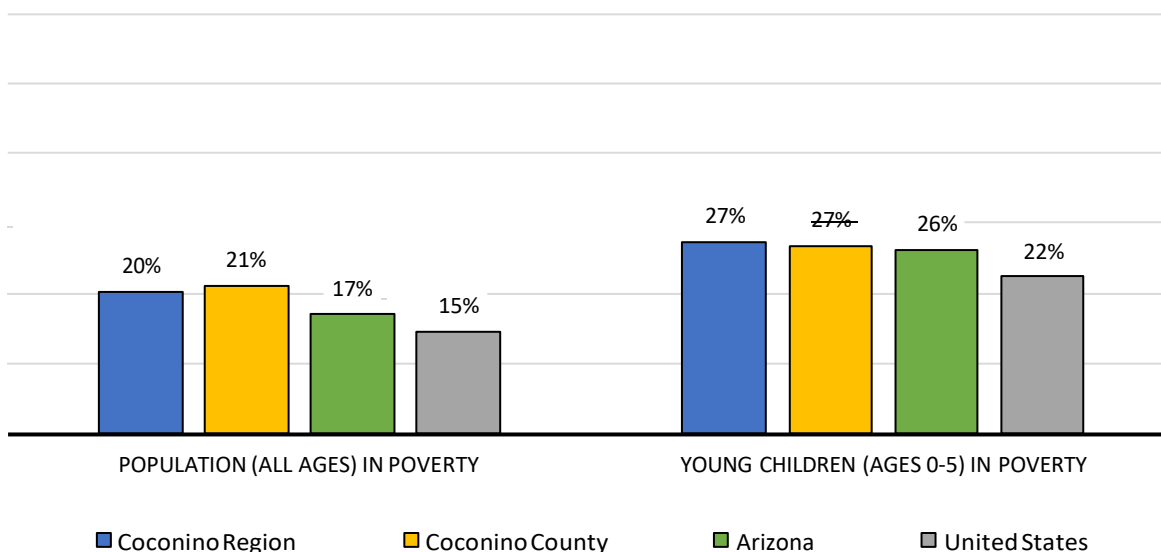
- Rates of adult employment in Coconino (60%) are higher than rates in the county (58%), state (55%), and the US as a whole (59%). From 2015 to 2018, the adult unemployment rate declined from 6.5 to 5.5 percent for Coconino County, while the state overall saw unemployment fall from 6.1 to 4.8 percent in the same period (Table 21 & Figure 5).
- In the Coconino Region, nearly two-thirds of households with young children (65%) have all present parents in the labor force. Overall, 88 percent of young children in the region have at least one parent in the labor force, which matches statewide rates (89%) (Table 22).

Housing Instability

- About one-third of households (34%) in the Coconino Region are spending 30 percent or more of their income on housing, a proportion comparable at the county (33%), state (31%), and national (32%) levels (Table 23).
- More than two-thirds of households (71%) in the region have both a smartphone and computer, which is higher than both state (67%) and national (66%) percentages. In the region, the majority (81%) of residents live in households with a computer and internet. This is slightly lower than state (82%) and national (83%) proportions (Table 24 & Table 25).
- For children specifically, household access to a computer and internet in the region is slightly higher (82%) (Table 26).
- Of people living in households with a computer and internet in the region, more than one in ten (12%) rely solely on a cellular data plan (Table 27).

Poverty

Figure 3. Percent of population (all ages) and young children (ages 0-5) living in poverty



Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B17001

Table 14. Median annual family income

GEOGRAPHY	MEDIAN INCOME FOR ALL FAMILIES	MEDIAN INCOME FOR MARRIED COUPLE FAMILIES WITH CHILDREN (0-17)	MEDIAN INCOME FOR FAMILIES WITH CHILDREN (0-17), SINGLE MALE HEAD	MEDIAN INCOME FOR FAMILIES WITH CHILDREN (0-17), SINGLE FEMALE HEAD
Coconino County	\$67,964	\$84,099	\$50,436	\$30,412
Arizona	\$63,812	\$80,533	\$38,650	\$26,907
United States	\$70,850	\$91,621	\$41,054	\$26,141

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B19126

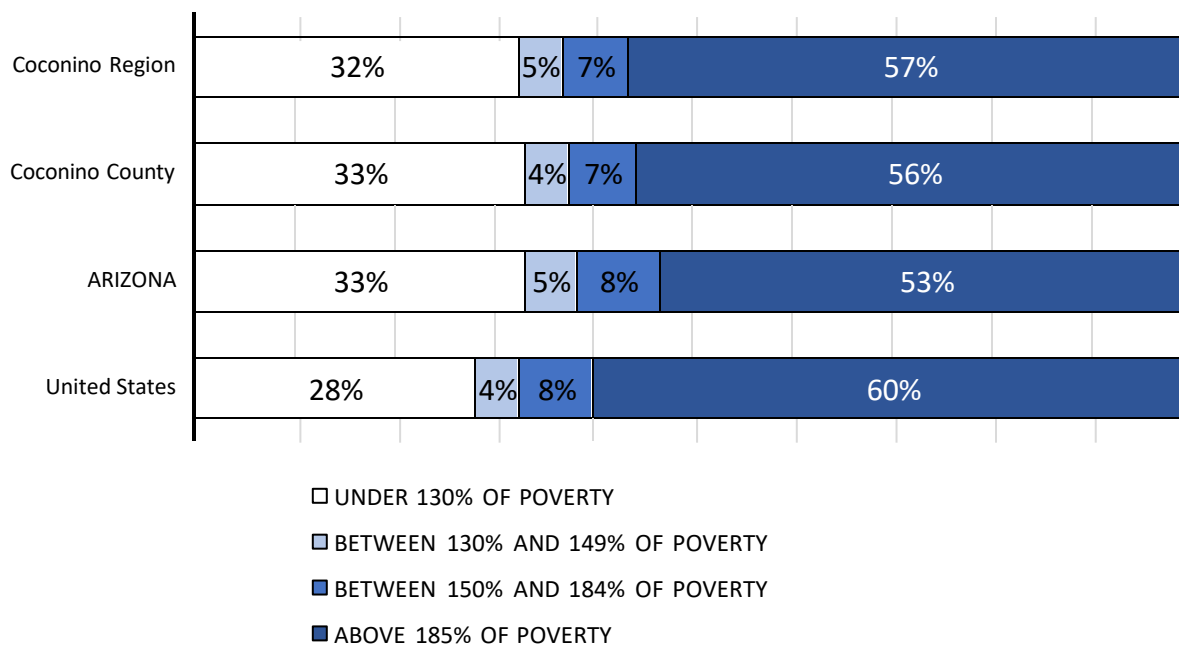
Table 15. Families with young children (ages 0-5) living at various poverty thresholds

GEOGRAPHY	TOTAL NUMBER OF FAMILIES WITH YOUNG CHILDREN (AGES 0-5)	PERCENT UNDER 130% OF POVERTY	PERCENT BETWEEN 130% AND 149% OF POVERTY	PERCENT BETWEEN 150% AND 184% OF POVERTY	PERCENT ABOVE 185% OF POVERTY
Coconino Region	4,679	32%	5%	7%	57%
Coconino County	5,061	33%	4%	7%	56%
Arizona	295,926	33%	5%	8%	53%
United States	13,951,604	28%	4%	8%	60%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Tables B17001 & B17022

Note: Poverty refers to the poverty threshold used by the U.S. Census Bureau to determine whether or not a family lives in poverty based on their income. In 2017, the most recent year of ACS data used in this report, the poverty threshold for a family of four was \$24,848. For more information about poverty thresholds, see <https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>

Figure 4. Families with young children (ages 0-5) living at various poverty thresholds



Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Tables B17001 & B17022

Note: Poverty refers to the poverty threshold used by the U.S. Census Bureau to determine whether or not a family lives in poverty based on their income. In 2017, the most recent year of ACS data used in this report, the poverty threshold for a family of four was \$24,848. For more information about poverty thresholds, see <https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>

Table 16. Families participating in the TANF program, Fiscal Years 2015 to 2018

GEOGRAPHY	HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5)	NUMBER OF FAMILIES PARTICIPATING IN TANF				PERCENT OF HOUSEHOLDS WITH YOUNG CHILDREN (0-5) PARTICIPATING IN TANF IN 2018
		FY 2015	FY 2016	FY 2017	FY 2018	
Coconino Region	6,795	133	121	118	113	2%
Coconino County	7,474	65	75	76	58	1%
Arizona	384,441	18,165	16,399	14,188	12,042	3%

Sources: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P20 & Arizona Department of Economic Security, Division of Benefits and Medical Eligibility. (2019). Unpublished data received by request

Table 17. Children participating in the TANF program, Fiscal Years 2015 to 2018

GEOGRAPHY	NUMBER OF YOUNG CHILDREN (AGES 0-5) IN THE POPULATION	NUMBER OF CHILDREN PARTICIPATING IN TANF				PERCENT OF YOUNG CHILDREN (0-5) PARTICIPATING IN TANF IN 2018
		FY 2015	FY 2016	FY 2017	FY 2018	
Coconino Region	9,652	174	160	145	144	1%
Coconino County	10,777	94	103	95	74	1%
Arizona	546,609	23,862	22,326	19,614	16,634	3%

Sources: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P20 & Arizona Department of Economic Security, Division of Benefits and Medical Eligibility. (2019). Unpublished data received by request

Food Insecurity

Table 18. Families participating in the SNAP program, Fiscal Years 2015 to 2018

GEOGRAPHY	HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5)	NUMBER OF FAMILIES PARTICIPATING IN SNAP				PERCENT OF HOUSEHOLDS WITH YOUNG CHILDREN (0-5) PARTICIPATING IN SNAP IN 2018
		FY 2015	FY 2016	FY 2017	FY 2018	
Coconino Region	6,795	3,246	3,030	2,942	2,733	40%
Coconino County	7,474	3,478	3,331	3,281	2,946	39%
Arizona	384,441	179,988	172,014	164,092	151,819	39%

Sources: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P20 & Arizona Department of Economic Security, Division of Benefits and Medical Eligibility. (2019). Unpublished data received by request

Table 19. Children participating in the SNAP program, Fiscal Years 2015 to 2018

GEOGRAPHY	NUMBER OF YOUNG CHILDREN (AGES 0-5) IN THE POPULATION	NUMBER OF CHILDREN PARTICIPATING IN SNAP				PERCENT OF YOUNG CHILDREN (0-5) PARTICIPATING IN SNAP IN 2018
		FY 2015	FY 2016	FY 2017	FY 2018	
Coconino Region	9,652	4,540	4,531	4,432	4,091	42%
Coconino County	10,777	4,979	5,086	4,981	4,491	42%
Arizona	546,609	249,707	258,556	247,418	229,291	42%

Sources: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P20 & Arizona Department of Economic Security, Division of Benefits and Medical Eligibility. (2019). Unpublished data received by request

Table 20. Percent of students (all grades) eligible for free or reduced-price lunch, 2015-16 to 2018-19

GEOGRAPHY	STUDENTS ELIGIBLE FOR FREE OR REDUCED-PRICE LUNCH (2015-16)	STUDENTS ELIGIBLE FOR FREE OR REDUCED-PRICE LUNCH (2016-17)	STUDENTS ELIGIBLE FOR FREE OR REDUCED-PRICE LUNCH (2017-18)	STUDENTS ELIGIBLE FOR FREE OR REDUCED-PRICE LUNCH (2018-19)
Coconino Region	51%	53%	57%	57%
Coconino County	55%	57%	60%	59%
Arizona	58%	57%	57%	56%

Source: Arizona Department of Education. (2019). 2015-16 to 2018-19 Free & Reduced-Price Lunch Data. Custom tabulation of eligibility data

Employment

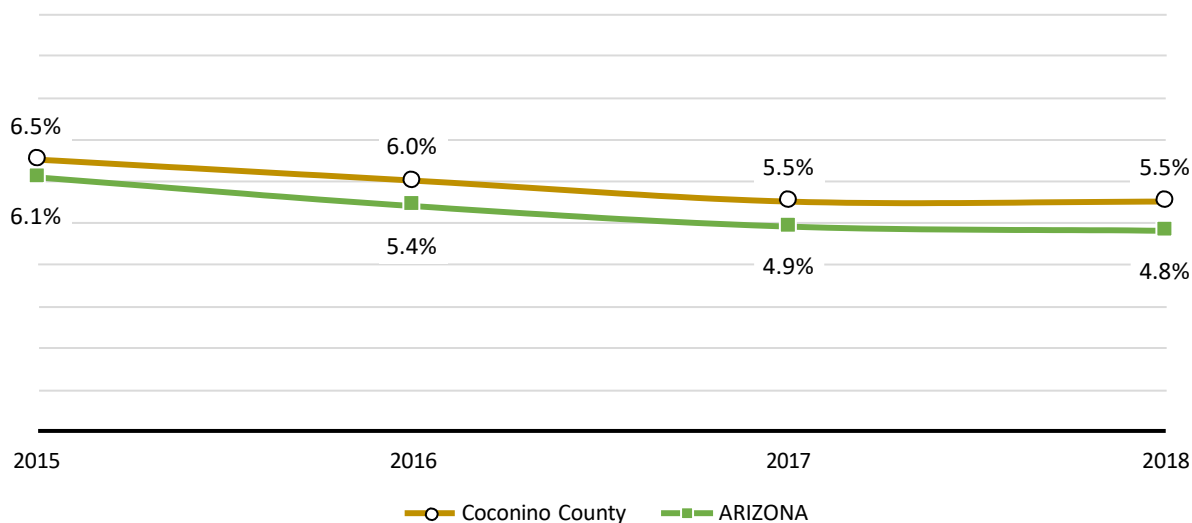
Table 21. Adult population (ages 16 and older) who are employed, unemployed, or not in the labor force

GEOGRAPHY	TOTAL POPULATION (AGES 16 AND OLDER)	PERCENT WHICH IS EMPLOYED	PERCENT WHICH IS UNEMPLOYED	PERCENT WHICH IS NOT IN THE LABOR FORCE
Coconino Region	104,158	60%	5%	35%
Coconino County	112,345	58%	5%	37%
Arizona	5,371,341	55%	4%	40%
United States	255,797,692	59%	4%	37%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B23025

Note: The labor force includes all persons who are currently employed, including those on leave, furlough, or temporarily laid off. Persons who are unemployed but actively looking for work are also considered to be in the labor force. Persons who are not working or looking for work (e.g., retired persons, stay-at-home parents, students) are considered to be "not in the labor force" in the American Community Survey.

Figure 5. Annual unemployment rates, not seasonally adjusted, 2015 to 2018



Source: Arizona Labor Statistics. (2019). Local Area Unemployment Statistics (LAUS). Retrieved from <https://laborstats.az.gov/local-area-unemployment-statistics>

Table 22. Parents of young children (ages 0-5) who are or are not in the labor force

GEOGRAPHY	TOTAL NUMBER OF CHILDREN (AGES 0-5) LIVING IN FAMILIES OR SUBFAMILIES	WITH TWO PARENTS, BOTH IN LABOR FORCE	WITH TWO PARENTS, ONE IN LABOR FORCE AND ONE NOT	WITH TWO PARENTS, NEITHER IN LABOR FORCE	WITH ONE PARENT, IN LABOR FORCE	WITH ONE PARENT, NOT IN LABOR FORCE
Coconino Region	8,309	39%	23%	1%	26%	10%
Coconino County	9,003	37%	22%	2%	28%	12%
Arizona	498,102	31%	29%	1%	29%	10%
United States	22,939,897	38%	26%	1%	27%	8%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B23008

Note: The labor force includes all persons who are currently employed, including those on leave, furlough, or temporarily laid off. Persons who are unemployed but actively looking for work are also considered to be in the labor force. Persons who are not working or looking for work (e.g., retired persons, stay-at-home parents, students) are considered to be "not in the labor force" in the American Community Survey.

Housing Instability

Table 23. Households who are paying thirty percent or more of their income for housing

GEOGRAPHY	TOTAL NUMBER OF OCCUPIED HOUSING UNITS	PERCENT OF HOUSING UNITS FOR WHICH HOUSING COSTS 30% OF INCOME OR MORE
Coconino Region	43,991	34%
Coconino County	47,588	33%
Arizona	2,482,311	31%
United States	118,825,921	32%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B25106

Table 24. Households with and without computers and smartphones

GEOGRAPHY	TOTAL NUMBER OF HOUSEHOLDS	PERCENT WITH COMPUTER (BUT NO SMARTPHONE)	PERCENT WITH SMARTPHONE (BUT NO COMPUTER)	PERCENT WITH BOTH SMARTPHONE AND COMPUTER	PERCENT WITH NEITHER SMARTPHONE NOR COMPUTER
Coconino Region	43,991	11%	8%	71%	10%
Coconino County	47,588	11%	8%	68%	12%
Arizona	2,482,311	12%	9%	67%	12%
United States	118,825,921	12%	9%	66%	13%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B28010

Note: In this table, "computer" includes both desktops and laptops.

Table 25. Persons (all ages) in households with and without computers and internet connectivity

GEOGRAPHY	NUMBER OF PERSONS (ALL AGES) LIVING IN HOUSEHOLDS	PERCENT IN HOUSEHOLDS WITH COMPUTER AND INTERNET	PERCENT IN HOUSEHOLDS WITH COMPUTER BUT NO INTERNET	PERCENT IN HOUSEHOLDS WITHOUT COMPUTER
Coconino Region	115,028	81%	10%	9%
Coconino County	125,977	76%	12%	11%
Arizona	6,656,124	82%	9%	9%
United States	312,916,765	83%	9%	9%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B28005

Table 26. Children (ages 0-17) in households with and without computers and internet connectivity

GEOGRAPHY	NUMBER OF CHILDREN (AGES 0-17) LIVING IN HOUSEHOLDS	PERCENT IN HOUSEHOLDS WITH COMPUTER AND INTERNET	PERCENT IN HOUSEHOLDS WITH 0-17 COMPUTER BUT NO INTERNET	PERCENT IN HOUSEHOLDS WITHOUT COMPUTER
Coconino Region	27,157	82%	10%	8%
Coconino County	29,560	77%	13%	10%
Arizona	1,619,346	83%	10%	8%
United States	73,392,369	85%	9%	5%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B28005

Table 27. Households by type of internet access (broadband, cellular data, and dial-up)

GEOGRAPHY	PEOPLE LIVING IN HOUSEHOLDS WITH COMPUTER AND INTERNET (ALL AGES)	PERCENT WITH FIXED BROADBAND WITH CELLULAR DATA PLAN	PERCENT WITH FIXED BROADBAND WITHOUT CELLULAR DATA PLAN	PERCENT WITH CELLULAR DATA PLAN, WITHOUT FIXED BROADBAND	PERCENT WITH DIAL-UP INTERNET ONLY
Coconino Region	93,378	52%	35%	12%	1%
Coconino County	96,336	51%	35%	13%	1%
Arizona	5,475,311	54%	35%	10%	1%
United States	258,531,929	55%	35%	10%	1%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B28008

Educational Indicators

Why it Matters

Measures of educational engagement and achievement in a community have important implications for the developmental and economic resources available to children and families in that region. Individuals with higher levels of education tend to live longer and healthier lives.⁸¹ Indicators such as school attendance and absenteeism, achievement on standardized testing, high school graduation rates, and adult educational attainment can provide valuable information about a region's educational engagement and success.

School attendance and absenteeism. School attendance and academic engagement early in life can significantly impact the direction of a child's schooling trajectory. Chronic absenteeism is defined as missing more than 10 percent of the school days within a school year, and it affects even the youngest children, with more than 10 percent of US kindergarteners and first graders considered chronically absent.⁸² Poor school attendance can cause children to fall behind, leading to lower proficiency in reading and math and increased risk of not being promoted to the next grade.⁸³ Consistent school attendance is particularly important for children from economically disadvantaged backgrounds, the group of children most at risk for chronic absenteeism.^{84,85}

Achievement on standardized testing. A child's third-grade reading comprehension skills have been identified as a critical indicator of future academic success.⁸⁶ 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.⁸⁷ 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.⁸⁸

In 2010, the Arizona legislature, recognizing the importance of early identification and targeted intervention for struggling readers, enacted *Move on When Reading* legislation. As of 2015, the statewide assessment tool for English language arts (ELA), including reading and writing, is Arizona's Measurement of Education Readiness to Inform Teaching (AzMERIT).^{vii,89}

AzMERIT 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.⁹⁰ Exceptions exist for students identified with or being evaluated for learning disabilities and/or reading impairments, English language learners,

^{vii} AzMERIT was renamed AzM2, a change that will take effect during the 2019-20 school year.

and those who have demonstrated reading proficiency on alternate forms of assessment approved by the State Board of Education.

Graduation rates and adult educational attainment. Ultimately, adult educational attainment speaks to the assets and challenges of a community's workforce, including those who are working with or on behalf of young children and their families. Adults who have 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.^{91,92} Children whose parents have higher levels of education are more likely to have positive outcomes related to school readiness and educational achievement, promoting academic success across generations.⁹³ Given 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 & Absenteeism

- In the 2018-2019 school year, 305 children were enrolled in preschool at public and charter schools in the Coconino Region. Kindergarten through third grade enrollments for the region were all relatively similar, ranging from 1,254 to 1,383 children enrolled in each grade (Table 28).
- Kindergarten through 3rd grade chronic absence rates steadily increased from the 2015-2016 to 2018-2019 school years at the regional, county, and state level. During the 2018-2019 school year, the Coconino Region had a 16 percent chronic absence rate, with 1,049 kindergarten through 3rd grade students in the region chronically absent (Table 29 & Table 30).
- By grade level, chronic absences ranged from 14 percent to 20 percent in the Coconino Region. In the region and county, chronic absences were highest among kindergarteners (20% and 24%, respectively), similar to, but higher than state-level chronic absences rates among kindergarteners (13%) (Table 31).

Achievement on Standardized Testing

- Fewer than half of 3rd grade students are meeting or exceeding proficiency expectations for 3rd grade literacy or math.
- Arizona's Measurement of Educational Readiness to Inform Teaching (AzMERIT) 3rd Grade English Language Arts passing rates for the Coconino Region (39%) were lower than statewide passing rates (44%) in 2017-2018 (Table 32 & Figure 6).
- AzMERIT 3rd Grade English Language Arts passing rates have increased slightly at the region, county, and state levels, with regional passing rates increasing from 34 percent in 2015-2016 to 39 percent in 2017-2018 (Figure 7).
- AzMERIT 3rd Grade Math passing rates for the Coconino Region (46%) were also lower than statewide passing rates (53%) in 2017-2018 (Table 33 & Figure 8).
- AzMERIT 3rd Grade Math passing rates have improved over time at the region, county, and state level, with regional passing rates increasing from 40 percent in 2015-2016 to 46 percent in 2017-2018 (Figure 9).

Graduation Rates & Adult Educational Attainment

- In 2017, the four-year graduation rate for the Coconino Region was 83 percent and the five-year graduation rate was 87 percent, which exceeded both the four-year graduation and five-year graduation rates in the state (78% and 82%, respectively). Since 2015, both the four-year and five-year graduation rates have increased slightly in the Coconino Region (Table 34, Table 35 & Table 36).

- The 7th-12th grade dropout rate for Coconino decreased from 5 percent in 2016-2017 to 3 percent in 2017-2018 (Table 37).
- A larger proportion of adults have more than a high-school education in the Coconino Region (71%) than in Coconino County (68%), Arizona (62%), and the United States overall (60%) (Figure 10).
- This difference in educational attainment is also seen in mothers giving birth, with a larger proportion of births to mothers in the Coconino Region with more than a high-school education (61%) than the county (59%) and state (56%) (Table 38).

School Attendance and Absenteeism

Table 28. Students enrolled in preschool through 3rd grade, 2018-19

GEOGRAPHY	PRESCHOOL	KINDERGARTEN	1ST GRADE	2ND GRADE	3RD GRADE
Coconino Region	305	1,254	1,330	1,383	1,268
Coconino County	347	1,232	1,314	1,324	1,267
Arizona	21,238	79,990	81,913	81,951	83,037

Source: Arizona Department of Education (2019). 2018-19 October 1 Enrollments. Custom tabulation of enrollment data facilitated by state agency staff.

Note: Data on enrollments were calculated at the district-level. Where districts were split between regions, district enrollments were apportioned to regions based on the percentage of K-3 students in each region within the district. See appendix 3 for a full list of districts within the region, including split districts.

Table 29. Chronic absence rates, Kindergarten through 3rd grade, 2015-16 to 2018-19

GEOGRAPHY	CHRONIC ABSENCE RATE (2015-16)	CHRONIC ABSENCE RATE (2016-17)	CHRONIC ABSENCE RATE (2017-18)	CHRONIC ABSENCE RATE (2018-19)
Coconino Region	11%	13%	16%	16%
Coconino County	13%	14%	16%	17%
Arizona	9%	10%	11%	12%

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

Note: The definition of chronic absenteeism used in this table includes children who are absent due to chronic illness. Regional data includes all schools in the Flagstaff Unified School District, including Leupp Public School.

Table 30. Chronic absence rates, Kindergarten through 3rd grade, 2018-19

GEOGRAPHY	TOTAL NUMBER OF STUDENTS	NUMBER OF STUDENTS WITH CHRONIC ABSENCES	CHRONIC ABSENCE RATE
Coconino Region	6,516	1,049	16%
Coconino County	6,282	1,061	17%
Arizona	402,206	46,482	12%

Source: Arizona Department of Education. (2019). 2018-19 Chronic Absenteeism Data. Unpublished data received by request

Note: The definition of chronic absenteeism used in this table includes children who are absent due to chronic illness. Regional data includes all schools in the Flagstaff Unified School District, including Leupp Public School.

Table 31. Chronic absence rates for students by grade (Grade K-3), 2018-19

GEOGRAPHY	CHRONIC ABSENCE RATE (KINDERGARTEN)	CHRONIC ABSENCE RATE (1ST GRADE)	CHRONIC ABSENCE RATE (2ND GRADE)	CHRONIC ABSENCE RATE (3RD GRADE)	CHRONIC ABSENCE RATE (K-3RD GRADE)
Coconino Region	20%	16%	14%	14%	16%
Coconino County	24%	16%	13%	15%	17%
Arizona	13%	12%	11%	10%	12%

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

Note: The definition of chronic absenteeism used in this table includes children who are absent due to chronic illness. Regional data includes all schools in the Flagstaff Unified School District, including Leupp Public School.

Achievement on Standardized Testing

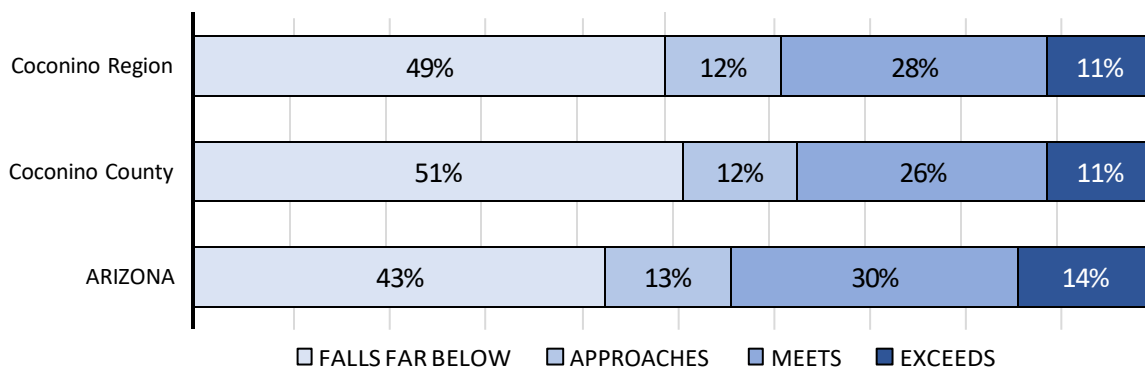
Table 32. AzMERIT Assessment Results: 3rd Grade English Language Arts, 2017-18

GEOGRAPHY	STUDENTS TESTED	FALLS FAR BELOW	APPROACHES	MEETS	EXCEEDS	PASSING
Coconino Region	1,436	49%	12%	28%	11%	39%
Coconino County	1,411	51%	12%	26%	11%	37%
Arizona	84,922	43%	13%	30%	14%	44%

Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Note: Regional data includes all schools in the Flagstaff Unified School District, including Leupp Public School.

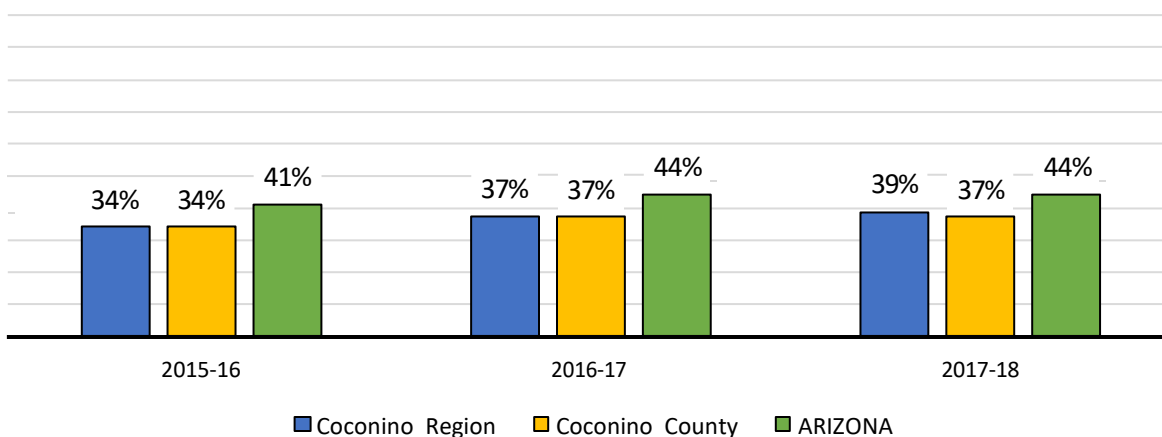
Figure 6. AzMERIT Assessment Results: 3rd Grade English Language Arts, 2017-18



Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Note: Regional data includes all schools in the Flagstaff Unified School District, including Leupp Public School.

Figure 7. Trends in passing rates for 3rd-grade English Language Arts AzMERIT, 2015-16 to 2017-18



Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Note: Regional data includes all schools in the Flagstaff Unified School District, including Leupp Public School.

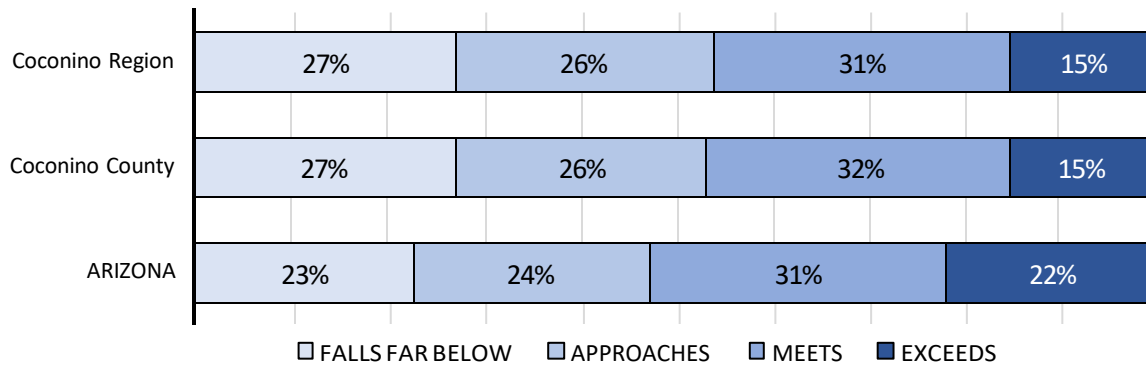
Table 33. AzMERIT Assessment Results: 3rd Grade Math, 2017-18

GEOGRAPHY	STUDENTS TESTED	FALLS FAR BELOW	APPROACHES	MEETS	EXCEEDS	PASSING
Coconino Region	1,428	27%	26%	31%	15%	46%
Coconino County	1,409	27%	26%	32%	15%	47%
Arizona	85,105	23%	24%	31%	22%	53%

Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Note: Regional data includes all schools in the Flagstaff Unified School District, including Leupp Public School.

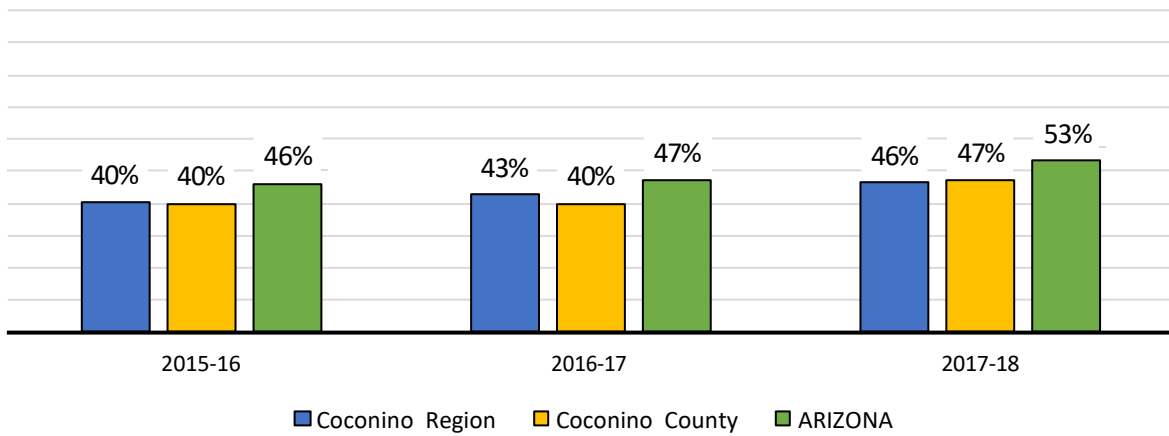
Figure 8. AzMERIT Assessment Results: 3rd Grade Math, 2017-18



Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Note: Regional data includes all schools in the Flagstaff Unified School District, including Leupp Public School.

Figure 9. Trends in passing rates for 3rd-grade Math AzMERIT, 2015-16 to 2017-18



Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Note: Regional data includes all schools in the Flagstaff Unified School District, including Leupp Public School.

Graduation Rates and Adult Educational Attainment

Table 34. Graduation and dropout rates, 2017

GEOGRAPHY	FOUR-YEAR SENIOR COHORT	FOUR-YEAR GRADUATES	FOUR-YEAR GRADUATION RATE	FIVE-YEAR GRADUATES	FIVE-YEAR GRADUATION RATE	DROPOUT RATE (7TH TO 12TH GRADES)
Coconino Region	1,485	1,235	83%	1,295	87%	3%
Coconino County	1,446	1,199	83%	1,274	87%	3%
Arizona	84,903	66,363	78%	70,178	82%	5%

Source: Arizona Department of Education. (2019). Cohort 2017 Four Year Graduation Rate Data, Cohort 2017 Five Year Graduation Rate Data, and Dropout Rates 2017. Custom tabulation of graduation and dropout data

Table 35. Trends in four-year graduation rates, 2015 to 2017

GEOGRAPHY	FOUR-YEAR GRADUATION RATE (2015)	FOUR-YEAR GRADUATION RATE (2016)	FOUR-YEAR GRADUATION RATE (2017)
Coconino Region	82%	84%	83%
Coconino County	82%	81%	83%
Arizona	79%	80%	78%

Source: Arizona Department of Education. (2019). Cohort 2014-2017 Four Year Graduation Rate Data. Retrieved from <https://www.azed.gov/accountability-research/data/>

Table 36. Trends in five-year graduation rates, 2015 to 2017

GEOGRAPHY	FIVE-YEAR GRADUATION RATE (2015)	FIVE-YEAR GRADUATION RATE (2016)	FIVE-YEAR GRADUATION RATE (2017)
Coconino Region	85%	86%	87%
Coconino County	85%	85%	87%
Arizona	82%	83%	82%

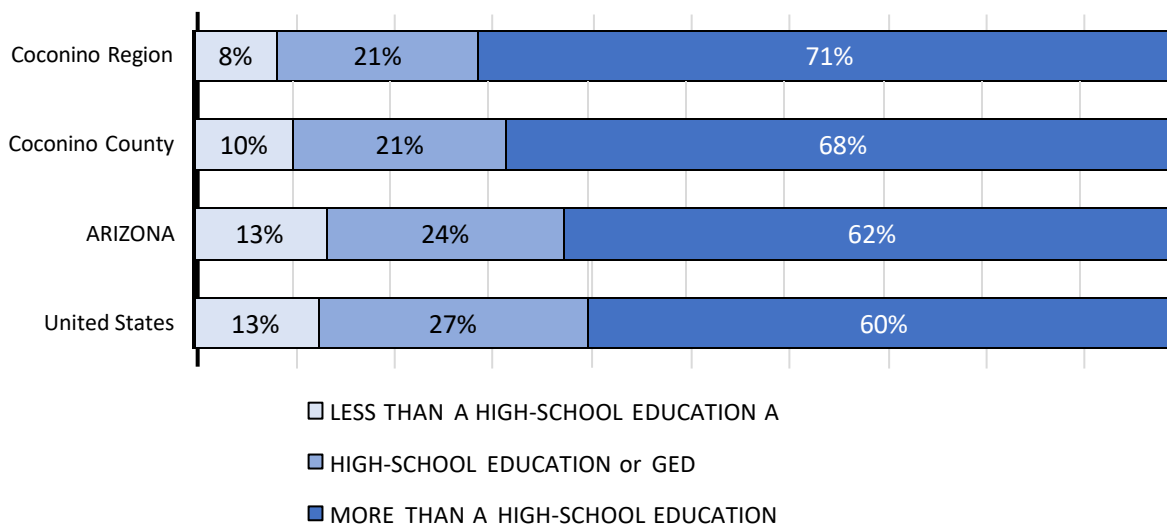
Source: Arizona Department of Education. (2019). Cohort 2014-2017 Five Year Graduation Rate Data. Retrieved from <https://www.azed.gov/accountability-research/data/>

Table 37. Trends in 7th-12th grade dropout rates, 2015-16 to 2017-2018

GEOGRAPHY	DROPOUT RATE (2015-16)	DROPOUT RATE (2016-17)	DROPOUT RATE (2017-18)
Coconino Region	3%	5%	3%
Coconino County	3%	5%	3%
Arizona	4%	5%	5%

Source: Arizona Department of Education. (2019). 2015-16 to 2017-18 Dropout Rates. Retrieved from <https://www.azed.gov/accountability-research/data/>

Figure 10. Level of education for the adult population (ages 25 and older)



Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B15002

Table 38. Level of education for mothers giving birth during calendar year 2017

GEOGRAPHY	TOTAL NUMBER OF BIRTHS IN 2017	MOTHER HAD LESS THAN A HIGH-SCHOOL EDUCATION	MOTHER HAD HIGH-SCHOOL DIPLOMA OR GED	MOTHER HAD MORE THAN HIGH-SCHOOL
Coconino Region	1,415	12%	27%	61%
Coconino County	1,506	14%	26%	59%
Arizona	81,664	17%	26%	56%

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Note: Due to a small number of births for which the mother's educational attainment is unknown, entries in this table may not sum to 100%.

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.^{94,95} 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 18 months of age;⁹⁶ those disparities that persist until kindergarten tend to predict later academic problems.⁹⁷

Access to early care and education. Though high-quality early care and education can promote development, families often face barriers in accessing these opportunities for their children. Families living in rural areas are more likely to face an inadequate child care supply, but Arizona families in both urban and rural areas face a gap between the number of young children and the availability of licensed child care.^{98,99,100} In fact, Arizona has a deficit of about 22,230 licensed early care and education slots to meet the needs of working families, without accounting for parents continuing their own education, or those not in the workforce but seeking out early learning programs to help assure their preschool age children are able to make a strong start in school.¹⁰¹ Even when early education is available, the cost can be prohibitive. According to the U.S. Department of Education, only 19 percent of four-year-olds in Arizona are enrolled in publicly-funded free or reduced cost preschool programs, compared to 41 percent nationally.¹⁰² If not enrolled in publicly-funded programs, the annual cost of full-time center-based care for a young child in Arizona is nearly equal to the cost of a year at a public college.^{103,104}

Child care subsidies can be a support for families who have financial barriers to accessing early learning services.¹⁰⁵ In June 2019, for the first time since the Great Recession, the Arizona Department of Economic Security's (DES) child care subsidy waiting list was suspended, meaning all children who qualify for subsidies are able to receive them, assuming that they are able to find a provider.¹⁰⁶ This is due to \$56 million in additional federal funds from the Child Care and Development Fund (CCDF) that was authorized by the State Legislature, and 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.¹⁰⁷

High quality early care and education. In addition to the early experiences children have in their homes, high quality early care and education services can also promote physical, cognitive, and social-emotional development and health, particularly for children from disadvantaged backgrounds.^{108,109,110} Children whose education begins in high quality preschool programs repeat grades less frequently, obtain higher scores on standardized tests, experience

fewer behavior problems, and are more likely to graduate from high school.¹¹¹ This translates into a return on investment to society through increased educational achievement and employment, reductions in crime, and better overall health of children as they mature into adults.^{112,113} Not only does access to affordable, quality child care make a positive difference for children's health and development, it also allows parents to maintain stable employment and support their families.¹¹⁴

Establishing that available early care and education programs meet quality standards is important to ensure these early environments support positive outcomes for children's well-being, academic achievement, and success later in life.¹¹⁵ Providers are considered quality educational environments by the Arizona Department of Economic Security if they receive a Quality First three-star rating or higher (see below) or are accredited by a national organization, such as the Association for Early Learning Leaders or the National Association for the Education of Young Children (NAEYC)¹¹⁶.

High quality early education environments have teachers with more education, experience, and supports that increase their skills in developing positive teacher-child interactions, providing enriching age-appropriate experiences and guiding appropriate behaviors.¹¹⁷ These quality environments may be particularly important for children with challenging behaviors, because lower teacher-child ratios and access to professional development and early childhood mental health consultation can help avoid preschool expulsion.^{118,119,120}

Quality First is Arizona's Quality Improvement and Rating System (QIRS) for early child care and preschool providers.¹²¹ 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. One star indicates a program is participating in Quality First, is regulated, in good standing, and is making the commitment to work on quality improvement. Three stars indicate that a program is of good quality care, and families can be confident that children are well cared for in such an environment. Five stars indicate the highest level of quality attainable, where families will find low staff-child ratios and group sizes, highly educated personnel, and strong curriculum which optimizes children's comprehensive development. The number of providers across the state that meet quality standards (three-star rating or higher) has increased across the last 5 years such that 25 percent of the 857 participating providers in 2013 met or exceeded quality standards, and 76 percent of 1,032 participating providers in 2019 met or exceeded quality standards.¹²²

High quality early care and education practices, including lower teacher-child ratios, access to professional development, and early childhood mental health consultation, can help avoid preschool expulsion.^{123, 124} Nationally, preschool expulsions and suspensions occur at high rates and disproportionately impact children of color, specifically young Black boys.^{125,126} In 2016, an estimated 50,000 preschoolers were suspended and 17,000 preschoolers expelled nationwide, with Black children 2.2 times more likely to be suspended or expelled than other children.¹²⁷

The U.S. Department of Education Office of Civil Rights began collecting data on preschool suspension and expulsion in 2011 and, as a result of federal changes to the Child Care Development Block Grant in 2014, Arizona began collecting provider-reported data on early learning environment expulsion in 2017.^{128,129} Given the positive impact of early educational experiences on children’s cognitive and emotional development and the negative impact of suspension and expulsion on educational outcomes, it is essential to identify areas with higher rates of expulsion to provide targeted supports.¹³⁰

As an alternative to expulsion, early education providers in Arizona have an opportunity to identify young children as being at risk for expulsion and to receive consultation from experts to help intervene in problem behaviors. Consultation is provided through on-site mental health consultation, available for Quality First and some non-Quality First providers in most but not all regions in the state, as well as through a statewide Department of Economic Security (DES)-managed hotline. If that child is then able to remain in the center, this is documented as a prevented expulsion and their case is closed out. The reported number of prevented expulsions of young children receiving subsidies increased from seven in 2017 to 45 in 2018.

Young children with special needs. 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. Children with special health care needs are defined as “those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.”¹³¹ Adverse Childhood Experiences (ACEs)^{viii} include childhood experiences of abuse, neglect, and other forms of potential trauma. According to the National Survey of Children’s Health, children with special health care needs are more likely to experience more adverse childhood experiences than typically developing children,¹³² and are at an increased risk for maltreatment and neglect,^{133,134} suggesting they may particularly benefit from high quality teacher-child interactions in classrooms.^{135,136} Almost half (46%) of families with a child with special needs in Arizona have incomes below 200 percent of the federal poverty level, suggesting that even if they can identify an appropriate provider, affording quality care is likely to be a burden.¹³⁷

Ensuring all families have access to timely and appropriate screenings for children who may benefit from early identification of special needs can help improve outcomes for these children and their families. Timely intervention can help young children with, or at risk for, developmental delays improve language, cognitive, and socio-emotional development.^{138,139} It also reduces educational costs by decreasing the need for special education.¹⁴⁰ In Arizona,

^{viii} 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.

services available to families with children with special needs include those provided through the Arizona Early Intervention Program (AzEIP),¹⁴¹ the Arizona Department of Education Early Childhood Special Education program,¹⁴² and the Division of Developmental Disabilities (DDD).¹⁴³

What the Data Tell Us

Access to Early Care & Education

- In the Coconino Region, 48 percent of children (ages 3 and 4) are enrolled in nursery school, preschool, or kindergarten. This is a larger proportion than the county (44%) and state (38%) and matches the national enrollment rate (48%) (Table 39).
- In the Coconino Region, nearly all (99.6%) of licensed child care capacity is provided by child care centers, with a small proportion provided by family child care providers and nannies/individual providers (<1%) (Table 40).
- The Coconino Region has a lower percentage of providers who are accredited (4%) than the state (10%), as well as a much lower percentage of potential child care slots (provider capacity) with accredited providers (5%) than the state (12%) (Table 41).
- Median monthly child care costs for certified group homes and licensed centers are lower by between \$50 to \$110 in the region and county compared to statewide median costs. Median costs for approved family homes are the same in the region, county, and state. Overall, licensed centers are the most expensive and approved family homes the least expensive for all ages (Table 42).
- Child care costs are relatively less expensive in Coconino County than in the state overall. At median levels, sending an infant to a licensed center requires over a tenth (13%) of a family's income (Table 43).
- Most children (90%) who are not involved with the Department of Child Safety (DCS) and are eligible for Department of Economic Security (DES) child care subsidies in the Coconino Region have received them in recent years. This proportion is slightly lower than the state overall, where 92 percent of eligible children received child care subsidies in 2018 (Table 44).
- For DCS-involved children specifically, the proportion of eligible children receiving subsidies in the region is lower than for all eligible children and declined sharply from 93 percent in 2017 to 76 percent in 2018. A declining trend in the percentage of DCS-involved children receiving subsidies was also seen at the state level, with 82 percent of DCS-involved children receiving subsidies in Arizona in 2018 compared to 91 percent in 2015 (Table 45).
- The proportion of eligible families not using DES child care subsidies has increased slightly over time at the region, county, and state level. In 2018, nine percent of eligible families in the Coconino Region did not use their child care subsidies (Table 46).

High Quality Early Care & Education

- Quality educational environments are defined by the Department of Economic Security (DES) as providers that are accredited by a national organization or providers that have received a state-approved quality indicator that is recognized by the department. From

2017 to 2018, the number of children who were receiving child care subsidies and were enrolled in quality environments, and particularly the number of subsidy-receiving DCS children in quality environments, increased at the regional, county, and state levels (Table 47).

- In 2019, a total of 28 child care providers in the Coconino Region participated in Quality First, 75 percent of which were quality-level settings (public 3-5 stars), and 1,110 children were enrolled at a Quality First provider site in the Coconino Region. Of all children enrolled at a Quality First provider site in the region, 70 percent were enrolled at a quality-level setting (public 3-5 stars). In 2019, 189 children received Quality First scholarships (Table 48 & Table 49).
- In 2018, no early learning programs in Coconino County reported any expulsions of young children receiving child care subsidies to DES (Table 50).

Young Children with Special Needs

- The number of young children (ages 3-5) enrolled in special education increased slightly from 236 in 2015-2016 to 278 in 2018-2019 in the Coconino Region (Table 51).
- The largest proportion of young children (ages 3-5) enrolled in special education in the region have a speech or language impairment (40%) or developmental delay (33%) (Table 52).
- Thirteen percent of students (grades 1-3) are enrolled in special education in the region, a rate slightly higher than the state (12%). Special education enrollment rates for this age group have increased from 2015-2016 to 2018-2019 at the region, county, and state levels (Table 53 & Table 54).
- From 2016 to 2017, the percentage of children (ages 0-2) who were referred to the Arizona Early Intervention Program (AzEIP) and found eligible decreased from 55 percent to 52 percent in the Coconino Region (Table 55).
- From 2017 to 2018, the number of active AzEIP cases in the Coconino Region decreased by 3 percent (Table 56).
- The number of children receiving services from the Division of Developmental Disabilities (DDD) has increased over time at the region and state levels since 2015. In the Coconino Region, children ages 0-2 receiving DDD services have increased by 23 percent over four years (Table 57 & Table 58).

Access to Early Care and Education

Table 39. School enrollment for children (ages 3 and 4)

GEOGRAPHY	POPULATION OF CHILDREN (AGES 3-4)	NUMBER ENROLLED IN SCHOOL	PERCENT ENROLLED IN SCHOOL
Coconino Region	3,046	1,448	48%
Coconino County	3,255	1,418	44%
Arizona	182,970	69,712	38%
United States	8,190,503	3,892,317	48%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B14003

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

Table 40. Number and licensed capacity of licensed or registered child care providers by type, 2018

GEOGRAPHY	NANNIES OR INDIVIDUAL PROVIDERS		CHILD CARE CENTERS		FAMILY CHILD CARE PROVIDERS		TOTAL PROVIDERS	
	NUMBER	CAPACITY	NUMBER	CAPACITY	NUMBER	CAPACITY	NUMBER	CAPACITY
Coconino Region	0	0	44	3,689	2	14	46	3,703
Coconino County	0	0	40	3,491	0	0	40	3,491
Arizona	26	90	1,527	182,561	656	3,871	2,209	186,522

Source: Arizona Department of Economic Security. (2019). 2018 Child Care Assistance Data. Unpublished data received by request

Table 41. Number and licensed capacity of nationally accredited child care providers, 2018

GEOGRAPHY	NUMBER OF ACCREDITED PROVIDERS	PERCENT OF PROVIDERS WHO ARE ACCREDITED	CAPACITY IN ACCREDITED PROVIDERS	PERCENT OF PROVIDER CAPACITY WHICH IS WITH ACCREDITED PROVIDERS
Coconino Region	2	4%	168	5%
Coconino County	2	5%	168	5%
Arizona	213	10%	22,931	12%

Source: Arizona Department of Economic Security. (2019). 2018 Child Care Assistance Data. Unpublished data received by request

Note: This table shows the number 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.

Table 42. Median monthly charge for full-time child care, 2018

GEOGRAPHY	APPROVED FAMILY HOMES			CERTIFIED GROUP HOMES			LICENSED CENTERS		
	1 TO 2 YEAR	3 TO 5 YEAR	OLDS	1 TO 2 YEAR	3 TO 5 YEAR	OLDS	1 TO 2 YEAR	3 TO 5 YEAR	OLDS
Coconino Region	\$400	\$400	\$400	\$550	\$450	\$450	\$760	\$664	\$624
Coconino County	\$400	\$400	\$400	N/A	N/A	N/A	\$760	\$710	\$650
Arizona	\$400	\$400	\$400	\$600	\$560	\$560	\$861	\$760	\$660

Source: Arizona Department of Economic Security. (2019). 2018 Child Care Assistance Data. Unpublished data received by request

Note: Approved family homes are family home child care providers who care for up to 4 children in their home and have completed the necessary steps to apply and be certified by DES or a tribal authority. Certified group homes are family home child care providers who care for 5-10 children in their home and are licensed ("certified") by ADHS or a tribal authority. Child care centers are child care providers who care for 10 or more children at a location separate from their residence and are licensed by ADHS or regulated by a military or tribal authority.

Table 43. Cost of center-based child care as a percentage of income, 2018

GEOGRAPHY	MEDIAN FAMILY INCOME (ACS 2013-2017)	COST FOR AN INFANT	COST FOR A 1 TO 2 YEAR OLD CHILD	COST FOR A 3 TO 5 YEAR OLD CHILD
Coconino County	\$67,964	13%	13%	11%
Arizona	\$63,812	16%	14%	12%

Sources: Arizona Department of Economic Security. (2019). 2018 Child Care Market Rate Survey. Unpublished data received by request. Arizona Department of Economic Security. (2019). 2018 Child Care Market Rate Survey Report. Retrieved from <https://des.az.gov/file/14277/download>

Table 44. Children receiving DES child care subsidies, 2015 to 2018

GEOGRAPHY	NUMBER OF CHILDREN RECEIVING SUBSIDIES				PERCENT OF ELIGIBLE CHILDREN RECEIVING SUBSIDIES			
	2015	2016	2017	2018	2015	2016	2017	2018
Coconino Region	225	189	168	207	93%	95%	90%	90%
Coconino County	163	131	122	164	94%	96%	88%	91%
Arizona	19,040	17,784	16,922	19,813	94%	93%	93%	92%

Source: Arizona Department of Economic Security. (2019). 2015-2018 Child Care Assistance Data. Unpublished data received by request

Note: This table reflects children receiving subsidies who are not DCS-involved.

Table 45. DCS-involved children receiving DES child care subsidies, 2015 to 2018

GEOGRAPHY	NUMBER OF DCS CHILDREN RECEIVING SUBSIDIES				PERCENT OF DCS ELIGIBLE CHILDREN RECEIVING SUBSIDIES			
	2015	2016	2017	2018	2015	2016	2017	2018
Coconino Region	83	102	115	118	90%	88%	93%	76%
Coconino County	62	66	85	92	91%	88%	90%	81%
Arizona	13,098	13,352	12,201	12,219	91%	89%	88%	82%

Source: Arizona Department of Economic Security. (2019). 2015-2018 Child Care Assistance Data. Unpublished data received by request

Table 46. Eligible families not using DES child care subsidies, 2015 to 2018

GEOGRAPHY	FAMILIES NOT USING SUBSIDIES, 2015	FAMILIES NOT USING SUBSIDIES, 2016	FAMILIES NOT USING SUBSIDIES, 2017	FAMILIES NOT USING SUBSIDIES, 2018
Coconino Region	7%	6%	10%	9%
Coconino County	7%	5%	11%	8%
Arizona	6%	6%	7%	8%

Source: Arizona Department of Economic Security. (2019). 2015-2018 Child Care Assistance Data. Unpublished data received by request

High Quality Early Care and Education

Table 47. Children in quality educational environments, 2017 and 2018

GEOGRAPHY	TOTAL NUMBER OF CHILDREN IN QUALITY ENVIRONMENTS, 2017	TOTAL NUMBER OF CHILDREN IN QUALITY ENVIRONMENTS, 2018	NUMBER OF DCS CHILDREN IN QUALITY ENVIRONMENTS, 2017	NUMBER OF DCS CHILDREN IN QUALITY ENVIRONMENTS, 2018
Coconino Region	175	198	81	93
Coconino County	136	168	60	74
Arizona	13,706	17,295	6,063	6,938

Source: Arizona Department of Economic Security. (2019). Child Care Assistance Dataset. Unpublished data received by request

Note: These data only reflect children receiving child care subsidies from DES. Quality educational environments are defined by the Department of Economic Security as providers that are accredited by a national organization or providers that have received a state-approved quality indicator that is recognized by the department. 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>

Table 48. First Things First Quality First child data, State Fiscal Year 2019

GEOGRAPHY	QUALITY FIRST SCHOLARSHIPS: NUMBER OF CHILDREN SERVED	NUMBER OF CHILDREN ENROLLED AT A QUALITY FIRST PROVIDER SITE	NUMBER OF CHILDREN ENROLLED AT A PROVIDER SITE WITH A PUBLIC 3-5 STAR RATING	PERCENT OF CHILDREN IN A QUALITY-LEVEL SETTING (PUBLIC 3-5 STARS)
Coconino Region	189	1,110	772	70%
Arizona	9,179	62,215	45,278	73%

Source: First Things First. (2019). Quality First, a Signature Program of First Thing First. Unpublished data received by request

Note: These data reflect regionally-funded Quality First provider sites and statewide-funded Quality First Redesign provider sites. Data reflect children enrolled at provider sites with a public rating. Star ratings are not publicly available when provider sites decline to publish their initial rating.

Table 49. First Things First Quality First child care provider data, State Fiscal Year 2019

GEOGRAPHY	NUMBER OF CHILD CARE PROVIDERS SERVED	NUMBER OF CHILD CARE PROVIDERS SERVED WITH A PUBLIC 3-5 STAR RATING	PERCENT OF CHILD CARE PROVIDERS SERVED WITH A PUBLIC 3-5 STAR RATING
Coconino Region	28	21	75%
Arizona	1,119	821	73%

Source: First Things First. (2019). Quality First, a Signature Program of First Thing First. Unpublished data received by request

Note: These data reflect regionally-funded Quality First provider sites and statewide-funded Quality First Redesign provider sites. Data reflect children enrolled at provider sites with a public rating. Star ratings are not publicly available when provider sites decline to publish their initial rating.

Table 50. Number of children birth to five years old receiving subsidy expelled from an early learning program or expulsion was prevented, 2017 and 2018

GEOGRAPHY	NUMBER OF CHILDREN EXPELLED IN 2017	NUMBER OF CHILDREN EXPELLED IN 2018	NUMBER OF EXPULSIONS PREVENTED IN 2017	NUMBER OF EXPULSIONS PREVENTED IN 2018
Coconino County	0	0	0	0
Arizona	27	57	<10	45

Source: Arizona Department of Economic Security. (2019). 2017-2018 Child Care Assistance Data. Unpublished data received by request

Young Children with Special Needs

Table 51. Children (ages 3-5) enrolled in special education, 2015-16 to 2018-19

GEOGRAPHY	CHILDREN (AGES 3-5) IN SPECIAL EDUCATION (2015-16)	CHILDREN (AGES 3-5) IN SPECIAL EDUCATION (2016-17)	CHILDREN (AGES 3-5) IN SPECIAL EDUCATION (2017-18)	CHILDREN (AGES 3-5) IN SPECIAL EDUCATION (2018-19)
Coconino Region	236	252	262	278
Coconino County	241	264	266	281
Arizona	14,295	15,257	16,159	16,432

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

Table 52. Children (ages 3-5) enrolled in special education by type of disability, 2018-19

GEOGRAPHY	NUMBER OF CHILDREN (AGES 3-5) ENROLLED	DEVELOPMENTAL DELAY	SPEECH OR LANGUAGE IMPAIRMENT	PRE-SCHOOL SEVERE DELAY	AUTISM	HEARING IMPAIRMENT	OTHER DISABILITIES
Coconino Region	278	33%	40%	18%	DS	4%	DS
Coconino County	281	37%	40%	21%	DS	DS	DS
Arizona	16,432	42%	39%	12%	3%	1%	3%

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

Table 53. Students (grades 1-3) enrolled in special education, 2018-19

GEOGRAPHY	TOTAL STUDENTS	STUDENTS IN SPECIAL EDUCATION	PERCENT OF STUDENTS IN SPECIAL EDUCATION
Coconino Region	4,074	540	13%
Coconino County	3,905	504	13%
Arizona	246,897	30,503	12%

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

Table 54. Percent of students (grades 1-3) enrolled in special education, 2015-16 to 2018-19

GEOGRAPHY	STUDENTS IN SPECIAL EDUCATION (2015-16)	STUDENTS IN SPECIAL EDUCATION (2016-17)	STUDENTS IN SPECIAL EDUCATION (2017-18)	STUDENTS IN SPECIAL EDUCATION (2018-19)
Coconino Region	11%	11%	13%	13%
Coconino County	11%	12%	13%	13%
Arizona	11%	11%	12%	12%

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

Table 55. Children referred to and found eligible for AzEIP, Federal Fiscal Years 2016 and 2017

GEOGRAPHY	NUMBER OF CHILDREN (AGES 0-2) REFERRED TO AzEIP, FFY2016	NUMBER OF CHILDREN (AGES 0-2) ELIGIBLE FOR AzEIP, FFY2016	PERCENT OF REFERRALS FOUND ELIGIBLE, FFY2016	NUMBER OF CHILDREN (AGES 0-2) REFERRED TO AzEIP, FFY2017	NUMBER OF CHILDREN (AGES 0-2) ELIGIBLE FOR AzEIP, FFY2017	PERCENT OF REFERRALS FOUND ELIGIBLE, FFY2017
Coconino Region	375	206	55%	379	196	52%
Coconino County	355	197	55%	344	170	49%
Arizona	16,063	9,383	58%	16,344	9,770	60%

Source: Arizona Department of Economic Security. (2019). AZEIP Service Dataset. Unpublished data received by request

Table 56. AzEIP caseloads, calendar years 2017 and 2018

GEOGRAPHY	CUMULATIVE ACTIVE AzEIP CASES, 2017	CUMULATIVE ACTIVE AzEIP CASES, 2018	PERCENT CHANGE IN AzEIP CASELOADS FROM 2017 TO 2018
Coconino Region	185	179	-3%
Coconino County	175	173	-1%
Arizona	10,934	11,600	+6%

Source: Arizona Department of Economic Security. (2019). AZEIP Service Dataset. Unpublished data received by request

Table 57. Children (ages 0-2) receiving services from DDD, State Fiscal Years 2015 to 2018

GEOGRAPHY	CHILDREN (AGES 0-2) RECEIVING DDD SERVICES, SFY2015	CHILDREN (AGES 0-2) RECEIVING DDD SERVICES, SFY2016	CHILDREN (AGES 0-2) RECEIVING DDD SERVICES, SFY2017	CHILDREN (AGES 0-2) RECEIVING DDD SERVICES, SFY2018	PERCENT CHANGE FROM 2015 TO 2018
Coconino Region	44	43	53	54	+23%
Coconino County	47	42	49	45	-4%
Arizona	3,948	4,095	4,505	5,012	+27%

Source: Arizona Department of Economic Security. (2019). 2015-2018 Division Developmental Disabilities Data. Unpublished data received by request

Table 58. Children (ages 3-5) receiving services from DDD, State Fiscal Years 2015 to 2018

GEOGRAPHY	CHILDREN (AGES 3-5) RECEIVING DDD SERVICES, SFY2015	CHILDREN (AGES 3-5) RECEIVING DDD SERVICES, SFY2016	CHILDREN (AGES 3-5) RECEIVING DDD SERVICES, SFY2017	CHILDREN (AGES 3-5) RECEIVING DDD SERVICES, SFY2018	PERCENT CHANGE FROM 2015 TO 2018
Coconino Region	<10	<10	<10	10	DS
Coconino County	<10	<10	<10	<10	DS
Arizona	887	898	1,049	1,154	+30%

Source: Arizona Department of Economic Security. (2019). 2015-2018 Division Developmental Disabilities Data. Unpublished data received by request

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. Starting with the mother's health before pregnancy, many factors influence a child's health.¹⁴⁴ Exposures and experiences in utero, at birth, and during the early years set the stage for health and well-being throughout a child's life.^{145,146} Access to health insurance and preventive care influence not only a child's current health, but long-term development and future health.^{147,148,149}

Access to health services. The ability to obtain health care is critical for supporting the health of pregnant mothers and young children. Health care during pregnancy, or prenatal care, can reduce maternal and infant mortality and complications during pregnancy.^{150,151} 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.¹⁵² 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.^{153,154} Thus, access to health insurance is an indicator of children's access to health services. Children who lack health insurance are also more likely to be hospitalized and to miss school.¹⁵⁵

Maternal, infant, and child health. A number of factors occurring before conception and in utero influence child health, making characteristics of pregnant women important determinants of the birth and developmental outcomes of their children. Pregnancy during the teen years is associated with a number of health concerns for infants, including neonatal death, sudden infant death syndrome, and child abuse and neglect.¹⁵⁶ Teenaged mothers (and fathers) themselves are less likely to complete high school or college, and more likely to require public assistance and to live in poverty than their peers who are not parents.^{157,158,159}

In addition to age, a mother's health status before, during, and after pregnancy influences her child's health. Women who are obese before they become pregnant are at a higher risk of birth complications and neonatal and infant mortality than women who are normal weight before pregnancy.^{160,161} Babies born to obese women are at risk for chronic conditions later in life such as diabetes and heart disease.¹⁶² Preterm birth, in addition to being associated with higher infant and child mortality, often results in longer hospitalization, increased health care costs, and longer-term impacts such as physical and developmental impairments. Babies born at a low-birth weight (less than 5 pounds, 8 ounces) are also at increased risk of infant mortality and longer-term health problems such as diabetes, hypertension and cardiac disease.¹⁶³

Maternal mental health is a factor for children's well-being as well. Maternal depression during and after pregnancy negatively influences the mother's ability to maintain a healthy pregnancy as well as meet the demands of motherhood and form a secure attachment with her baby.^{164,}

¹⁶⁵ 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.¹⁶⁶

Substance use disorders. A mother's use of substances such as drugs and alcohol also 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.^{167,168} 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.¹⁶⁹ 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.¹⁷⁰

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 percent compared to 4.5 percent).¹⁷¹ 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.^{172,173} 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.¹⁷⁴

Nutrition and weight status. 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.¹⁷⁵ The American Academy of Pediatrics recommends exclusive breastfeeding for about 6 months, and continuing to breastfeed as new foods are introduced for 1 year or longer.¹⁷⁶

A child's weight status can have long-term impacts on health and well-being. Nationwide, an estimated 3 percent of children ages 2-19 are underweight, 16.6 percent are overweight, and 18.5 percent are obese.^{177,178} Obesity can have negative consequences on physical, social, and psychological well-being that begin in childhood and continue into and throughout adulthood.¹⁷⁹ 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).^{180, 181}

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.¹⁸² A national study showed that low-income children were more likely than higher-income children to have untreated cavities.¹⁸³ 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%).¹⁸⁴ 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.¹⁸⁵

First Things First's Oral Health strategy was able to provide 24,664 children birth to age 5 with a dental screening, and 16,837 children with a fluoride varnish in the Arizona State Fiscal Year

Many children had untreated tooth decay and other oral health needs identified through the screenings. Further, attempts were made to connect children to dental homes who either did not already have a dental home or who needed dental care.

Childhood immunizations. Immunization against preventable diseases protects children and the surrounding community from illness and potentially death. In order to ensure community immunity of preventable diseases, which helps to protect unvaccinated children and adults, rates of vaccination in a community need to remain high.¹⁸⁷

Illness and injury. Asthma is the most common chronic illness affecting children¹⁸⁸, and it is more prevalent among boys, Black children, American Indian or Alaska Native children, and children in low-income households.^{189,190} 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.¹⁹¹ Unintentional injuries are the leading cause of death for children in Arizona¹⁹² and nationwide.¹⁹³ It is estimated that as many as ninety percent of unintentional injury-related deaths could be preventable through better safety practices, such as use of proper child restraints in vehicles and supervision of children around water.¹⁹⁴ 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.^{195,196}

One useful metric 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 mothers and children fall in relation to these current national benchmarks (Healthy People 2020) 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 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.¹⁹⁷

What the Data Tell Us

Access to Health Services

- In the Coconino Region, thirteen percent of the population do not have health insurance coverage, which is higher than the rate in both the state (12%) and the nation (10%) (Table 59 & Figure 11).
- For young children specifically, health insurance coverage is slightly better than the overall population in the region but worse than the national rate, with six percent of young children uninsured in Coconino and four percent of young children uninsured nationally (Table 59 & Figure 11).
- Over half of births (56%) in the Coconino Region were covered by AHCCCS^{ix} in 2017, a percentage slightly higher than the state rate (53%). The proportion of births covered by the Indian Health Service (IHS) and self-paid births were comparable between the region (6%) and the state (6%) in 2017 (Table 60).

Maternal, Infant, and Child Health

- While the percent of births to mothers with no prenatal care or fewer than five prenatal visits were similar in the region, county, and state, the Coconino Region had a lower proportion of births to mothers with no prenatal care in the first trimester (21.9%) than seen in Arizona overall (26.4%). The region met the Healthy People 2020 target of at least 77.9 percent of births to mothers who received prenatal care in the first trimester, whereas both the county and state did not (Table 61).
- The proportion of babies born at low birth weight is much higher in Coconino (9.8%) than the county (9.0%) and state (7.5%), so the region did not meet the Healthy People 2020 target of keeping rates of low birth weight babies below 7.8 percent (Table 62). These high rates of low birthweight births are likely at least partially due to the effects of high altitude on fetal development. A 1997 study in Colorado found that birthweight declined an average of 102 g per 1000 meters of elevation gain.¹⁹⁸
- Rates of preterm birth in both the region (10.6%) and the county (11.0%) did not meet the Healthy People 2020 target of no more than 9.4 percent of births before 37 weeks gestation (Table 62).
- The Coconino Region did not meet the Healthy People 2020 target for maternal use of tobacco during pregnancy (not to exceed 1.4%), with 2.4 percent of births to mothers using tobacco while pregnant. However, rates of tobacco use during pregnancy in both the region (2.4%) and the county (1.8%) were substantially lower than rates in the state as a whole (4.7%) (Table 62).

^{ix} AHCCCS is Arizona's Medicaid agency

- In 2017, Coconino County had an infant mortality rate (4.0 per 1,000 live births) that met the Healthy People 2020 target (6.0 per 1,000 live births) and was lower than the state rate (5.6 per 1,000 live births) (Table 63).
- In 2016 and 2017 combined, the rate of neonatal abstinence syndrome (i.e., opioid-addicted babies) in Coconino County (2.2 per 1,000 live births) was less than a third of the statewide rate (7.4 per 1,000 live births) (Table 64).

Substance Use Disorders

- Between June 2017 and June 2018, there were 75 suspected opioid overdoses among people of all ages in Coconino County (Table 65).
- In 2017, there were 10 deaths directly attributed to opioids in Coconino County; this accounted for only one percent of opioid-related deaths across the state (Table 65).

Nutrition & Weight Status

- In Coconino County, rates of breastfeeding for infants in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) are much higher than the state rates. While 87 percent of WIC infants were breastfed at some point in infancy, rates of breastfeeding decline with the baby's age. Although the American Academy of Pediatrics recommends exclusive breastfeeding until six months of age, at six months of age, less than half of WIC infants (44%) were ever breastfed and only 8 percent were exclusively breastfed in Coconino County. Even at three months old, only about one in three WIC infants (32%) were exclusively breastfed. However, rates of exclusive breastfeeding at both three and six months were more than double the rates seen statewide (13% and 3%, respectively) (Table 66).

Oral Health

- In 2019, 483 children received at least one fluoride varnish and 773 children received at least one oral health screening in the Coconino Region as a result of the work of First Things First (Table 67).

Child Immunizations

- Between 2015 and 2018, Coconino County had 294 cases of influenza, 180 cases of respiratory syncytial virus (RSV), and fewer than six cases of varicella ("chickenpox"), pertussis, or mumps in young children (Table 68).
- Across all required immunizations, children in child care in the Coconino Region had slightly higher vaccination rates than the state as a whole and met the Healthy People 2020 targets during the 2018-2019 school year. However, the region trailed statewide kindergarten immunization rates and did not meet any of the Healthy People 2020

targets for kindergarten immunizations during the same school year (Table 69 & Table 70).

- In terms of immunization exemptions among children in child care, in 2016-2017 and 2017-2018 the region had higher rates of children receiving religious exemptions and exemptions from all required vaccines compared to the state. However, during the 2018-2019 school year, 4.4 percent of children in child care received a religious exemption in Coconino compared to 4.5 percent of children statewide. Similarly, 3.2 percent of children in child care received exemptions from all required vaccines in Coconino compared to 3.0 percent of children statewide (Table 71).
- The Coconino Region had much higher rates of children in kindergarten receiving personal belief exemptions and exemptions from all required vaccinations than rates seen statewide between 2016-2017 and 2018-2019. During the 2018-2019 school year, 6.1 percent of children in kindergarten received a personal belief exemption in the region compared to 5.9 percent of children statewide, and 5.0 percent of children in kindergarten received exemptions from all required vaccines in the region compared to 3.8 percent statewide. However, rates of both personal belief exemptions and exemptions from all required vaccinations declined in both the region and county, while statewide rates increased over the same period (Table 72).

Illness & Injury

- Between 2015 and 2018, reasons for non-fatal hospitalizations of young children for unintentional injuries in the Coconino Region aligned with the state, with falls (26%) and poisoning (20%) the most common. Reasons for non-fatal emergency room visits were also similar between region, county, and state, with falls (43%) and being 'struck by or against' an object or person (15%) the most common (Table 73 & Table 74).
- Between 2015 and 2017, there were 55 emergency room visits and 16 inpatient hospitalizations for asthma for young children in the Coconino Region. The average length of stay for asthma hospitalization (3.2 days) was higher for the Coconino Region than the state (1.9 days) (Table 75).
- Between 2015 and 2017, there were 44 deaths of children in the Coconino Region, 57 percent of which were in young children (25 deaths). The proportion of child deaths that involved young children was much lower in the Coconino Region and Coconino County (57%) than in the state (71%) (Table 76).

Access to Health Services

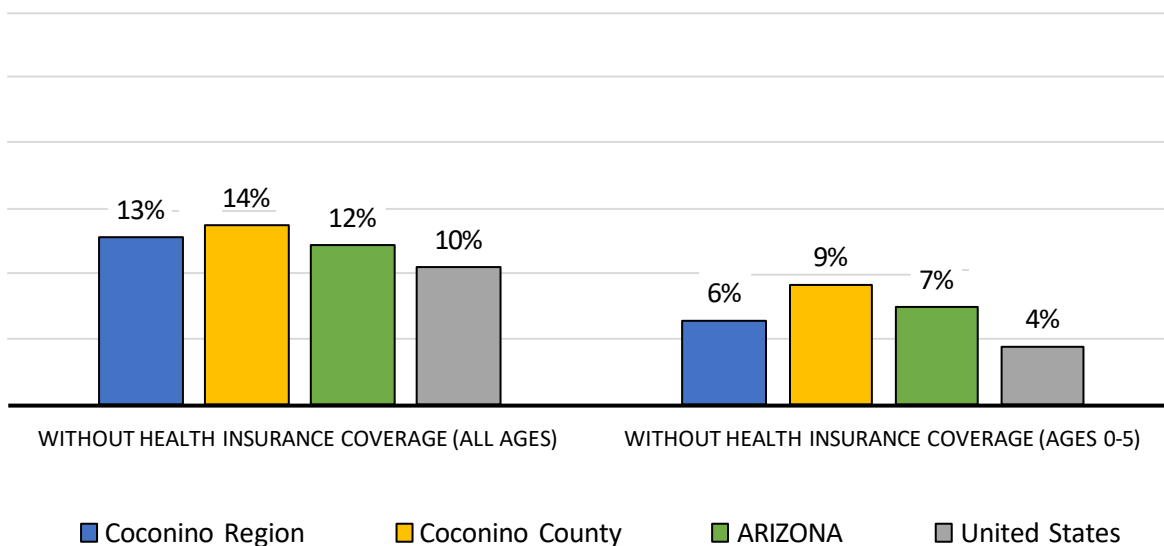
Table 59. Health insurance coverage

GEOGRAPHY	POPULATION (ALL AGES)	PERCENT WITHOUT HEALTH INSURANCE COVERAGE (ALL AGES)	POPULATION OF YOUNG CHILDREN (AGES 0-5)	PERCENT WITHOUT HEALTH INSURANCE COVERAGE (AGES 0-5)
Coconino Region	126,849	13%	8,693	6%
Coconino County	137,820	14%	9,495	9%
Arizona	6,701,990	12%	520,741	7%
United States	316,027,641	10%	23,832,080	4%

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, 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" according to the U.S. Census Bureau.

Figure 11. Health insurance coverage for the population (all ages) and for young children (ages 0 to 5)



Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B27001

Note: This figure 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" according to the U.S. Census Bureau.

Table 60. Payors for births during calendar year 2017

GEOGRAPHY	TOTAL NUMBER OF BIRTHS IN 2017	BIRTHS PAID BY AHCCCS	BIRTHS PAID BY IHS	BIRTHS SELF-PAY
Coconino Region	1,415	56%	1%	5%
Coconino County	1,506	58%	3%	4%
Arizona	81,664	53%	1%	5%

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Maternal, Infant, and Child Health

Table 61. Prenatal care for mothers giving birth during calendar year 2017

GEOGRAPHY	TOTAL NUMBER OF BIRTHS IN 2017	MOTHERS WHO HAD NO PRENATAL CARE	MOTHERS WHO HAD NO PRENATAL CARE IN FIRST TRIMESTER	MOTHERS WHO HAD FEWER THAN FIVE PRENATAL VISITS
Coconino Region	1,415	3%	21.9%	7%
Coconino County	1,506	3%	24.6%	8%
Arizona	81,664	3%	26.4%	8%
Healthy People 2020 targets			22.1%	

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Table 62. Various risk factors for births during calendar year 2017

GEOGRAPHY	TOTAL NUMBER OF BIRTHS IN 2017	LOW BIRTH WEIGHT	PRETERM (LESS THAN 37 WEEKS)	NICU ADMISSIONS	MOTHER USED TOBACCO	MOTHER YOUNGER THAN 18	MOTHER YOUNGER THAN 20
Coconino Region	1,415	9.8%	10.6%	4%	2.4%	2%	8%
Coconino County	1,506	9.0%	11.0%	4%	1.8%	2%	8%
Arizona	81,664	7.5%	9.3%	7%	4.7%	2%	6%
Healthy People 2020 targets		7.8%	9.4%		1.4%		

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Table 63. Infant mortality, calendar year 2017

GEOGRAPHY	INFANT DEATHS WITHIN SEVEN DAYS OF BIRTH, 2017	INFANT MORTALITY RATE (WITHIN ONE YEAR; PER THOUSAND LIVE BIRTHS), 2017
Coconino County	<6	4.0
Arizona	234	5.6
Healthy People 2020 targets		6.0

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Table 64. Neonatal abstinence syndrome, calendar years 2016 and 2017

GEOGRAPHY	NUMBER OF BABIES BORN WITH NEONATAL ABSTINENCE SYNDROME (NAS)	NAS RATE PER 1,000 LIVE BIRTHS
Coconino County	7	2.2
Arizona	1,228	7.4

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Substance Use Disorders

Table 65. Opioid overdoses and deaths, June 2017 to June 2018

GEOGRAPHY	SUSPECTED OPIOID OVERDOSES, JUNE 2017 TO JUNE 2018	DEATHS DIRECTLY ATTRIBUTED TO OPIOIDS, CALENDAR YEAR 2017
Coconino County	75	10
Arizona	8,591	949

Source: Arizona Department of Health Services. (2018). *Arizona Opioid Emergency Response Report, June 2017-June 2018*.

Retrieved from <https://www.azdhs.gov/documents/prevention/womens-childrens-health/injury-prevention/opioid-prevention/2017-opioid-emergency-response-report.pdf>

Nutrition and Weight Status

Table 66. Breastfeeding rates for infants in the WIC program, calendar year 2018

GEOGRAPHY	WIC INFANTS EVER BREASTFED	WIC INFANTS BREASTFED AT 6 MONTHS	WIC INFANTS BREASTFED AT 12 MONTHS	WIC INFANTS EXCLUSIVELY BREASTFED AT 3 MONTHS	WIC INFANTS EXCLUSIVELY BREASTFED AT 6 MONTHS
Coconino County	87%	44%	28%	32%	8%
Arizona	77%	26%	14%	13%	3%

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Oral Health

Table 67. First Things First oral health strategy data, 2019

GEOGRAPHY	NUMBER OF CHILDREN WHO RECEIVED AT LEAST ONE FLUORIDE VARNISH	NUMBER OF CHILDREN WHO RECEIVED AT LEAST ONE ORAL HEALTH SCREENING
Coconino Region	483	773
Arizona	16,837	24,664

Source: First Things First. (2019). Oral Health Strategy Data. Unpublished data received by request

Child Immunizations

Table 68. Cases of infectious diseases among young children (ages 0-5), 2015-2018 cumulative

GEOGRAPHY	INFLUENZA	RESPIRATORY SYNCYTIAL VIRUS (RSV)		VARICELLA	PERTUSSIS	HAEMOPHILUS INFLUENZAE		MUMPS
Coconino County	294		180	<6	<6		<6	<6
Arizona	5,449		4,201	70	51		31	<6

Source: Arizona Department of Health Services. (2019). 2015-2018 Child Infectious Disease Data. Custom data tabulation from requested data

Note: These numbers include both confirmed and probable cases. There were zero reported cases of meningococcal meningitis or measles.

Table 69. Children in child care with required immunizations, 2018-19

GEOGRAPHY	NUMBER OF CHILDREN ENROLLED IN CHILD CARE	IMMUNIZATION COVERAGE						
		DTAP	POLIO	MMR	HIB	HEPATITIS A	HEPATITIS B	VARICELLA
Coconino Region	1,711	94.3%	94.9%	95.7%	95.6%	85.8%	95.0%	95.3%
Coconino County	1,639	94.4%	95.1%	95.8%	95.5%	86.6%	94.9%	95.3%
Arizona	86,829	92.4%	94.2%	94.9%	94.2%	85.5%	93.3%	94.7%
Healthy People 2020 targets		90.0%	90.0%	90.0%	90.0%	85.0%	90.0%	90.0%

Source: Arizona Department of Health Services. (2019). 2018-19 Child Care Immunization Data. Custom data tabulation from requested data; Arizona Department of Health Services. (2019). Childcare Immunization Coverage by County, 2018-2019 School Years. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Note: The hepatitis A vaccine series (2 doses) is only required in Maricopa County child care settings, but is recommended in all other Arizona counties.

Table 70. Kindergarteners with required immunizations, 2018-19

GEOGRAPHY	NUMBER OF CHILDREN ENROLLED IN KINDERGARTEN	DTAP	POLIO	MMR	HEPATITIS B	VARICELLA
Coconino Region	1,097	92.8%	92.8%	92.1%	93.0%	93.6%
Coconino County	1,102	92.8%	93.1%	91.0%	93.2%	93.9%
Arizona	79,981	92.7%	93.3%	93.0%	94.4%	95.6%
Healthy People 2020 targets		95.0%	95.0%	95.0%	95.0%	95.0%

Source: Arizona Department of Health Services. (2019). 2018-19 Kindergarten Immunization Data. Custom data tabulation from requested data; Arizona Department of Health Services. (2019). Kindergarten Immunization Coverage by County, 2018-2019 School Years. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Table 71. Child care immunization exemption rates, 2016-17 to 2018-19

GEOGRAPHY	RELIGIOUS EXEMPTION (2016-17)	RELIGIOUS EXEMPTION (2017-18)	RELIGIOUS EXEMPTION (2018-19)	EXEMPT FROM EVERY REQUIRED VACCINE (2017-18)	EXEMPT FROM EVERY REQUIRED VACCINE (2018-19)
Coconino Region	4.8%	5.2%	4.4%	4.0%	3.2%
Coconino County	5.2%	5.6%	4.5%	4.3%	3.3%
Arizona	3.9%	4.3%	4.5%	2.9%	3.0%

Source: Arizona Department of Health Services. (2019). 2016-17 to 2018-19 Child Care Immunization Data. Custom data tabulation from requested data; Arizona Department of Health Services. (2019). Childcare Immunization Coverage by County, 2016-17 to 2018-2019 School Years. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Table 72. Kindergarten immunization exemption rates, 2016-17 to 2018-19

GEOGRAPHY	PERSONAL BELIEF EXEMPTION (2016-17)	PERSONAL BELIEF EXEMPTION (2017-18)	PERSONAL BELIEF EXEMPTION (2018-19)	EXEMPT FROM EVERY REQUIRED VACCINE (2017-18)	EXEMPT FROM EVERY REQUIRED VACCINE (2018-19)
Coconino Region	7.3%	9.7%	6.1%	5.9%	5.0%
Coconino County	7.4%	10.3%	5.9%	6.5%	4.8%
Arizona	4.9%	5.4%	5.9%	3.5%	3.8%

Source: Arizona Department of Health Services. (2019). 2016-17 to 2018-19 Kindergarten Immunization Data. Custom data tabulation from requested data; Arizona Department of Health Services. (2019). Kindergarten Immunization Coverage by County, 2016-17 to 2018-2019 School Years. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Illness and Injury

Table 73. Non-fatal hospitalizations of young children (ages 0-5) for unintentional injuries, 2015-2018 cumulative

GEOGRAPHY	NUMBER OF NON-FATAL INPATIENT HOSPITALIZATIONS FOR CHILDREN (AGES 0-5), 2015-2018 TOTALS	MOST COMMON REASON FOR HOSPITALIZATION	SECOND MOST COMMON REASON FOR HOSPITALIZATION
Coconino Region	61	Falls (26%)	Poisoning (20%)
Coconino County	80	Falls (25%)	Burns (20%)
Arizona	3,015	Falls (33%)	Poisoning (15%)

Source: Arizona Department of Health Services. (2019). 2015-2018 Child Injury Data. Unpublished data received by request

Table 74. Non-fatal emergency-room visits by young children (ages 0-5) for unintentional injuries, 2015-2018 cumulative

GEOGRAPHY	NUMBER OF NON-FATAL EMERGENCY ROOM VISITS FOR CHILDREN (AGES 0-5), 2015-2018 TOTALS	MOST COMMON REASON FOR EMERGENCY ROOM VISIT	SECOND MOST COMMON REASON FOR EMERGENCY ROOM VISIT
Coconino Region	2,003	Falls (43%)	Struck by or against (15%)
Coconino County	2,563	Falls (43%)	Struck by or against (14%)
Arizona	181,068	Falls (46%)	Struck by or against (14%)

Source: Arizona Department of Health Services. (2019). 2015-2018 Child Injury Data. Unpublished data received by request

Note: "Struck by or against" denotes being struck by or against an object or person, not including vehicles.

Table 75. Asthma hospitalizations and emergency-room visits, 2015-2017 cumulative

GEOGRAPHY	NUMBER OF INPATIENT HOSPITALIZATIONS FOR ASTHMA (AGES 0 TO 5, EXCEPT NEWBORNS), 2015-2017 TOTALS	AVERAGE LENGTH OF STAY (DAYS) FOR ASTHMA HOSPITALIZATION (AGES 0-5 EXCEPT NEWBORNS), 2015-2017	NUMBER OF EMERGENCY ROOM VISITS FOR ASTHMA (AGES 0 TO 5, EXCEPT NEWBORNS), 2015-2017 TOTALS
Coconino Region	16	3.2	55
Coconino County	17	3.1	61
Arizona	2,232	1.9	12,812

Source: Arizona Department of Health Services. (2019). 2015-2017 Child Asthma Data. Unpublished data received by request

Table 76. Child mortality, 2015-2017 cumulative, 2015-2017 cumulative

GEOGRAPHY	TOTAL NUMBER OF DEATHS OF YOUNG CHILDREN (AGES 0-4), 2015 TO 2017	TOTAL NUMBER OF DEATHS OF CHILDREN (AGES 0-17), 2015 TO 2017
Coconino Region	25	44
Coconino County	32	56
Arizona	1,682	2,357

Source: Arizona Department of Health Services. (2019). 2015-2017 Child Mortality Data. Unpublished data received by request

Family Support and Literacy

Why it Matters

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 during a child's earliest years and lead to better social, physical, academic, and economic outcomes later in life.^{199,200,201,202} Parental and family involvement is positively linked to academic skills and literacy in preschool, kindergarten, and elementary school.²⁰³ Children benefit when their families have the knowledge, resources, and support to use positive parenting practices, and support their child's healthy development, nutrition, early learning, and language acquisition. Specifically, knowledge of positive parenting practices and child development has been identified as one of five key protective factors that improve child outcomes and reduce the incidence of child abuse and neglect.^{x,204}

Early literacy. Parental and family involvement is positively linked to academic skills and literacy in preschool, kindergarten and elementary school.²⁰⁵ 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.²⁰⁶

A child's reading skills when entering elementary school have been shown to strongly predict academic performance in later grades, emphasizing the importance of early literacy for future academic success.^{207,208} 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.^{209,210} However, low-income families may face additional barriers to home-based literacy practices, including limited free time with children, limited access to books at home, and a lack of knowledge of kindergarten readiness.²¹¹

Communities may employ many resources to support families in engaging with their children, including through targeted programs like home visitation programs and "stay and play" programs, or participating in larger initiatives like Read On Arizona or the national "Reach Out & Read" program.²¹²

Adverse childhood experiences. Unfortunately, not all children are able to begin their lives in positive, stable, nurturing environments. Experiences early in life can have lasting impacts on an individual's mental and physical health. Adverse Childhood Experiences (ACEs) have been linked

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

to future risky health behaviors (such as smoking, drug use, and alcoholism), chronic health conditions (including diabetes, depression, and obesity), poorer life outcomes (such as lower educational achievement and increased lost work time), and early death.²¹³ Alternatively, Positive Childhood Experiences (PCEs), including positive parent-child relationships and feelings of safety and support, have been shown to have similarly cumulative, though positive, long-term impacts on mental and relational health.²¹⁴ Nationally and in Arizona, very young children are most at risk for child abuse, neglect, and fatalities from abuse and neglect. In 2017, children five years old and younger made up more than half (55%) of child maltreatment victims in Arizona.²¹⁵ Future poor health outcomes are also more likely as an individual's ACE score increases.²¹⁶ Children in Arizona are considerably more likely to have experienced two or more ACEs (27.3%), compared to children across the country (8.3%).²¹⁷ These children and their families may require specific, targeted resources and interventions in order to reduce harm and prevent future risk.²¹⁸

Mental and behavioral health. Behavioral health supports, both for children and caregivers, are often needed to address exposure to adverse childhood events. Infant and toddler mental health development involves the young child's developing capacity to "experience, regulate and express emotions; form close interpersonal relationships; and explore the environment and learn."²¹⁹ 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. Understanding the behavioral health of mothers is also important for the well-being of Arizona's young children. Mothers dealing with behavioral health issues such as depression may not be able to perform daily caregiving activities, form positive bonds with their children, or maintain relationships that serve as family supports.²²⁰

Child removals and foster care. There are situations where the harm in remaining with their family is determined to be too great to a child and they are removed from their home, either temporarily or permanently. In accordance with the Indian Child Welfare Act of 1978, many tribal governments manage their own child welfare systems that must work cooperatively with state systems.²²¹ 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.²²² Foster parents often need education, support, and resources to ensure they are able to successfully care for foster children who may have these added health needs. According to a 2015 Arizona Department of Child Safety Independent Review, focusing on evidence-based targeted interventions for families at risk of child removal—including home visitation, positive parenting programs, and family-based therapy—may help lower this risk, thus reducing placements in foster care systems.²²³

What the Data Tell Us

Home Visitation

- In 2019, 52 families in the Coconino Region received First Things First-funded home visitation services, including one family who successfully completed and graduated^{xi} from home visitation programs in 2019 (Table 77).

Child Removals & Foster Care

- Between January 2018 and June 2018, there were 55 substantiated maltreatment reports in Coconino County. Of those substantiated reports, the majority were related to neglect (80%), with a smaller proportion related to physical abuse (13%) and sexual abuse (5%). These proportions mirror the statewide proportions for Arizona during this time period (83%, 13% and 4%, respectively) (Table 78).
- The statewide number of child removals by the Department of Child Safety (DCS) declined from 2014 to 2017 (Table 79 & Figure 12).
- Between January 2018 and June 2018, 10 percent of DCS reports resulted in a child removal in Coconino County, with 53 children removed. While the percentage of children removed overall was lower in the county than the state (16%), there was a much higher percentage of children with a prior removal in the last 24 months in Coconino County (17%) than the state (9%) (Table 80).
- While the number of foster placements declined from 2015 to 2018, the statewide number of licensed foster homes steadily increased during this time (Table 81 & Table 82).

^{xi} Graduation rates do not necessarily reflect those retained in the program. Families who did not graduate may still be continuing in the program.

Home Visitation

Table 77. First Things First-funded home visiting program data, State Fiscal Year 2019

GEOGRAPHY	NUMBER OF FAMILIES SERVED	FAMILIES SUCCESSFULLY GRADUATED FROM HOME VISITATION PROGRAMS
Coconino Region	52	1
Arizona	4,106	241

Source: First Things First. (2019). Home Visitation Program Data. Unpublished data received by request

Note: This is an unduplicated count of families who received home visitation services since the beginning of the contract year. Families are only counted one time during the year even if they enrolled in home visitation multiple times. Graduation rates do not necessarily reflect those retained in the program. Families who did not graduate may still be continuing in the program. Program completion/graduation is defined differently by home visitation models: PAT: Services are offered for 2 years or until the child ages out (age 6). HFAZ: Services are offered until the child is at least three years old and can continue up to age five. NFP: Services are offered prenatally until the child's 2nd birthday.

Child Removals and Foster Care

Table 78. Substantiated maltreatment reports by type, January to June, 2018

GEOGRAPHY	TOTAL SUBSTANTIATED MALTREATMENT REPORTS	NEGLECT	PHYSICAL ABUSE	SEXUAL ABUSE	EMOTIONAL ABUSE
Coconino County	55	80%	13%	5%	2%
Arizona	3,104	83%	13%	4%	<1%

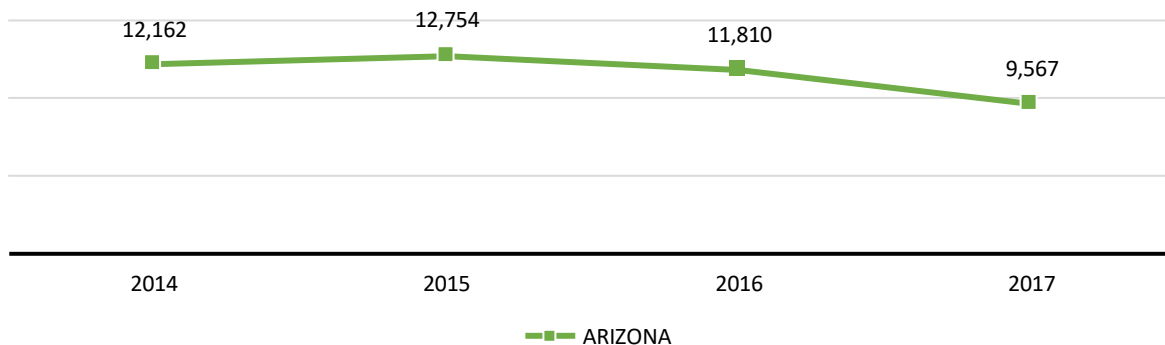
Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Table 79. Children removed by the Department of Child Safety (DCS), 2014 to 2017

GEOGRAPHY	2014	2015	2016	2017
Arizona	12,162	12,754	11,810	9,567

Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Figure 12. Children removed by the Department of Child Safety (DCS), 2014 to 2017



Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Table 80. Children removed by the Department of Child Safety (DCS), January to June, 2018

GEOGRAPHY	TOTAL REPORTS	NUMBER OF CHILDREN REMOVED	PERCENT OF CHILDREN REMOVED	NUMBER OF CHILDREN WITH PRIOR REMOVAL IN LAST 24 MONTHS	PERCENT OF CHILDREN WITH PRIOR REMOVAL IN LAST 24 MONTHS
Coconino County	536	53	10%	9	17%
Arizona	30,943	4,797	16%	434	9%

Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Table 81. Number of foster placements, 2015 to 2018

GEOGRAPHY	2015	2016	2017	2018
Arizona	17,592	18,906	16,899	14,929

Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Table 82. Number of licensed foster homes, 2015 to 2018

GEOGRAPHY	2015	2016	2017	2018
Arizona	4,497	4,681	5,000	5,213

Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Systems Coordination among Early Childhood Programs and Services

Why it Matters

From November 2016 to June 2017, First Things First convened the second Arizona Early Childhood Task Force, comprised of diverse leaders from across the state. The goal of the task force was to create an ambitious, yet attainable, statewide five-year plan for First Things First and Arizona’s early childhood system. Building from the model early-childhood system developed in 2010, the task force identified six desired outcomes, one of which is “When the early childhood system is successful, everyone will benefit from living in communities where the early childhood system is high-quality, centered on children and families, coordinated, integrated and comprehensive.” First Things First’s role in building this system is to foster cross-system collaboration among local, state, federal, and tribal organizations to improve the coordination and integration of programs, services, and resources for young children and their families.

Through system building, First Things First connects various components of the early childhood system to create a more holistic system that promotes shared results for children and families. Agencies that work together are often easier for families to access, and the services they provide are more responsive to those families’ needs. Coordination efforts may also increase agencies’ capacity to deliver services by identifying and addressing gaps in the service delivery continuum. By supporting a variety of coordination efforts, First Things First aims to create a high quality, interconnected, and comprehensive system of early-childhood service delivery that enhances children’s overall development and that is timely, culturally responsive, family driven, and community based. Determining how these efforts are affecting each of the 28 regions and their families can help inform services, programs, and policy decisions to benefit families and young children throughout the state.

What the Data Tell Us

Through continued partnership with LAUNCH Flagstaff, the Coconino Regional Partnership Council is able to advance coordination and collaboration in the early education system in the Region. LAUNCH Flagstaff is currently working to establish its Preschool Expansion project that aims to provide full-day, year-round, high-quality preschool free of charge to all four-year-olds living in households with income between 130 and 200 percent of the federal poverty level. LAUNCH Flagstaff was able to secure funding from the City of Flagstaff, Coconino County and the Wharton Foundation to continue to advance its preschool expansion project. The funding served as a milestone for the expansion project, allowing it to move forward into the next stage of its implementation. Additionally, through an in-kind donation from Association for Supportive Child Care, LAUNCH was able to create a regional lead supervisor position. This position will be responsible for the coordination and implementation of the expansion project, including working to ensure each classroom of the expansion provides a high-quality care and education. Though the work of LAUNCH expansion project is currently limited to the city of Flagstaff, it is being developed in a manner to support future development of the work into the rural communities of Coconino County.

Furthermore, as part of its goal to increase collaboration of literacy resources in the community, LAUNCH Flagstaff applied for and was subsequently selected as a Read-On Arizona Acceleration Zone. As a result, LAUNCH's executive director received training in the Lectio Literacy program analysis tool which has been used to form a literacy coordination team comprised of representatives from the Flagstaff Library, the Literacy Center, Flagstaff Unified School District, Northern Arizona University, Parenting Arizona, Coconino County School Superintendent's office, First Things First, the Association for Supportive Child Care, United Way of Northern Arizona, and Reach out and Read. The team has completed an initial program analysis of the literacy landscape in Flagstaff and is determining strategies for improved alignment and coordination of these existing resources in conjunction with Flagstaff Unified School District's literacy plan.

To further inform the system building work within the region, in SFY2019 the Regional Partnership Council convened community conversations with local representatives in the city of Page to identify the greatest needs for children birth to five and their families in the community and surrounding areas. These meetings were structured to support the work of the Page Childcare Partnership in identifying coordination and collaboration strategies for improving access to high quality child care in the region. Through these discussions and the work of the Page Childcare Partnership, the Coconino Regional Partnership Council was able to identify early childhood needs in Page that are universal to rural communities in the region and as a result was able begin to establish priorities for coordination and collaboration work for the Coconino Region. In addition to the expansion of high quality early education programs in the region, it is of note that professional development for early childhood professionals was identified as a strong need in rural communities to support access to high quality education.

Programs in rural communities often struggle to recruit qualified professionals to staff their classrooms and providing greater access to educational opportunities was identified as a strategy that could address that need. Collaborations have resulted in some additional direction for the work of the council with many more opportunities likely in the future.

Communication, Public Information and Awareness

Why it Matters

Public awareness of the importance of early childhood development and health is critical in building a comprehensive, effective early childhood system in Arizona. Building public awareness and support for early childhood impacts individual behaviors as well as the broader objectives of system building. For the general public, information and awareness is the first step in taking positive action in support of children birth to age 5. This could include a range of actions—from influencing their personal networks by sharing early childhood information to actively encouraging community leaders to support programs and services for young children. For parents and other caregivers, awareness is the first step to engaging in programs or behaviors that will better support their child’s health and development.

There is no single communications strategy that will achieve the goal of making early childhood an issue that more Arizonans value and prioritize. Therefore, integrated strategies that complement and build on each other are key to any successful strategic communications effort. Employing a range of communications strategies to share information—from traditional broad-based tactics such as paid media advertising to grassroots, community-based tactics such as community outreach—ensures that diverse audiences are reached more effectively across multiple media platforms. A thoughtful and disciplined combination of methods of delivering information is required to ensure multiple messaging touch-points for diverse audiences: families, civic organizations, faith communities, businesses, local leaders, and others.

What the Data Tell Us

Since State Fiscal Year 2011, First Things First (FTF) has led a collaborative, concerted effort to build public awareness and support across Arizona employing integrated communications strategies that now include:

- strategic messaging and branding
- community outreach
- community awareness
- social media
- digital content marketing
- earned media
- paid media advertising

Progress toward building support for children birth to age 5 can be measured by changes in awareness, attitudes and behaviors, as demonstrated through key results of a periodic statewide survey and through tactical impact measures. The most recent statewide survey was conducted in September 2018 and included a general phone survey as well as an online survey of parents of young children. Key results include the following:

- Those who agree that the state should ensure all children have access to early childhood services increased from 80 percent in 2012 to 84 percent in 2018.
 - Among parents, this measure increased from 81 percent in 2016 (the first available parent survey results) to 87 percent in 2018.
- Those who agree that a child who received early education and healthcare services before age 5 is more likely to succeed in school and beyond increased from 82 percent in 2012 to 88 percent in 2018.
 - Among parents, agreement increased from 85 percent in 2016 to 87 percent in 2018.
- Those who agree that the state should put the same priority on early education as it does on K-12 education increased from 62 percent in 2012 to 72 percent in 2018.
 - Among parents, agreement increased from 69 percent in 2016 to 74 percent in 2018.

While understanding and supporting early childhood in general is critical, it's also important that Arizonans have a trustworthy source of early childhood resources and know about the availability of early childhood resources, programs and tools. For this reason, building awareness of FTF as a credible source is critical. Results of the most recent statewide survey show that, while some progress has been made, there is still more to be done to increase awareness about FTF.

- In the 2018 general survey, 87 percent of respondents had never heard of FTF, compared to 89 percent in 2012.
 - Among parents specifically, more had heard of FTF, with 66 percent stating they had never heard of FTF, compared to 69 percent in 2016.

While this statewide survey offers a measure of broad changes in attitudes and awareness, specific tactical measures of awareness and support-building strategies employed by FTF offer another point of information. These include:

- FTF implemented three annual statewide awareness campaigns since the last regional needs and assets reporting period. The SFY17-SFY18 campaign—*Help Them Get There*—shared messaging about the importance of the early years for future school and life success and that parents’ everyday positive interactions with babies, toddlers and preschoolers promote healthy development. The SFY19 campaign—*Givers of Care*—focused specifically on the important role of caregivers and quality early learning environments.
- These paid campaigns reached a large number of Arizonans, measured through the total number of traditional and digital media impressions. Traditional media impressions refer to television, radio, cinema, and billboard ads, while digital media impressions refer to online ads which appear on both desktop and smartphone devices. These statewide impressions—which measure the estimated number of views of FTF ads—are detailed below.

Table 83. First Things First media awareness campaign impressions, SFY17-SFY19

	SFY17	SFY18	SFY19
Traditional media impressions	10 million	17 million	11 million
Digital media impressions	66 million	100 million	76 million

Source: *First Things First. (2019). Communications Strategy Data. Unpublished data received by request*

- In addition, targeted digital advertising allows geographically-based targeting of audiences within regions with the ability to measure the number of click-throughs that digital ads garnered. The click-throughs delivered viewers to the FTF website. In SFY19, in the Coconino Region, digital advertising led to a total of 8,670 click-throughs to the FTF website where families could access more information and resources.
- In the area of social media, engagement with FTF early childhood online platforms has grown over the years. Particular success has been seen in the growth of Facebook Page

Likes for FTF, which grew from just 3,000 in 2012 to 142,600 in 2019. Content is also distributed through Twitter, LinkedIn and Instagram.

- Since inception in SFY17, FTF’s digital content marketing strategy which targets parents and families with engaging and informative video and blog posts via website, social media, and email has expanded its reach. In SFY19, 40 original, high-quality content pieces were published.
- In SFY19, an online searchable database of early childhood programs funded by FTF in all the regions launched. In the first six months, over 24,187 visits were logged.

In addition, FTF began a community engagement effort in SFY14 to recruit, motivate and support community members to take action on behalf of young children. The community engagement program is led by community outreach staff in regions which fund the FTF Community Outreach strategy. This effort focuses on engaging individuals across sectors—including business, faith, K-12 educators, and civic organizations—in the work of spreading the word about the importance of early childhood as trusted, credible messengers in their communities.

Focused efforts to engage parents’ most trusted messengers—which include pediatricians—included creating and distributing a toolkit for health providers to help them better understand and share information on the statewide free Birth to 5 Helpline. This toolkit was also distributed to attendees of the annual conference of the Arizona Chapter of the American Academy of Pediatrics. Other statewide awareness partnerships included creation and distribution of a grocery list tip pad for parents and caregivers sharing Read On Arizona’s Smart Talk tips, a digital content sharing partnership with Expect More Arizona and partnering with the Arizona Association for the Education of Young Children on a social media campaign promoting Week of the Young Child.

Because Arizona is so vast—with more than 500,000 children under age 6 and nearly 400,000 households with kids under age 6—engaging others in spreading the word about early childhood is critical to reaching across diverse geographic areas and expanding our reach. Supporters and Champions—who are trained in early childhood messaging and effective ways to share early childhood information—reported a total of 940 positive actions taken on behalf of young children throughout Arizona in SFY19. These actions range from leading presentations in support of early childhood to sharing FTF’s early childhood resources with parents at community events. Table 84 shows total recruitment of Supporters and Champions through SFY19 and actions taken in SFY19.

Table 84. FTF engagement of early childhood supporters and champions, SFY19

GEOGRAPHY	SUPPORTERS	CHAMPIONS	SUPPORTER AND CHAMPION ACTIONS IN SFY19
Coconino Region	522	83	48
Arizona	6,258	1,170	940

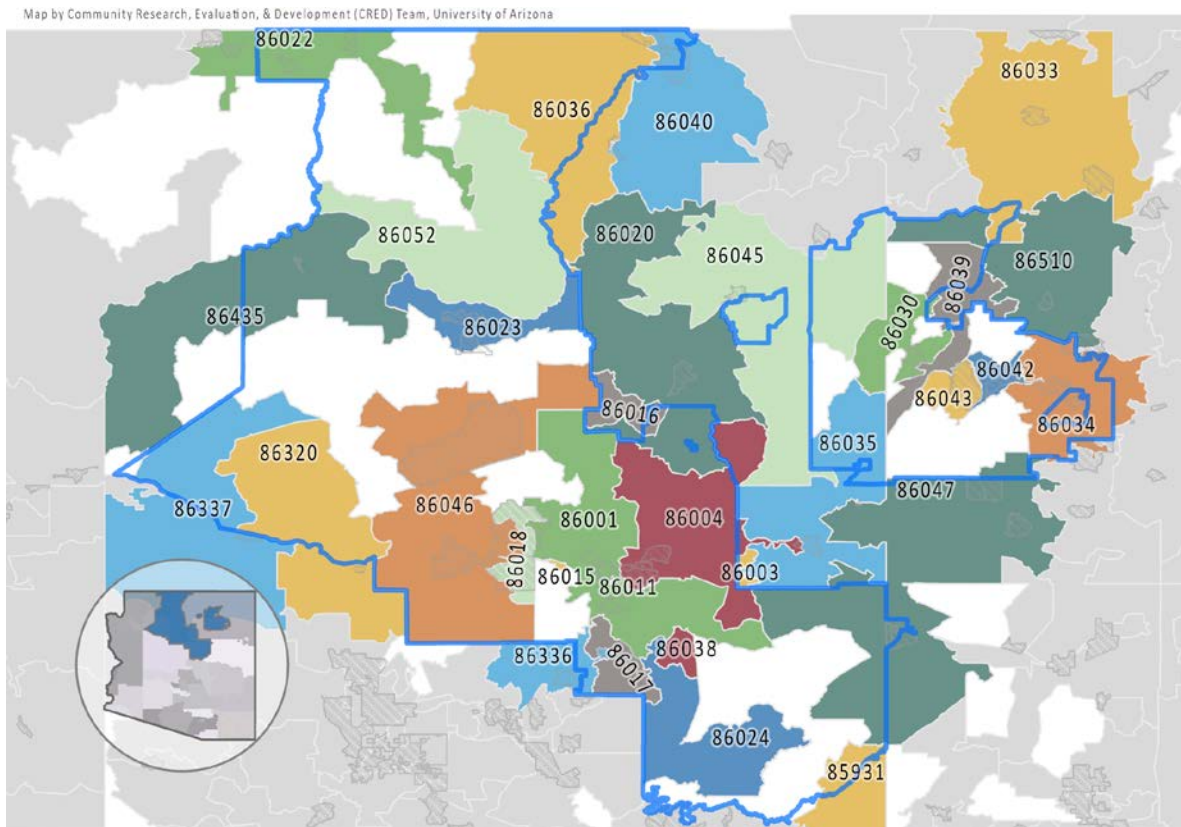
Source: First Things First. (2019). Communications Strategy Data. Unpublished data received by request

First Things First has also led a concerted effort to build awareness among policymakers at all levels (federal, tribal, state, and municipal) of the importance of early childhood. This includes: in-office meetings with elected leaders to provide general information on early childhood, as well as discuss the impact of proposed legislation; regular communication to policymakers with updates on early childhood research and the work of FTF (such as a quarterly email newsletter for policymakers and their staff); and site tours of FTF-funded programs to allow policymakers to see the impact of early childhood investments in their area. In SFY19, FTF also launched ACT4KIDS, a text-based system that alerts participants to timely developments in early childhood policy and opportunities to engage with policymakers. In its first nine months of implementation, more than 700 Arizonans had signed up to participate in ACT4KIDS.

In addition, FTF actively participates in the Arizona Early Childhood Alliance, comprised of more than 50 early childhood system leaders like United Way, the state affiliates of the National Association for the Education of Young Children, Southwest Human Development, Children’s Action Alliance, Read On Arizona, Stand for Children, Expect More Arizona, and the Helios Foundation, which represents a united voice of the early childhood community in advocating for early childhood programs and services. For the past three years, the Alliance has also led an annual Early Childhood Day at the legislature, which draws hundreds of Arizonans to the state Capitol to engage with policymakers and show their support for early childhood development and health.

Appendix 1: Map of zip codes of the Coconino Region

Figure 13. Map of the ZIP codes in the Coconino 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>)

Appendix 2: Zip Codes of the Coconino Region

Table 85. Zip Code Tabulation Areas in the Coconino Region

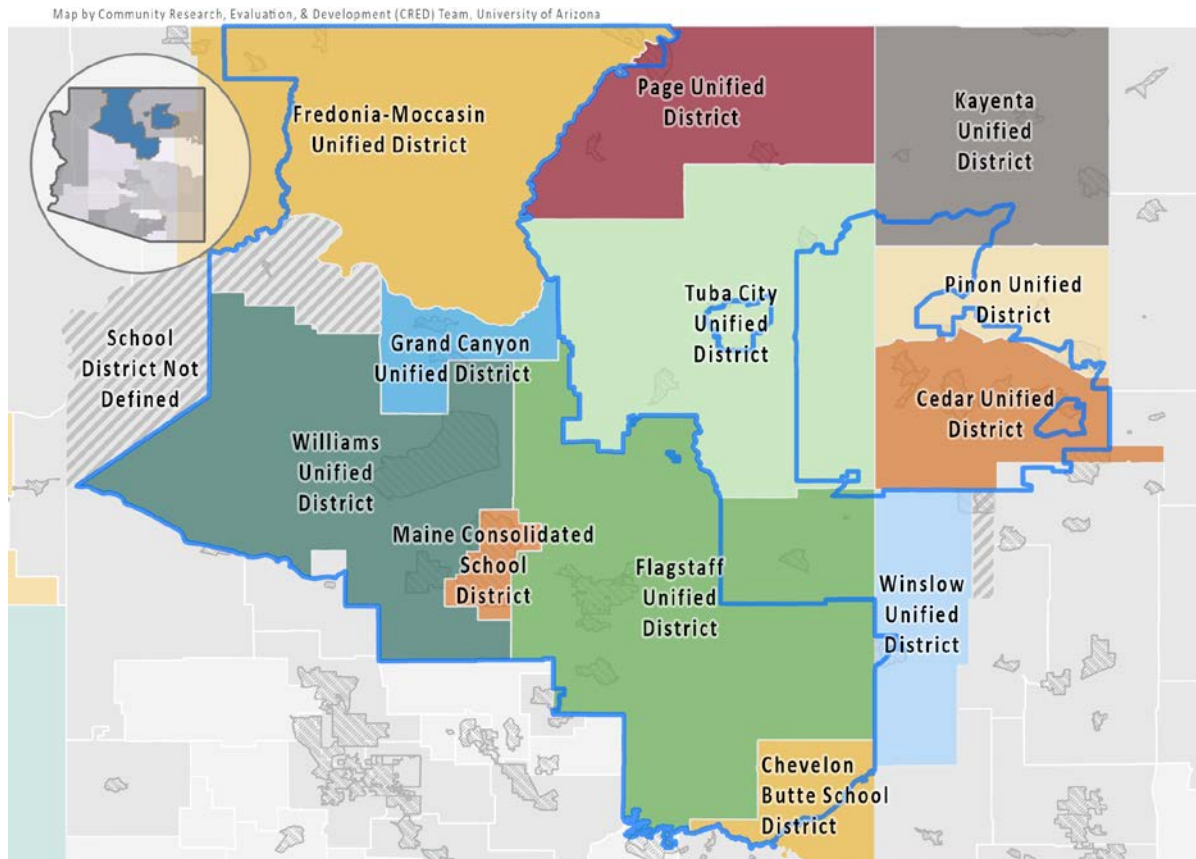
ZIP CODE TABULATION AREA (ZCTA)	TOTAL POPULATION	POPULATION (AGES 0-5)	TOTAL NUMBER OF HOUSEHOLDS	HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5)	PERCENT OF ZCTA'S TOTAL POPULATION LIVING IN THE Coconino REGION	THIS ZCTA IS SHARED WITH
Coconino Region	124,238	9,652	43,764	6,795		
85931	4	1	1	1	2%	Navajo/Apach e
86001	40,776	2,840	16,311	2,063	100%	
86004	37,131	3,355	13,404	2,354	99%	Navajo Nation
86011	6,362	0	9	0	100%	
86015	385	75	135	47	100%	
86016	6	2	2	1	10%	Navajo Nation
86017	667	28	325	21	100%	
86018	759	48	332	35	100%	
86020	52	8	16	6	3%	Navajo Nation
86022	1,724	163	630	105	78%	La Paz/Mohave
86023	2,627	151	1,034	109	100%	
86024	703	14	374	10	100%	
86030	1,148	112	362	77	84%	Navajo Nation
86033	10	0	5	0	0%	Navajo Nation
86034	604	55	185	36	27%	Navajo Nation
86035	53	4	18	3	3%	Navajo Nation
86036	241	2	145	2	62%	Navajo Nation
86038	77	1	43	1	100%	
86039	671	62	232	43	46%	Navajo Nation
86040	7,638	733	2,699	500	74%	Navajo Nation
86042	1,778	183	517	120	100%	

ZIP CODE TABULATION AREA (ZCTA)	TOTAL POPULATION	POPULATION (AGES 0-5)	TOTAL NUMBER OF HOUSEHOLDS	HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5)	PERCENT OF ZCTA'S TOTAL POPULATION LIVING IN THE Coconino REGION	THIS ZCTA IS SHARED WITH
Coconino						
Region	124,238	9,652	43,764	6,795		
86043	1,798	227	454	149	100%	
86045	1,010	117	269	78	9%	Navajo Nation
86046	6,090	440	2,478	322	100%	
86047	10,150	906	3,083	626	68%	Navajo Nation & Navajo/Apach e
86052	28	0	8	0	100%	
86320	885	54	381	42	47%	Yavapai
86336	308	4	170	4	3%	Yavapai
86337	56	3	29	2	4%	Yavapai
86435	481	64	105	38	99%	Hualapai Tribe
86510	8	0	5	0	0%	Navajo Nation
Other	8	0	3	0		

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

Appendix 3: School Districts in the Coconino Region

Figure 14. Map of school districts in the Coconino 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 86. School Districts/Local Education Authorities in the Coconino Region

DISTRICT/LEA NAME	SCHOOLS IN DISTRICT/LEA	K-3RD GRADE STUDENTS IN DISTRICT/LEA	PERCENT OF	
			K-3RD GRADE STUDENTS IN REGION	THIS DISTRICT IS SHARED WITH
Coconino Region	49	5,617		
Flagstaff Unified District	16	2,708	97%	Navajo Nation
Page Unified District	5	725	100%	
Winslow Unified District	5	553	100%	
Williams Unified District	2	163	100%	
Heritage Elementary School	2	413	8%	Northwest Maricopa
BASIS Schools, Inc.	1	262	100%	
Mountain School, Inc.	1	131	100%	
Flagstaff Montessori, L.L.C.	1	102	100%	
Pine Forest Education Association, Inc.	1	95	100%	
Flagstaff Junior Academy	1	94	100%	
Grand Canyon Unified District	2	85	100%	
PEAK School Inc., The	1	77	100%	
Fredonia-Mocasin Unified District	2	66	100%	
Maine Consolidated School District	1	51	100%	
Haven Montessori Children's House, Inc.	1	50	100%	
Painted Desert Demonstration Projects, Inc.	1	42	100%	

Source: Arizona Department of Education. (2019). FY 2018 & FY 2019 Enrollment Data. Custom tabulation facilitated by agency staff

Note: This table only contains Districts/LEAs with enrolled K-3rd grade students physically located within regional boundaries. It does not reflect the residence of students that attend these schools. It does not include high school districts. These are the districts and charter operators from which data on preschool to 3rd grade students were drawn for the tables and figures presented in this report. The percentage shown in the "Percent of K-3rd grade students in the region" column was used to apportion district-level enrollment counts to the region. All other data were aggregated at the school level. The "Schools in district/LEA" and "K-3rd grade students in district/LEA" columns reflect totals for the district, not only the portion within the region. Kayenta School District, Pinon Unified District, Cedar Unified District, and Tuba City Unified District all overlap the Coconino Region but have no schools serving K-3rd grade students located within the region. Chevelon Butte School District does not have any operating schools and instead coordinates transportation to cooperating schools in Heber-Overgaard Unified District, Pine Strawberry Elementary District, and Payson Unified District.

Appendix 4: Data Sources

Arizona Department of Administration, Office of Employment and Population Statistics. (December 2012). "2012-2050 State and county population projections." Retrieved from <http://www.workforce.az.gov/population-projections.aspx>

Arizona Department of Administration, Office of Employment and Population Statistics. (2019). Local area unemployment statistics (LAUS). Retrieved from <https://laborstats.az.gov/local-area-unemployment-statistics>

Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Arizona Department of Economic Security. (2019). 2018 Child Care Market Rate Survey. Unpublished data received by 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. (2019). Child Care Market Rate Survey 2018. Data received from the First Things First State Agency Data Request

Arizona Department of Economic Security. (2019). [AzEIP Data]. Unpublished raw data received through the First Things First State Agency Data Request

Arizona Department of Economic Security. (2019). [Child Care Assistance Data]. Unpublished raw data received through the First Things First State Agency Data Request

Arizona Department of Economic Security. (2019). [DDD Data]. Unpublished raw data received through the First Things First State Agency Data Request

Arizona Department of Economic Security. (2015). [SNAP data set]. Unpublished raw data received from the First Things First State Agency Data Request

Arizona Department of Economic Security. (2015). [TANF data set]. Unpublished raw data received from the First Things First State Agency Data Request

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

Arizona Department of Education. (2019). AzMERIT Results, 2015-2018. Retrieved from <https://www.azed.gov/accountability-research/data/>; Arizona Department of Education. (2019). AzMERIT Results, 2015-2018. Custom tabulation of unpublished data

Arizona Department of Education. (2019). [Chronic Absence data set]. Custom tabulation of unpublished data

Arizona Department of Education. (2019). [Graduation & Dropout data set]. Custom tabulation of unpublished data

- Arizona Department of Education. (2019). Percentage of children approved for free or reduced-price lunches, July 2015. Unpublished raw data received from the First Things First State Agency Data Request
- Arizona Department of Health Services. (2019). 2015-2017 Child Asthma Data. Unpublished data received by request
- Arizona Department of Health Services. (2019). 2015-2017 Child Mortality Data. Unpublished data received by request
- Arizona Department of Health Services. (2019). [Immunizations Dataset]. Unpublished raw data received from the First Things First State Agency Data Request
- Arizona Department of Health Services, Bureau of Public Health Statistics. (2019). [Vital Statistics Dataset]. Unpublished raw data received from the First Things First State Agency Data Request
- Arizona Department of Health Services, Office of Disease Prevention and Health Promotion. (2019). ADHS Arizona Health Status and Vital Statistics
- ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics. Preliminary 2018 report prepared by T. Lowry
- ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics. Report prepared by Kyle Gardner, Office of Injury Prevention
- Arizona Department of Health Services, Office of Injury Prevention. (2019). [Injuries Dataset]. Data received from the First Things First State Agency Data Request
- Arizona Labor Statistics. (2019). Local Area Unemployment Statistics (LAUS). Retrieved from <https://laborstats.az.gov/local-area-unemployment-statistics>
- Arizona Office of Economic Opportunity. (2018). Arizona Population Projections: 2018 to 2055, Medium Series
- Arizona Opioid Emergency Response Report, June 2017-June 2018
- First Things First. (2019). Communications Strategy Data. Unpublished data received by request
- First Things First. (2019). Home Visitation Program Data. Unpublished data received by request
- First Things First. (2019). Oral Health Strategy Data. Unpublished data received by request
- First Things First. (2019). Quality First, a Signature Program of First Thing First. Unpublished data received by request
- Office of Infectious Disease Services, Division of Public Health Preparedness, AZ Department of Health Services

U.S. Census Bureau. (2010). 2010 Decennial Census, Tables P1, P4, P11, P12A, P12B, P12C, P12D, P12E, P12F, P12G, P12H, P14, P20, P32, P41. Retrieved from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

U.S. Census Bureau. (2018). American Community Survey Five-Year Estimates, 2013-2017, Table B05009, B09001, B10002, B14003, B15002, B16001, B16002, B16005, B17001, B17002, B17006, B17022, B19126, B23008, B23025, B25002, B25106, B27001, B28005, B28008, B28010. Retrieved from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

U.S. Census Bureau. (2019). 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 U.S. Census Bureau. (May, 2000). Factfinder for the Nation. Retrieved from <http://www.census.gov/history/pdf/cff4.pdf>
- ² 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
- ³ U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. (2014). *Child Health USA 2014: Population characteristics*. Retrieved from <https://mchb.hrsa.gov/chusa14/population-characteristics.html>
- ⁴ 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>.
- ⁵ 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>.
- ⁶ 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>
- ⁷ 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>.
- ⁸ 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 from <https://www.urban.org/research/publication/young-children-immigrants-leading-edge-americas-future>
- ⁹ 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.
- ¹⁰ 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.
- ¹¹ Bernstein, H., Gonzalez, D., Karpman, M., & Zuckerman, S. (2019). One in Seven Adults in Immigrant Families Reported Avoiding Public Benefit Programs in 2018. *Urban Institute*, Brief (May 22, 2019). Retrieved from <https://www.urban.org/research/publication/oneseven-adults-immigrant-families-reported-avoiding-public-benefitprograms-2018>
- ¹² For more information on the public charge rule visit <https://www.uscis.gov/news/fact-sheets/public-charge-fact-sheet>
- ¹³ Bernstein, H., Gonzalez, D., Karpman, M., & Zuckerman, S. (2019). *One in Seven Adults in Immigrant Families Reported Avoiding Public Benefit Programs in 2018*. Urban Institute, Brief (May 22, 2019), available at <https://www.urban.org/research/publication/oneseven-adults-immigrant-families-reported-avoiding-public-benefitprograms-2018>
- ¹⁴ 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 from <https://www.kff.org/report-section/living-in-an-immigrant-family-in-america-issue-brief/>

- ¹⁵ Pereira, 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 from <http://webarhive.urban.org/UploadedPDF/413260-Barriers-to-Immigrants-Access-to-Health-and-Human-Services-Programs.pdf>
- ¹⁶ Bernstein, H., McTarnaghan, S., & Gonzalez, D. (2019). Safety Net Access in the Context of the Public Charge Rule. *Urban Institute*. Retrieved from https://www.urban.org/sites/default/files/publication/100754/safety_net_access_in_the_context_of_the_public_charge_rule_1.pdf
- ¹⁷ 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>
- ¹⁸ 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>.
- ¹⁹ 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>
- ²⁰ 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>.
- ²¹ 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>
- ²² 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>.
- ²³ 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>
- ²⁴ 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>.
- ²⁵ 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>.
- ²⁶ National Center for Children in Poverty. (2012, October). *Young children at risk*. Retrieved from http://www.nccp.org/publications/pub_1073.html
- ²⁷ McCarty, T.L., & Nicholas, S.E. (2014). Reclaiming Indigenous Languages: A Reconsideration of the Roles and Responsibilities of Schools. *Review of Research in Education*, 38(1), 106-136.

²⁸ U.S. Department of Health & Human Services, Administration for Native Americans. (n.d.). *Native Languages*. For more information, visit <http://www.acf.hhs.gov/programs/ana/programs/native-language-preservation-maintenance>

²⁹ 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>.

³⁰ Pew Research Center. (2018). *The changing profile of unmarried parents*. Retrieved from <https://www.pewsocialtrends.org/2018/04/25/the-changing-profile-of-unmarried-parents/>

³¹ Vandivere, S., Yrausquin, A., Allen, T., Malm, K., & 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 from <http://aspe.hhs.gov/basic-report/children-nonparental-care-review-literature-and-analysis-data-gaps>

³² Cohn, D., & Passel, J.S. (2018). *A record 64 Million Americans live in multigeneration households*. Fact Tank: News in the Numbers, 5 April 2018. Pew Research Center. Retrieved from: <https://www.pewresearch.org/fact-tank/2018/04/05/a-record-64-million-americans-live-in-multigenerational-households/>

³³ Halgunseth, L. (2009). Family engagement, diverse families and early childhood education programs: An integrated review of the literature. *Young Children*, 64(5), pp. 56-68.

³⁴ 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 from: <http://scholarworks.wmich.edu/grandfamilies/vol3/iss1/4>

³⁵ Vandivere, S., Yrausquin, A., Allen, T., Malm, K., & 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 from <http://aspe.hhs.gov/basic-report/children-nonparental-care-review-literature-and-analysis-data-gaps>

³⁶ Department of Health and Human Services, Administration for Children and Families, and Children's Bureau. (2016). *Site visit report: Arizona Kinship Navigator Project*. Retrieved from <https://www.childwelfare.gov/pubPDFs/azkinship.pdf>

³⁷ Ellis, R., & Simmons, T. (2014). *Coresident Grandparents and Their Grandchildren: 2012*. Current Population Reports, P20-576, U.S. Census Bureau: Washington, DC.

³⁸ 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

³⁹ 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 from <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>

⁴⁰ 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 from <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>

⁴¹ Child Trends. (2014, January 8). *5 Ways Poverty Harms Children*. Retrieved from <https://www.childtrends.org/child-trends-5/5-ways-poverty-harms-children>

⁴² Brooks-Gunn, J., & Duncan, G. (1997). The effects of poverty on children. *Children and Poverty*, 7(2), 55-71.

- ⁴³ McLoyd, V. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, 53(2), 185-204. doi:10.1037/0003-066X.53.2.185
- ⁴⁴ Ratcliffe, C., & McKernan, S. (2012). *Child poverty and its lasting consequences*. Low-Income Working Families Series, The Urban Institute. Retrieved from http://www.urban.org/research/publication/child-poverty-and-its-lasting-consequence/view/full_report
- ⁴⁵ Duncan, G., Ziol-Guest, K., & Kalil, A. (2010). Early-childhood poverty and adult attainment, behavior, and health. *Child Development*, 81(1), 306-325. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8624.2009.01396.x/full>
- ⁴⁶ 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.
- ⁴⁷ 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 from http://www.nccp.org/publications/pub_909.html
- ⁴⁸ Duncan, G., Ziol-Guest, K., & Kalil, A. (2010). Early-childhood poverty and adult attainment, behavior, and health. *Child Development*, 81(1), 306-325. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8624.2009.01396.x/full>
- ⁴⁹ U.S. Department of Health & Human Services Office of the Assistant Secretary for Planning and Evaluation. (2019). *2019 Poverty Guidelines*. Retrieved from <https://aspe.hhs.gov/2019-poverty-guidelines>
- ⁵⁰ Pearce, D.M. (2019). *The Self-Sufficiency Standard*. Retrieved from <http://www.selfsufficiencystandard.org/the-standard>
- ⁵¹ Pearce, D.M. (2019). *The Self-Sufficiency Standard for Arizona 2018*. Available online at: https://www.womengiving.org/wp-content/uploads/2019/08/AZ18_SSS_Update-1.pdf
- ⁵² 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>
- ⁵³ 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 <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-residence/div/4BEE4D6C09F9FFCABEE404F9E313BE7C>
- ⁵⁴ 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>
- ⁵⁵ 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>
- ⁵⁶ Food and Nutrition Service, U.S. Department of Agriculture. (n.d.). *National School Lunch Program*. Retrieved from <https://www.fns.usda.gov/nslp>
- ⁵⁷ 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>
- ⁵⁸ 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>

⁵⁹ 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>

⁶⁰ Coleman-Jensen, A., Rabbitt, M.P., Gregory, C.A., & Singh, A. (2018). *Household food security in the United States in 2017, ERR-256*. U.S. Department of Agriculture, Economic Research Service.

⁶¹ 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

⁶² 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

⁶³ For more information on the Arizona WIC Program, visit <http://azdhs.gov/prevention/azwic/>

⁶⁴ 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>

⁶⁵ National Center for Children in Poverty. (2014). *Arizona demographics for low-income children*. Retrieved from http://www.nccp.org/profiles/AZ_profile_6.html

⁶⁶ Isaacs, J. (2013). *Unemployment from a child's perspective*. Retrieved from <http://www.urban.org/UploadedPDF/1001671-Unemployment-from-a-Childs-Perspective.pdf>

⁶⁷ For a discussion of current trends in labor force participation versus employment, see Uchitelle, 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>

⁶⁸ 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>

⁶⁹ Herbert, C., Hermann, A., & McCue, D. (2018). *Measuring Housing Affordability: Assessing the 30 Percent of Income Standard*. Cambridge, MA: Joint Center for Housing Studies of Harvard University. Retrieved from: https://www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_Herbert_Hermann_McCue_measuring_housing_affordability.pdf

⁷⁰ Gabriel, S., & 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 from: <https://www.aei.org/wp-content/uploads/2017/04/CHA-Panel-1.pdf>

⁷¹ 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 from https://www.childstats.gov/pdf/ac2015/ac_15.pdf

⁷² 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>

⁷³ OECD. (2001). *Understanding the digital divide*. Paris, France: OECD Publications.

⁷⁴ OECD. (2001). *Understanding the digital divide*. Paris, France: OECD Publications.

- ⁷⁵ 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](https://doi.org/10.1080/1369118X.2015.1050438)
- ⁷⁶ Pew Research Center. (2019, June 12). *Internet/Broadband Fact Sheet*. Retrieved from <https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>
- ⁷⁷ 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.
- ⁷⁸ 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/>
- ⁷⁹ 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
- ⁸⁰ For more information about AHCCCS eligibility visit <https://www.azahcccs.gov/Members/Downloads/EligibilityRequirements.pdf>
- ⁸¹ 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>
- ⁸² Robert Wood Johnson Foundation. (2016, September). *The relationship between school attendance and health*. Retrieved from <https://www.rwjf.org/en/library/research/2016/09/the-relationship-between-school-attendance-and-health.html>
- ⁸³ Dahlin, M., & Squires, J. (2016). *Pre-K attendance: Why it's important and how to support it*. Center on Enhancing Early Learning Outcomes. Retrieved from http://nieer.org/wp-content/uploads/2016/09/ceelo_fastfact_state_ece_attendance_2016_02_01_final_for_web.pdf
- ⁸⁴ 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.
- ⁸⁵ Robert Wood Johnson Foundation. (2016, September). *The relationship between school attendance and health*. Retrieved from <https://www.rwjf.org/en/library/research/2016/09/the-relationship-between-school-attendance-and-health.html>
- ⁸⁶ 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 from https://www.chapinhall.org/sites/default/files/Reading_on_Grade_Level_111710.pdf
- ⁸⁷ 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 from https://www.chapinhall.org/sites/default/files/Reading_on_Grade_Level_111710.pdf
- ⁸⁸ 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 from <http://files.eric.ed.gov/fulltext/ED518818.pdf>
- ⁸⁹ Arizona Department of Education. (n.d.). *Assessment: AzMERIT*. Retrieved from <http://www.azed.gov/assessment/azmerit/>
- ⁹⁰ For more information on Move on When Reading, visit <http://www.azed.gov/mowr/>

- ⁹¹ National Research Council. 2012. *Key National Education Indicators: Workshop Summary*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/13453>.
- ⁹² 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>
- ⁹³ Child Trends Data Bank. (2015). *Parental education: Indicators on children and youth*. Retrieved from http://www.childtrends.org/wp-content/uploads/2012/04/67-Parental_Education.pdf
- ⁹⁴ Center on the Developing Child at Harvard University. (2010). *The foundations of lifelong health are built in early childhood*. Retrieved from <http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf>
- ⁹⁵ Kuhl, P.K. (2011). Early language learning and literacy: Neuroscience implications for education. *Mind, Brain, and Education*, 5(3), 128-142.
- ⁹⁶ 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>
- ⁹⁷ Lee, V., & Burkam, D. (2002). *Inequality at the Starting Gate: Social background Differences in Achievement as Children Begin School*. Washington, DC: Economic Policy Institute.
- ⁹⁸ 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 from <https://www.americanprogress.org/issues/early-childhood/reports/2016/10/27/225703/child-care-deserts/>
- ⁹⁹ Tanoue, K.H., DeBlois, M., Daws, J., & Walsh, M. (2017). *Child Care and Early Education Accessibility in Tucson (White Paper No. 5)*. Retrieval from Making Action Possible in Southern Arizona (MAP Dashboard) website: <https://mapazdashboard.arizona.edu/article/child-care-and-early-education-accessibility-tucson>
- ¹⁰⁰ 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 from <http://usa.childcareaware.org/wp-content/uploads/2017/10/Arizona-Infant-Toddler-Brief1.pdf>
- ¹⁰¹ Ibid
- ¹⁰² U.S. Department of Education. (2015). *A matter of equity: Preschool in America*. Retrieved from <https://www2.ed.gov/documents/early-learning/matter-equity-preschool-america.pdf>
- ¹⁰³ Child Care Aware® of America. (2017). *The US and the High Cost of Child Care: Arizona*. Arlington, VA: Child Care Aware of America. Retrieved from <https://usa.childcareaware.org/advocacy-public-policy/resources/research/costofcare/>
- ¹⁰⁴ Child Care Aware® of America. (2018). *Arizona Cost of Child Care*. Retrieved from <https://usa.childcareaware.org/wp-content/uploads/2018/10/Arizona2018.pdf>
- ¹⁰⁵ For more information on child care subsidies see <https://www.azdes.gov/child-care/>
- ¹⁰⁶ Arizona Department of Economic Security. (n.d.). *Child Care Waiting List*. Retrieved on 7/28/19 from <https://des.az.gov/services/child-and-family/child-care/child-care-waiting-list>
- ¹⁰⁷ Machelor, P. (2019, June 17). Arizona suspends child-care waiting list, increases provider reimbursements. *Arizona Daily Star*. Retrieved from https://tucson.com/news/local/arizona-suspends-child-care-waiting-list-increases-provider-reimbursements/article_a91a641f-5817-5e0d-a8c5-caaf530551ce.html

- ¹⁰⁸ 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 from <http://www.jstor.org/stable/3202474>
- ¹⁰⁹ 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 from <https://www.fcd-us.org/assets/2013/10/Evidence20Base20on20Preschool20Education20FINAL.pdf>
- ¹¹⁰ U.S. Department of Education. (2015). *A matter of equity: Preschool in America*. Retrieved from <https://www2.ed.gov/documents/early-learning/matter-equity-preschool-america.pdf>
- ¹¹¹ 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>
- ¹¹² White House Council of Economic Advisors. (2014). *The economics of early childhood investments*. Retrieved from https://obamawhitehouse.archives.gov/sites/default/files/docs/early_childhood_report_update_final_non-embargo.pdf
- ¹¹³ 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 Chicago: The Heckman Equation. Retrieved from <http://heckmanequation.org/content/resource/research-summary-abecedarian-health>
- ¹¹⁴ Montes, G., & Halterman, J.S. (2011). The impact of child care problems on employment: Findings from a national survey of US parents. *Academic Pediatrics*, 11(1):80-87.
- ¹¹⁵ 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>
- ¹¹⁶ 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>
- ¹¹⁷ Wechsler, M., Melnick, H., Maier, A., & Bishop, J. (2016). *The Building Blocks of High-Quality Early Childhood Education Programs* (policy brief). Palo Alto, CA: Learning Policy Institute.
- ¹¹⁸ 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.
- ¹¹⁹ 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 from <https://eclkc.ohs.acf.hhs.gov/publication/understanding-eliminating-expulsion-early-childhood-programs>
- ¹²⁰ Donoghue, E. (2017). Quality early education and child care from birth to kindergarten. *Pediatrics*, 140(2).
- ¹²¹ 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
- ¹²² Arizona Early Childhood Development and Health Board, First Things First. (2018). *2018 Annual Report*. Phoenix, AZ: First Things First. Retrieved from http://www.azftf.gov/WhoWeAre/Board/Documents/FY2016_Annual_Report.pdf

- ¹²³ 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.
- ¹²⁴ 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 from <https://eclkc.ohs.acf.hhs.gov/publication/understanding-eliminating-expulsion-early-childhood-programs>
- ¹²⁵ U.S. Department of Health and Human Services & U.S. Department of Education. (n.d.). *POLICY STATEMENT ON EXPULSION AND SUSPENSION POLICIES IN EARLY CHILDHOOD SETTINGS*. Retrieved from <https://www2.ed.gov/policy/gen/guid/school-discipline/policy-statement-ece-expulsions-suspensions.pdf>
- ¹²⁶ U.S. Department of Education Office for Civil Rights. (2014). *Data Snapshot: Early Childhood Education*. Retrieved from <https://www2.ed.gov/about/offices/list/ocr/docs/crdc-early-learning-snapshot.pdf>
- ¹²⁷ Malik, R. (2017, November 6). New Data Reveal 250 Preschoolers Are Suspended or Expelled Every Day. *Center for American Progress*. Retrieved from <https://www.americanprogress.org/issues/early-childhood/news/2017/11/06/442280/new-data-reveal-250-preschoolers-suspended-expelled-every-day/>
- ¹²⁸ U.S. Department of Education Office for Civil Rights. (2014). *CIVIL RIGHTS DATA COLLECTION Data Snapshot: Early Childhood Education*. Retrieved from <https://www2.ed.gov/about/offices/list/ocr/docs/crdc-early-learning-snapshot.pdf>
- ¹²⁹ U.S. Department of Health and Human Services and Education. (2015). *Policy statement on expulsion and suspension policies in early childhood settings*.
- ¹³⁰ Lamont, J.H., Devore, C.D., Allison, M., Ancona, R., Barnett, S.E., Gunther, R., ... Young, T. (2013). Out-of-school suspension and expulsion. *Pediatrics*, 131(3), e1000-e1007.
- ¹³¹ 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 from <https://mchb.hrsa.gov/cshcn0910/more/pdf/nscshcn0910.pdf>
- ¹³² 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 from <https://mchb.hrsa.gov/cshcn0910/more/pdf/nscshcn0910.pdf>
- ¹³³ 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/nmc.77.1.30. Retrieved from <http://www.ncmedicaljournal.com/content/77/1/30.full.pdf+html>
- ¹³⁴ 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](https://doi.org/10.1001/jama.2015.12912)
- ¹³⁵ 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.
- ¹³⁶ 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.

- ¹³⁷ 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>
- ¹³⁸ 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 from <http://www.nectac.org/~pdfs/pubs/importanceofearlyintervention.pdf>
- ¹³⁹ 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 from https://www.sri.com/sites/default/files/publications/neils_finalreport_200702.pdf
- ¹⁴⁰ 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 from <http://ectacenter.org/~pdfs/pubs/econbene.pdf>
- ¹⁴¹ For more information on AzEIP, visit <https://www.azdes.gov/azeip/>
- ¹⁴² For more information on ADE's Early Childhood Special Education program, visit <http://www.azed.gov/ece/early-childhood-special-education/> and <http://www.azed.gov/special-education/az-find/>
- ¹⁴³ For more information on DDD, visit https://www.azdes.gov/developmental_disabilities/
- ¹⁴⁴ Center on the Developing Child at Harvard University. (2010). *The foundations of lifelong health are built in early childhood*. Retrieved from <http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf>
- ¹⁴⁵ 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 from <http://futureofchildren.org/publications/docs/FOC-spring-2015.pdf>
- ¹⁴⁶ Center on the Developing Child at Harvard University. (2010). *The foundations of lifelong health are built in early childhood*. Retrieved from <http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf>
- ¹⁴⁷ Maternal and Child Health Bureau, Health Resources and Services Administration, U.S. Department of Health and Human Services. (n.d.). *Prenatal services*. Retrieved from <http://mchb.hrsa.gov/programs/womeninfants/prenatal.html>
- ¹⁴⁸ 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 from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2147600/>
- ¹⁴⁹ 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 from <http://pediatrics.aappublications.org/content/118/1/405.full>
- ¹⁵⁰ 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.

¹⁵¹ 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>

¹⁵² 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>

¹⁵³ 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>

¹⁵⁴ 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/>

¹⁵⁵ Child Trends Databank. (2016). Health care coverage: Indicators on children and youth. *Health Care Coverage, 2016*. Retrieved from http://www.childtrends.org/wp-content/uploads/2016/05/26_Health_Care_Coverage.pdf

¹⁵⁶ 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.

¹⁵⁷ Centers for Disease control and Prevention. (n.d.). *Teen Pregnancy. About Teen Pregnancy*. Retrieved from: <http://www.cdc.gov/teenpregnancy/aboutteenpreg.htm>

¹⁵⁸ Diaz, C., & Fiel, J. (2016). The effect(s) of teen pregnancy: Reconciling theory, methods, and findings. *Demography*, *53*(1), 85-116. doi: 10.1007/s13524-015-0446-6. Retrieved from <http://link.springer.com/article/10.1007/s13524-015-0446-6>

¹⁵⁹ Youth.gov. (2016). *Pregnancy prevention: Adverse effects*. Retrieved from <http://youth.gov/youth-topics/teen-pregnancy-prevention/adverse-effects-teen-pregnancy>

¹⁶⁰ 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 from <https://www.ncbi.nlm.nih.gov/pubmed/26942355>

¹⁶¹ 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 from <http://jamanetwork.com/journals/jama/fullarticle/2503173>

¹⁶² Mayo Clinic. (n.d.). In-depth: How could obesity affect my baby? *Healthy Lifestyle, Pregnancy week by week*. Retrieved from <http://www.mayoclinic.org/healthy-lifestyle/pregnancy-week-by-week/in-depth/pregnancy-and-obesity/art-20044409?pg=2>

¹⁶³ 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>

¹⁶⁴ Healthy People 2020. (n.d.). *Maternal, infant, and child health: Life stages & 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/Maternal-Infant-and-Child-Health/determinants>

- ¹⁶⁵ Center for Disease Control and Prevention. (2018). *Maternal and infant health: Pregnancy complications*. Retrieved from https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregnancy-complications.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Freproductivehealth%2Fmaternalinfanthealth%2Fpregcomplications.htm
- ¹⁶⁶ 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.
- ¹⁶⁷ 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/>
- ¹⁶⁸ 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
- ¹⁶⁹ 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>
- ¹⁷⁰ 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.
- ¹⁷¹ 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
- ¹⁷² 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.
- ¹⁷³ Smith, V., & Wilson, R. (2016). Families affected by parental substance use. *Pediatrics*, 138(2). PMID: 27432847
- ¹⁷⁴ Ibid
- ¹⁷⁵ 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>
- ¹⁷⁶ 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.
- ¹⁷⁷ Fryar, C., Carroll, M., & Ogden, C. (2018). Prevalence of underweight among children and adolescents aged 2-19 years: United States, 1963-1965 through 2015-2016. *National Center for Health Statistics: Health E-Stats*. Retrieved from https://www.cdc.gov/nchs/data/hestat/underweight_child_15_16/underweight_child_15_16.pdf
- ¹⁷⁸ Fryar, C., Carroll, M., & Ogden, C. (2018). *Prevalence of Overweight, Obesity, and Severe Obesity Among Children and Adolescents Aged 2-19 Years: United States, 1963-1965 Through 2015-2016*. National Center for Health Statistics: Health E-Stats. Retrieved from https://www.cdc.gov/nchs/data/hestat/obesity_child_15_16/obesity_child_15_16.pdf

- ¹⁷⁹ 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 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>
- ¹⁸⁰ 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 from http://healthyeatingresearch.org/wp-content/uploads/2016/03/her_1000_days_final-1.pdf
- ¹⁸¹ Center on the Developing Child at Harvard University. (2010). *The foundations of lifelong health are built in early childhood*. Retrieved from <http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf>
- ¹⁸² 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>
- ¹⁸³ Gupta, N., Vujcic, 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.
- ¹⁸⁴ First Things First. (2020). *Arizona State Needs and Assets Report*.
- ¹⁸⁵ 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
- ¹⁸⁶ First Things First. (2019). *Impacting Young Lives Throughout Arizona—2019 Annual Report*. First Things First. Retrieved from https://www.firstthingsfirst.org/wp-content/uploads/2019/09/FY2019_Annual_Report.pdf
- ¹⁸⁷ 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>
- ¹⁸⁸ 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.
- ¹⁸⁹ Zahran, H.S., Bailey, C.M., Damon, S.A., Garbe, P.L., & Breyse, P.N. (2018). Vital Signs: Asthma in Children—United States, 2001-2016. *MMWR Morbidity and Mortality Weekly Report*, 67(5): 149-155.
- ¹⁹⁰ 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.
- ¹⁹¹ 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.
- ¹⁹² Arizona Department of Health Services. (2018). *Arizona Injury Data Report 2016*. Retrieved from <https://www.azdhs.gov/prevention/womens-childrens-health/reports-fact-sheets/index.php#injury-prevention>
- ¹⁹³ Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2018). *10 Leading causes of death by age group, United States—2017*. Retrieved from <https://www.cdc.gov/injury/wisqars/LeadingCauses.html>
- ¹⁹⁴ 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

- ¹⁹⁵ Danseco, E.R., Miller, T.R., & Spicer, R.S. (2000). Incidence and Cost of 1987-1994 Childhood Injuries: Demographic breakdowns. *Pediatrics*, *105*(2): E27. PMID: 10654987.
- ¹⁹⁶ 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.
- ¹⁹⁷ Arizona Department of Health Services. (2013). *Arizona Health Status and Vital Statistics 2013 Annual Report. Table 6A: Monitoring Progress Toward Arizona and Selected Healthy People 2020 Objectives: Statewide Trends*. Retrieved from: http://www.azdhs.gov/plan/report/ahs/ahs2013/pdf/6a1_10.pdf
- ¹⁹⁸ Jensen, G. M., & Moore, L. G. (1997). The effect of high altitude and other risk factors on birthweight: independent or interactive effects? *American Journal of Public Health*, *87*(6), 1003–1007.
- ¹⁹⁹ Evans, G., & Kim, P. (2013). Childhood poverty, chronic stress, self-regulation, and coping. *Child Development Perspectives*, *7*(1), 43-48. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/cdep.12013/abstract>
- ²⁰⁰ 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 from http://journals.cambridge.org/download.php?file=%2FDPP%2FDPP25_4pt%2FS0954579413000813a.pdf&code=ae62de3e0ea8214329e7a33e0a9df0e
- ²⁰¹ Magnuson, K., & Duncan, G. (2013). *Parents in poverty*. In Bornstein, M., *Handbook of parenting: Biology and ecology of parenting vol. 4: Social conditions and applied parenting*. New Jersey: Lawrence Erlbaum.
- ²⁰² Center on the Developing Child at Harvard University. (2010). *The foundations of lifelong health are built in early childhood*. Retrieved from <http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf>
- ²⁰³ 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 from http://www.p2presources.com/uploads/3/2/0/2/32023713/family_outcomes.pdf
- ²⁰⁴ Browne, C. (2014). The Strengthening Families Approach and Protective Factors Framework: Branching Out and Reaching Deeper. *Center for the Study of Social Policy*. Retrieved from <https://cssp.org/wp-content/uploads/2018/11/Branching-Out-and-Reaching-Deeper.pdf>
- ²⁰⁵ 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 from http://www.p2presources.com/uploads/3/2/0/2/32023713/family_outcomes.pdf
- ²⁰⁶ American Academy of Pediatrics. (n.d.). *Pediatric Professional Resource: Evidence Supporting Early Literacy and Early Learning*. Retrieved from https://www.aap.org/enus/Documents/booksbuildconnections_evidencesupportingearlyliteracyandearlylearning.pdf
- ²⁰⁷ Duncan, G.J., Dowsett, C.J., Claessens, A., Magnuson, K., Huston, A.C., Klebanov, P., ... Sexton, H. (2007). School readiness and later achievement. *Developmental Psychology*, *43*(6), 1428.
- ²⁰⁸ Bernstein, S., West, J., Newsham, R., & Reid, M. (2014). *Kindergartners' skills at school entry: An analysis of the ECLS-K*. Princeton, NJ: Mathematica Policy Research.
- ²⁰⁹ 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

- ²¹⁰ 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.
- ²¹¹ Peterson, J., Bruce, J., Patel, N., & Chamberlain, L. (2018). Parental attitudes, behaviors, and barriers to school readiness among parents of low-income Latino children. *International Journal of Environmental Research and Public Health*, 15(2), 188.
- ²¹² Reach Out and Read. (n.d.). *Programs Near You*. Retrieved from <http://www.reachoutandread.org/resource-center/find-a-program/>
- ²¹³ Centers for Disease Control and Prevention. (n.d.). *Division of Violence Prevention: About adverse childhood experiences*. Retrieved from https://www.cdc.gov/violenceprevention/acestudy/about_ace.html
- ²¹⁴ 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.
- ²¹⁵ U.S. Department of Health & Human Services, Administration for Children & Families, Children's Bureau. (2019). *Child Welfare Outcomes Report Data for Arizona*. Retrieved from <https://cwoutcomes.acf.hhs.gov/cwodatasite/childrenReports/index>
- ²¹⁶ 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.
- ²¹⁷ Keating, K., Daily, S., Cole, P., Murphey, D., Pina, G., Ryberg, R., Moron, L., & Laurore, J. (2019). *State of Babies Yearbook: 2019*. Washington, DC: ZERO TO THREE and Bethesda MD: Child Trends.
- ²¹⁸ Centers for Disease Control and Prevention. (n.d.). *Preventing child abuse & neglect*. Retrieved from <https://www.cdc.gov/violenceprevention/childabuseandneglect/fastfact.html>
- ²¹⁹ Zero to Three Infant Mental Health Taskforce Steering Committee, 2001.
- ²²⁰ Healthy People 2020. (n.d.). *Maternal, infant, and child health: Life stages and determinants*. Retrieved from <https://www.healthypeople.gov/2020/leading-health-indicators/2020-lhi-topics/Maternal-Infant-and-Child-Health/determinants>
- ²²¹ Starks, R.R., Smith, A.T., Jäger, M.B., Jorgensen, M., & Cornell, S. (2016). *Tribal Child Welfare Codes as Sovereignty in Action: A Guide for Tribal Leaders*. Prepared for 2016 NICWA Annual Conference. Tucson, AZ: Native Nations Institute, and Portland, OR: National Indian Child Welfare Association. Retrieved 28 Aug. 2019 from http://nni.arizona.edu/application/files/9214/7042/9035/2016_child_welfare_nicwa_conference_paper_final.pdf
- ²²² Turney, K., & Wildeman, C. (2016). Mental and physical health of children in foster care. *Pediatrics*, 138(5), e20161118.
- ²²³ Ibid