

FIRST THINGS FIRST

Cochise



2018 NEEDS AND ASSETS REPORT

**COCHISE
REGIONAL PARTNERSHIP COUNCIL
2018
NEEDS AND ASSETS REPORT**

Prepared by
Harder and Company Community Research

Funded by
First Things First Cochise Regional Partnership Council

Letter from the Chair

November 29, 2017

Message from the Chair:

Since the inception of First Things First, the Cochise 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 programmatic and other systems-building 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 Cochise Regional Council would like to thank our Needs and Assets vendor, Harder + Co, for their knowledge, expertise and analysis of the Cochise 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 Cochise 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 on 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,



COCHISE Regional Partnership Council

77 Calle Portal, B140
Sierra Vista, AZ 85635
Phone: 520.378.3280
Fax: 520.378.3622

Thomas Reardon, Chair

Laura Killberg, Vice Chair

Danielle Brownrigg

Lisa Holland

Chuck Hoyack

Peter Huisking

Darlene Melk

Anthony Reed

Lori Silk

Tommy Simpson

Nancy-Jean Welker

Report Prepared by:

Harder + CO Community Research

3965 5th Ave Ste 420 San Diego, CA 92103



Introductory Summary and Acknowledgments

90 percent of a child's brain develops before kindergarten and the quality of a child's early experiences impact whether their brain will develop in positive ways that promote learning. 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 Cochise Region helps us in understanding the needs of young children, the resources available to meet those needs and gaps that may exist in those resources. An overview of this information is provided in the Executive Summary and documented in further detail in the full report.

The First Things First Cochise 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. This report provides information that will aid the Council's funding decisions, as well as our work with community partners on building a comprehensive early childhood system that best meets the needs of young children in our community.

It is our sincere hope that this information will help guide community conversations about how we can best support school readiness for all children in the Cochise region. This information may also be useful to stakeholders in our 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 our area.

Acknowledgments:

We want to thank the Arizona Department of Economic Security and the Arizona Child Care Resource and Referral, the Arizona Department of Health Services, the Arizona Department of Education, the Census Bureau, the Arizona Department of Administration- Employment and Population Statistics, Cochise County Sheriff Mark Dannels, Chiricahua Community Health Centers and the Arizona Health Care Cost Containment System for their contributions of data for this report, and their ongoing support and partnership with First Things First on behalf of young children.

To the current and past members of the Cochise Regional Partnership Council, your vision, dedication, and passion have been instrumental in improving outcomes for young children and families within the region. Our current 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.

Contents

- Executive Summary2
 - Overview of the FTF Cochise Region.....2
 - Key Findings3
- Introduction10
 - About This Report.....10
- 1. Population Characteristics**13
 - Why It Matters.....14
 - What the Data Tell Us.....14
- 2. Economic Circumstances**23
 - Why It Matters.....24
 - What the Data Tell Us.....25
- 3. Educational Indicators**36
 - Why It Matters.....37
 - What the Data Tell Us.....37
- 4. Early Learning**45
 - Why It Matters.....46
 - What the Data Tell Us.....47
- 5. Child Health**58
 - Why It Matters.....59
 - What the Data Tell Us.....60
- 6. Family Support and Literacy**72
 - Why It Matters.....73
 - What the Data Tell Us.....73
- 7. Communication, Public Information, and Awareness**88
 - Why It Matters.....89
 - What the Data Tell Us.....89
- 8. System Coordination Among Early Childhood Programs and Services**98
 - Why It Matters.....99
 - What the Data Tell Us.....102
- Conclusion116
- Appendix A120

Executive Summary

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

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

Overview of the FTF Cochise Region

The FTF Cochise Region and Cochise County share roughly the same boundaries and occupy the southeastern corner of Arizona. The Cochise landscape consists of scenic country and mountains. Cochise is bordered to the south by Mexico and to the east by New Mexico. It is largely rural and consists of small towns with populations of less than 10,000 people. The largest city in the FTF Cochise Region is Sierra Vista, which includes the Fort Huachuca Military Base, one of the largest employers in the area. The region's economy is based on agriculture, mining, and tourism.

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

- Strengthening families through voluntary home visiting,
- Improving the quality of child care and preschool programs,
- Offering scholarships for children to access high-quality early learning, and
- Providing oral health screenings and fluoride varnishes.

The following section provides a summary of the key findings for each of the eight domains of the 2018 Regional Needs and Assets Report, highlighting the major data findings, the needs and assets they identify for the FTF Cochise Region, potential considerations, and opportunities for further exploration. The considerations provided below do not represent comprehensive approaches and methods for tackling the needs and assets in the region. Instead, the considerations represent possible approaches that early childhood system partners, including FTF, could take to address needs and assets in the region, as conceptualized by the authors of this report.

Key Findings

Population Characteristics

The FTF Cochise Region has a total population of 132,279 residents and 10,125 children birth to age five. Though the total number of births has decreased in recent years, the population of zero to five year olds is projected to increase over the next several decades. The race and ethnicity breakdown of the population is similar to that of the rest of the state with 63 percent of the adult population identifying as White and three-quarters identifying English as their primary language. However, almost half of the zero to five population (47%) and mothers (44%) identify as Hispanic or Latino, indicating that the demographics of the region will likely change in future years, requiring more linguistically and culturally responsive services as the Hispanic/Latino population continues to grow.

The majority of households with children birth to age five are married-couple households, with about 23 percent of households led by single females and 10 percent led by single males, similar to the state. Additionally, about 15 percent of children in the region live in the same household as a grandparent. Of those children, about 70 percent are primarily cared for by a grandparent, compared to 53 percent for the state. The high percentage of children growing up in dual-parent households is an asset for the region, as is the experience of children living in a multigenerational household, since this means the children will likely have more permanent connections with adult role models. Though living with grandparents can be an asset, it can also indicate that the child's parents are emotionally or financially unable to care for their child on their own, and that there may be need for resources and parenting education for grandparents who are taking on the task of raising a second generation. Additionally, about one-third of children are living in single-family households, which may indicate a more stressful home environment and less time spent with their parents, who are likely the sole breadwinners for their family.

Population Characteristic Considerations:

- Discuss tactics for planning ahead for the projected slow, but steady, growth of the under six population and the needs that accompany that growth.
- Look into supporting culturally appropriate services for families that are more comfortable speaking in a language other than English.
- Discuss supporting services specifically designed for single-parent and grandparent-led households to help them support the young children in their homes.

Economic Circumstances

The average unemployment rates for both the state and the region have decreased since 2010, though so has the number of people in the Cochise County labor force, indicating that the region is recovering from the 2008 recession but at a slower rate than the state. Almost all parents (91%) with children ages zero to five years are employed or their household partner is employed. The median annual income for families with children under 18 in the county (\$65,306) is less than the statewide median (\$73,563), and married couples make significantly more than single mothers and fathers, who earn \$23,888 and \$43,333, respectively. Given that the self-sufficiency standard for an adult with a preschooler is estimated to be \$32,416, single females in the region are likely struggling and have need for support to help their child's growth and development.

About 28 percent of children in the FTF Cochise Region live under the poverty level, similar to the state (29%). The Ash Creek Elementary and Douglas Unified School Districts have the highest percentages of children living in poverty. The ethnicities with the highest population below the poverty level in the region are the American Indian or Alaskan Native, multiracial, and Hispanic/Latino populations. These data on poverty by school districts and ethnicities may help identify geographic areas and populations to target for further intervention or support around increasing financial resources. Similarly, the school districts and populations with lower poverty rates may be able to identify strategies or assets within their areas that can be applied to others.

Almost a third (29%) of residents in the FTF Cochise Region do not have affordable housing and Cochise County has a lower foreclosure rate than the state (1 in every 1,626 versus 1 in every 1,721). Additionally, 16 percent of the overall population and 27 percent of children under 18 are food insecure in Cochise County, meaning they have limited or uncertain access to adequate food. This may be due in part to the 39 percent of residents in the county with low access to grocery stores and the low rate of SNAP-authorized stores in the county. Though local programs providing fresh and healthy food options exist in the region, more outreach and information is needed to inform families of the resources available. Unstable housing and limited access to nutritional food can have detrimental effects on children's health and learning and is an area in need of support for the FTF Cochise Region.

Economic Circumstances Considerations:

- Increase community awareness of the nutrition programs available to young children and their families.
- Identify and promote supports or resources that can help subsidize child care and housing costs for single parents with young children.

Educational Indicators

Participation in early learning experiences is likely to result in higher academic performance in future years. About two in five children (39%) between ages three to four in the Cochise Region are enrolled in nursery school, preschool, or kindergarten. A similar percentage of third grade students scored "proficient" or "highly proficient" on the AzMERIT English language arts and math assessments (37% and 41%, respectively). The AzMERIT assessment, which replaced AIMS in the 2014–2015 school year, is designed to assess students' critical thinking skills and their mastery of the Arizona College and Career Ready Standards established in 2010. Students who receive a "proficient" or "highly proficient" score are considered adequately prepared for success in the next grade. The indication that less than half of the state and region's third graders are meeting proficiency in math and English Language Arts suggests the need for further intervention in this area.

The percentage of first, second, and third graders missing 10 or more days of school slightly increased between 2014 to 2015 in the FTF Cochise Region and the state, though it decreased as grade level increased. The FTF Cochise Region's high school graduation rate has remained fairly steady since 2011, around 80 percent and the high school dropout rate has remained at 3 percent since 2012. The majority of adults 25 and older in the region (87%) have completed high school, have received a GED, or have pursued further education past high school. A similar percentage of mothers in the region (84%) have at least completed high school or their GED, four percent more than the state level. In

general, residents in the FTF Cochise Region have completed high school or more, indicating an understanding of the importance of education that will hopefully be incorporated into their parenting priorities.

Educational Indicators Considerations:

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

Early Learning

Only 39 percent of preschool-aged children in the FTF Cochise Region are enrolled in early care and education programs. Early childhood professionals in the state are not well compensated; most are earning minimum wage and almost half leave the profession within five years.

Head Start and Early Head Start programs are assets in the region, as children attending these programs tend to score higher in cognitive and social-emotional development than those who do not. About 3,250 children in Cochise and four neighboring counties are enrolled in Head Start or Early Head Start. Given that there is only one Head Start grantee across the five counties in southern Arizona, with eight centers in Cochise, the region may want to consider working with the federal government to bring more Head Start resources and programs into the Cochise Region. This is even more important when considering the high costs of child care in the region, especially relative to the median income of Cochise families. Child care subsidies in the region appear to be helping as the number of children receiving subsidies increased and the number on the waitlist decreased between 2013 to 2014. Additionally, almost 600 children in the region are enrolled in Quality First centers and homes rated between three to five stars, indicating that these centers are at quality levels.

Children receiving AzEIP referrals and services have increased in the region, indicating both increased need and capacity to meet the need. The most common types of disabilities for preschool children were developmental delays and speech and language impairments.

Early Learning Considerations:

- Recognize that Quality First efforts in the region increase the opportunities for children to receive quality early care and education experiences.
- Identify professional development and networking opportunities for quality early childhood professionals to retain their skills in the early childhood field and reduce staff turnover.
- Identify gaps in follow-up referrals to ensure that developmental needs of child are being met.

Child Health

Cochise County has a higher ratio of population to primary healthcare providers than the state average, indicating that although the high majority of Cochise Region residents have health insurance (88%), access to healthcare is still limited by the number of available providers. This may be expounded

by Cochise being a rural region where transportation is a barrier to accessing services. Additionally, only 27 percent of parents believe they impact their child's brain development during the prenatal period, indicating a lack of knowledge around prenatal care's impact on a child's growth and development. Another risk indicator, the percentages of adults with obesity and diabetes in Cochise County, has been rising since 2004. Over half of mothers were overweight or obese prior to pregnancy in 2015. This may be due in part to the limited number of recreational or fitness facilities and to poor access to affordable nutritious food, as previously discussed.

Despite the lower rate of early prenatal care and the higher rate of obesity amongst mothers, the percentage of infants born with low birth weight and abnormal conditions remained steady or declined. Additionally, only 10 percent of mothers reported drinking or smoking during pregnancy, indicating an understanding that substance use is not recommended during pregnancy. However, the percentage of births with medical risks was on the rise until 2014, when the definition was modified to exclude cardiac disease, lung disease, and other medical conditions that were previously included.

Families in the Cochise Region have been successful in implementing the healthy preventative practices of breastfeeding and vaccinating their children. The percentage of mothers participating in Women, Infants, and Children (WIC) and who breastfeed their infant at least once a day has increased to 61 percent in 2015 and only one percent of preschoolers and three percent of kindergartners are exempt from immunizations.

Although 73 percent of parents who completed the Healthy Smiles Healthy Bodies survey in the Cochise Region report regularly taking their children to dental visits, almost half of children in the region (46%) have had tooth decay and almost one third (31%) have had untreated decay. Additionally, 22 percent of parents in the state who responded to the survey have the Arizona Health Care Cost Containment System (AHCCCS) insurance but are not aware that dental insurance is included. This indicates a need for increased oral health education and services in the FTF Cochise Region.

Child Health Considerations:

- Continue to promote and raise awareness regarding immunizations within schools and other convenient locations to reduce barriers to accessing immunizations.
- Work with partners in the region to attract and retain healthcare providers to the region and engage in supporting infrastructure for tele-health services.
- Provide more outreach and education regarding prenatal care, especially targeting first-time and teen mothers.
- Promote oral health services and education, to inform parents of the importance of early oral healthcare.

Family Support and Literacy

In 2012, 145 parents and caregivers in the FTF Cochise Region completed the Family and Community survey administered by FTF to better understand parents' knowledge of parenting practices and child development. Though changes in parent knowledge have likely occurred since 2012, the data available showed that 27 percent of respondents understand their impact on their child in the prenatal stage, 26 percent understand that an infant takes in the world right from birth, and 44 percent understand that a baby can sense and be affected by the parents' mood, all lower than the state as a whole.

Respondents in the Cochise Region also scored lower than the statewide average on understanding that a child's capacity for learning can be impacted by parent interaction.

On the contrary, almost all respondents (99%) in the region understand that the first year of life impacts school performance, 16 percent more than the state. Cochise Region respondents also had a higher understanding of the importance of play and the impact of emotional closeness on a child's intellectual development. The majority of respondents correctly identified age-appropriate expectations of behavior and engaged with their child in activities such as reading, drawing, and singing six or seven days a week. These findings indicate that, though more education around the prenatal and infant stages of development is needed, most parents in the region are aware of their impact on their child's development and engage in behaviors to enhance their learning.

Cochise County had relatively few new substantiated cases of child abuse and neglect and children entering out-of-home placements in the 2014–2015 fiscal year. There are two domestic violence shelters in the county that served 115 adults and 107 children. Additionally, the number of children and female caregivers receiving behavioral health services in the region has remained fairly stable over the past few years while the number of juvenile arrests and the amount of substance use have decreased.

Family Support and Literacy Considerations:

- Promote and raise awareness to educate parents on the importance of play and engaging in developmentally stimulating activities with their children daily.
- Continue to promote safe environments for families and adolescents in the region.
- Consider supporting community education campaigns to increase awareness of parents' impact on their child's development, especially starting in the prenatal stage.

Communication, Public Information and Awareness

Public awareness of the importance of early childhood development and health is a crucial component of efforts to build a comprehensive, effective early childhood system in Arizona. FTF has led a collaborative, concerted effort to build public awareness and support across Arizona employing several integrated communications strategies.

The 2012 Parent Survey also included questions around parent satisfaction with community services and resources. Overall, the majority of respondents agreed that it is easy to locate services they need or want and felt the available services were very good. However, only 27 percent felt that services were available at convenient times or locations, less than half (42%) knew if they were eligible to receive services, and the slight majority (56%) felt they were asked to fill out paperwork or eligibility forms multiple times. The majority (57%) also felt that the services filled some but not all of their family's needs.

Almost all respondents (92%) reported taking their children to the same doctor's office regularly and slightly less (77%) reported having regular visits with the same dental provider. One in three respondents (33%) felt they could find preventive services.

Additionally, although more than half of respondents felt the services reflected their cultural values (56%) and were provided in their language (67%), as the Hispanic/Latino population continues to grow,

the need for linguistically and culturally appropriate services will likely increase.

Communication, Public Information and Awareness Considerations:

- Continue to support public awareness of the important of early childhood.
- Promote and raise awareness to the current infrastructure in the region so children and their families have access to high quality programs and services.
- Consider supporting a care coordination system that helps link families to information and services and reduces redundancies in paperwork.

System Coordination Among Early Childhood Programs and Services

To gain a better understanding of the coordination and collaboration occurring among early childhood system partners within FTF regions, FTF administered the Coordination and Collaboration Survey to system partners in October of 2016. Twenty-nine respondents from the FTF Cochise Region participated in the survey, the majority of whom were from K-12 education (55%) or local/public entities and considered themselves to be participants or partners in the early childhood system in the FTF Cochise Region.

Overall, 61 percent of respondents perceived the early childhood system in the region to be well-coordinated, followed by 33 percent who considered it to be partially coordinated. Respondents felt the four areas of the system (family support and literacy, children's health, early learning, and professional development) to be equally and highly effective (89-90%) in addressing the needs of young children and their families. However, early learning was considered to have the highest level of collaboration (62%), followed by professional development (42%). Children's health had the lowest level of collaboration (33%) but the highest level of coordination (33%). Respondents also identified broader communication and an up-to-date inventory of current services as potential ways to improve system coordination.

System Coordination Considerations:

- Continue to bring organizations together to coordinate services and provide a holistic system for families. Identify more system leaders that can guide system partners and participants towards a more coordinated and collective network that will even more efficiently serve children and families.
- Identify successes from early learning's collaboration efforts that can be applied to other areas, especially children's health. Consider supporting a virtual health collaborative that respects the limited time of healthcare providers yet allows them to connect and leverage each other's expertise.
- Support the development of an online platform for communication between partners that can be updated with changes in services and eligibility.

Opportunities for Further Exploration

Most of the findings provided in this report are based on secondary data sources. As the FTF Cochise Regional Partnership Council continues to make increasingly difficult decisions with diminishing funds, the following suggestions for further data collection and analysis may help inform those decisions in a data-driven way. The Council may want to consider collecting additional information regarding:

- Whether or not **grandparents who are caring for grandchildren** do so because the child's parents are taking care of their own elderly parents, because the parents are unable to independently care for themselves and their children, or because of other factors, such as cultural norms. It is also recommended that resources and education, such as respite or parenting refreshers, be given to grandparents who need to care for their young grandchildren.
- School districts with similar SES factors who have **high third grade proficiency scores** versus those with lower scores and the factors that contribute to those results that can inform policy and practice changes within lower-performing districts.
- Children with **developmental delays and special needs** to understand the resources and human capital needed to identify, screen, and address mild-to-moderate delays early, before they become more severe.
- **Parent-level gains** as a result of participation in FTF services.
- Barriers to **system coordination** and potential innovative solutions.

Introduction

Family well-being is an important indicator of child success.¹ Healthy families and healthy communities create a context in which young children can thrive and develop the cognitive, emotional, motor, and social skills they need to succeed in school and life.² Early childhood interventions help promote strong families and children.³

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

- Strengthening families through voluntary home visiting,
- Improving the quality of child care and preschool programs,
- Offering scholarships for children to access high-quality early learning, and
- Providing oral health screenings and fluoride varnishes.

About This Report

This is the sixth Needs and Assets Report conducted on behalf of the FTF Cochise Regional Council. It fulfills the requirement of ARS Title 8, Chapter 13, Section 1161, to submit a biennial report to the Arizona Early Childhood Health and Development Board detailing the assets, coordination opportunities, and unmet needs of children from birth to five years and their families in the region. This report is designed to provide updated information to the FTF Cochise Council about the needs and assets in their region to help them make important programmatic and funding decisions. This report describes the current circumstances of young children and their families as it relates to unmet needs and assets for the FTF Cochise Region. Located in the southeastern corner of Arizona, the FTF Cochise Region is geographically diverse and expansive, covering 6,219 square miles.

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

- Population characteristics;

1 Martinez, J., Mehesy, C., & Seely, K. (2003). *What Counts : Measuring Indicators of Family Well-Being Executive Summary Report* (Vol. 8466). Denver, CO.

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

3 Shonkoff, J., & Meisels, S. (2000). *Early Childhood Intervention: The Evolution of a Concept*. New York, NY: Cambridge University Press.

Introduction

- Economic circumstances;
- Educational indicators;
- Early learning;
- Child health;
- Family support and literacy;
- Communication, public information and awareness;
- System coordination among early childhood programs and services;
- Conclusion; and
- Appendices.

Methods

A systematic review designed to assess the needs and assets of the FTF Cochise Region was used to collect and summarize data for this report. Quantitative data components included a review and analysis of current and relevant secondary data describing the FTF region, county, and the State of Arizona. Wherever possible, data throughout the report are provided specifically for the FTF Cochise Region, and they are often presented alongside data for Cochise County and the State of Arizona for comparative purposes.

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

Further secondary data were gathered directly from the public database. For example, demographic data included in this report were primarily gathered from the US Census and the American Community Survey. Likewise, early education data were gathered from the US Children's Bureau, an office of the Administration for Children & Families. Understanding the true needs and assets of the region required extracting data from multiple data sets that often do not have similar reporting standards, definitions, or means for aggregating data. This means that for some indicators data were only available at the county, town, or zip code levels, whereas for other indicators, data were available at all levels. Whenever possible this report presents all data available. In some cases not enough data were available to make meaningful conclusions about a particular indicator within a region, city, or county.

Furthermore, many agencies are collecting data independent of other public entities, which results in duplication of data efforts, gaps in the collection of critical indicators, or differences in method of collection, unit of analysis, or geographic level. Many indicators that are of critical importance to understanding the well-being of children under six years of age and their families are not currently collected in the FTF Cochise Region. The analysis presented in this report aims to integrate relevant data indicators from a variety of credible sources, including from regional and sub-regional, and/or community-level analyses for a subset of data indicators. This report represents the most up-to-date representation of the needs and assets of young children and their families in the region and the interpretations of the identified strengths of the community (i.e., the assets available in the region).

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

Per FTF guidelines, data related to social service and early education programming, with counts of fewer than 10 and excluding counts of zero (i.e., all counts of one through nine), are suppressed. For data related to health or developmental delay, all counts of fewer than 25, excluding counts of zero (i.e., all counts of one through 24), are suppressed.

Limitations

This report relied primarily on secondary data. Most of the data were extracted by teams other than the evaluation team conducting the asset and needs assessment; therefore, conducting quality assurance on some data provided for this report was limited. The demographic and economic profile of the region relied mostly on Census and American Community Survey (ACS) data. For some of the Census indicators, only the 2010 Census was available, which will be eight years old by the time the report is released. For some of the indicators reported, the most recent data for the region was released in 2014, thus trends may have changed within the past four years. For example, the most recent diabetes and obesity data are from 2013 and the most recent data for the number of fitness facilities and level of access to grocery stores is from 2012.

Another limitation impacting the findings and the interpretation of the findings is the targeted population included in each of the different data sources. For many domains reported, data were often only available at the county level rather than the region, and data for children often includes children under 18 rather than children birth to five years old. ACS estimates are also less reliable for small geographic areas or areas with smaller populations. Similarly, rural areas, along with non-white populations, tend to be undercounted. Federal data also have similar limitations. For example, Head Start and WIC data include only a sample of the young children and families' services.

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



1. Population Characteristics

Why It Matters

The profile of residents in a particular community informs the needs of the community and the types of services offered in that community. For this reason it is important for policy and decision makers to understand the demographic profile of the communities they serve so that they can make effective decisions that will positively impact the community's well-being. Timely information about the demographics of a region, such as the number of children and families, number of households, racial and ethnic composition, languages spoken, and living arrangements, can help policy makers understand the needs of the region they serve and the services and resources that would be most culturally and geographically appropriate.

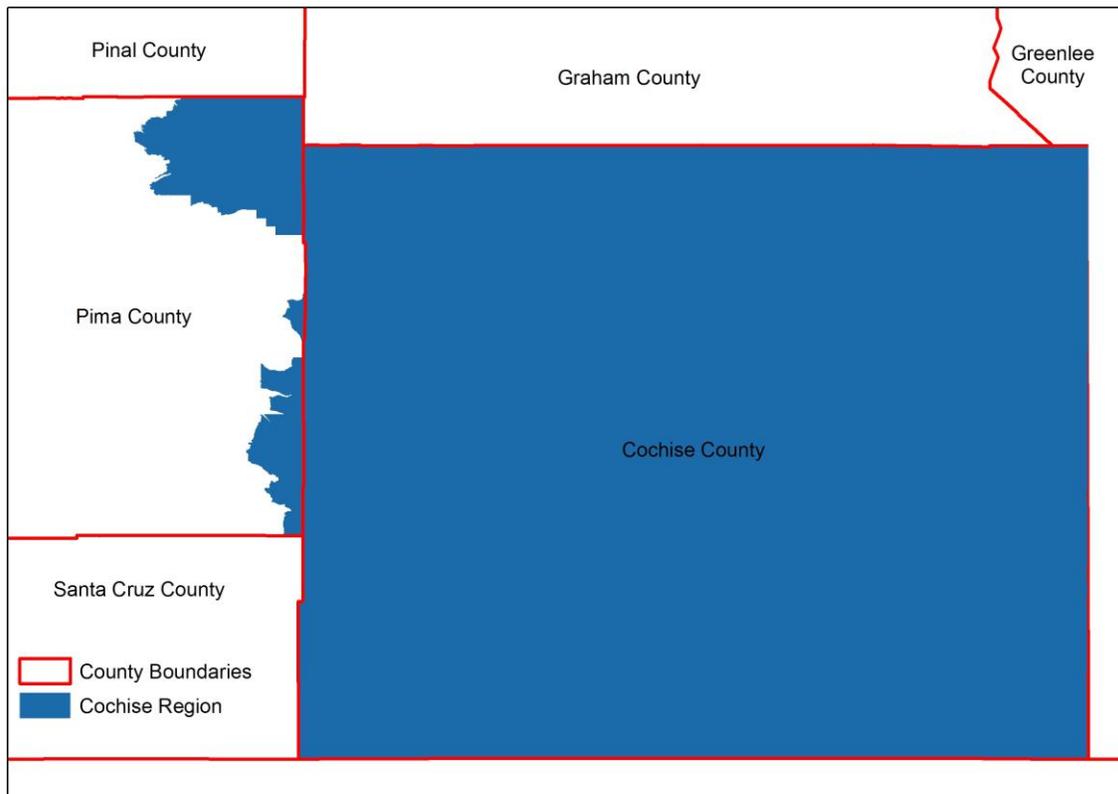
A thorough and comprehensive demographic profile allows policy makers to understand the residents of a region, the strengths they bring, and the needs and barriers they face by providing an overview of the geographic region's population dynamics, projected growth, ethnic and racial composition, languages spoken, immigration trends, and household characteristics (e.g., living arrangements for children). Understanding how the population is changing and where areas of growth will occur can allow decision makers to provide more resources in advance of that community confronting a shortage of resources and supports. Knowing where non-English speakers live and what their primary languages are allows for translation and interpretation services to be provided so that language barriers do not prevent these families from accessing health care and other social services they may need.

What the Data Tell Us

The FTF Cochise Region and Cochise County share roughly the same boundaries and occupy the southeastern corner of Arizona. The Cochise landscape consists of scenic country with the Chiricahua Mountains and the Dragoon Mountains. Cochise is bordered to the south by Mexico and to the east by New Mexico. The surrounding counties are Pima, Santa Cruz, Graham, and Greenlee (see Exhibit 1.1). The region is largely rural and consists primarily of small towns with populations of less than 10,000 people. The largest city in the FTF Cochise Region is Sierra Vista, which includes the Fort Huachuca Military Base, housing a population of over 40,000. The population density in the county is 21 people per square mile, compared to the population density of Arizona, which is 57 people per square mile. The region's economy is primarily based on agriculture, mining, and tourism, with the exception of Sierra Vista and Douglas. One of the largest employers in the county is the US Army post of Fort Huachuca.⁴ To fully understand the demographic profile of the region, this section of the report will provide data on the current population characteristic indicators to help showcase the current status of young children and their families. The following section provides a more detailed breakdown of the population characteristics of the FTF Cochise Region and how those characteristics compare to the state.

⁴ <https://www.cochise.az.gov/>

Exhibit 1.1. Map of FTF Cochise Region and Cochise County



Population Counts and Projections

According to the 2010 Census, the FTF Cochise Region has a total population of 132,279 residents. There are more than 10,000 children under six-years-old in the region, accounting for eight percent of the total population in the region and two percent of the children ages zero to five statewide (see Exhibit 1.2). Children between the ages of zero to five make up a slightly lower proportion of the total population in the FTF Cochise Region than in the state of Arizona. Further age breakdowns are available in Appendix 1.1.

Exhibit 1.2. 2010 Population of Arizona, Cochise County, and the FTF Cochise Region

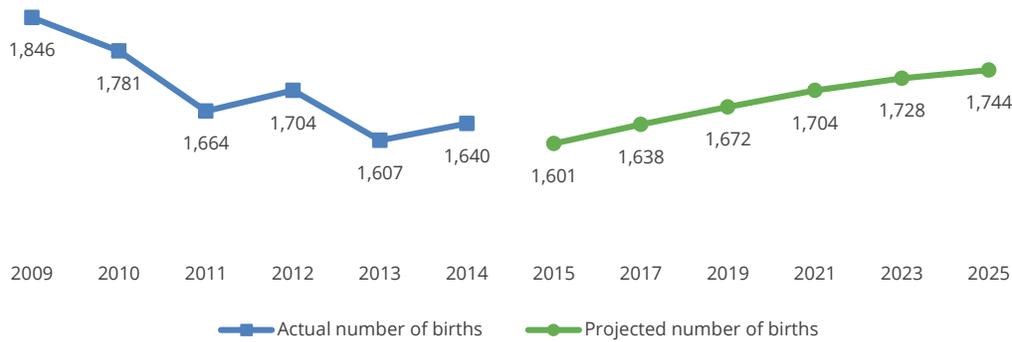
	Arizona	Cochise County	FTF Cochise Region
Total Population	6,392,017	131,346	132,279
Population of children 0-5	546,609	10,125	10,177
Percent of children 0-5 out of total population	8.6%	7.7%	7.7%

U.S. Census Bureau; 2010 Census Summary File 1; Tables P11 & P14; generated by AZ FTF; using American FactFinder; <<http://factfinder2.census.gov>>

The number of births in the county decreased by nearly 11 percent from 2009 to 2014 (see Exhibit 1.3). This compares to a six percent decrease for Arizona. Although the actual number of births has

decreased in recent years, the number of births and the population of children under age six in the county are expected to slowly increase over the next several decades. The number of births in the county is projected to increase to 1,744 in 2025, an increase of about 100 from the actual number of births in 2014, which was 1,640. Similarly, the number of children under age six is projected to slightly increase in 2025 to 11,463 (see Exhibit 1.4). This indicates a modestly growing need for early care and education and health services for this population in the coming years, and it emphasizes the importance of preparing for this growing demand by removing barriers and supporting family engagement and development to ensure the Cochise Region’s youngest residents will thrive.

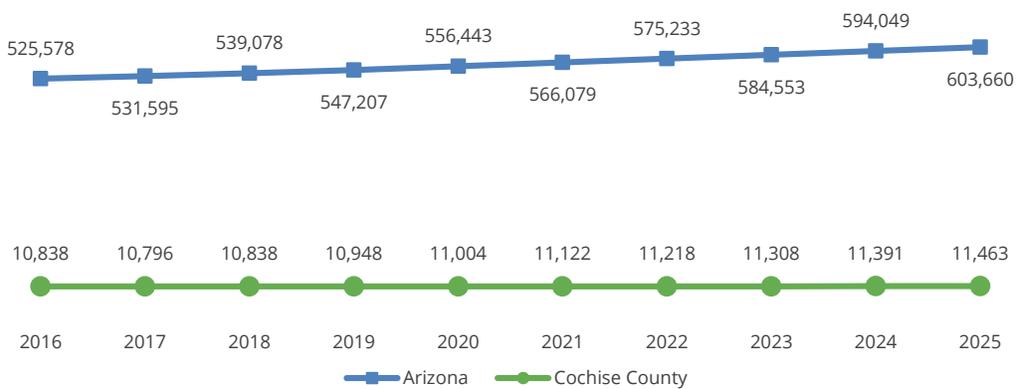
Exhibit 1.3. Number of births from 2009 to 2014 and projected number of births from 2015 to 2025 in Cochise County



Arizona Department of Health Services (2014). Vital Statistics. Provided by AZ FTF.

Arizona Department of Administration, Office of Employment & Population Statistics (2015). Arizona Population Projections: 2015 to 2050, Medium Series

Exhibit 1.4. Projected population of children 0–5 in Arizona and Cochise County



Arizona Department of Administration, Office of Employment & Population Statistics (2015). Arizona Population Projections: 2015 to 2050, Medium Series

Demographics and Language

In the FTF Cochise Region, a little over one-fourth (28%) of adults 18 and over identify as Hispanic or Latino. This is lower than the 47 percent of children birth to age four and the 44 percent of mothers who identify as Hispanic or Latino (see Exhibit 1.5 and Exhibit 1.6). The large difference between the race/ethnicity of adults 18 and over and children under age five indicates that the Hispanic/Latino population of both the FTF Cochise Region and the state will increase, while the White population will decrease as young families are more likely to identify as Hispanic/Latino and older adults are more likely to identify as White.

Exhibit 1.5. Distribution of race/ethnicity in the FTF Cochise Region

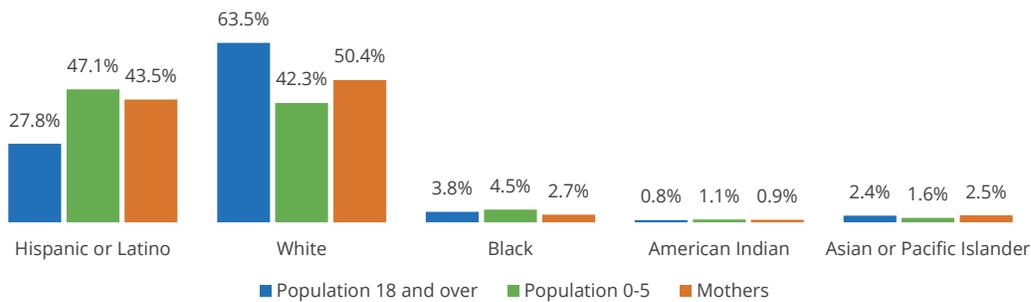
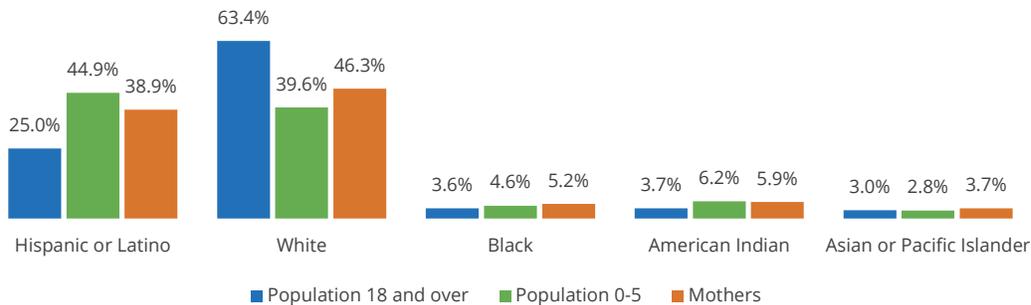


Exhibit 1.6. Distribution of race/ethnicity in Arizona



U.S. Census Bureau; 2010 Census Summary File 1; Table P11; generated by AZ FTF using American FactFinder; <http://factfinder2.census.gov>

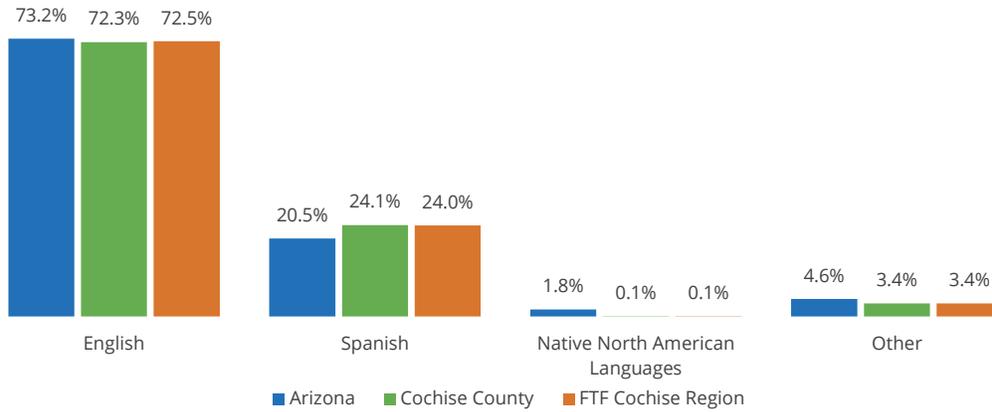
U.S. Census Bureau; 2010 Census Summary File 1; Tables P12B, P12C, P12D, P12E, P12H, and P12I; generated by AZ FTF using American FactFinder; <http://factfinder2.census.gov>

Arizona Department of Health Services (2014). Vital Statistics Trends in Arizona.

Approximately three out of four households in the region speak English as their primary language, while nearly a quarter primarily speak Spanish and an additional three percent primarily speak a language other than English, Spanish, or a Native North American language (see Exhibit 1.7). Potentially included in the 27 percent of the population that primarily speak a language other than English at home, 10 percent of the population in the region speak English less than “very well” and six percent of

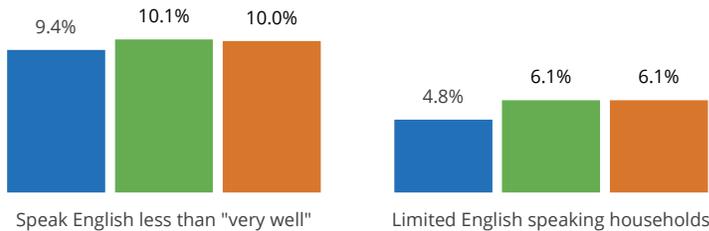
households are limited English speaking households (see Exhibit 1.8).⁵ As the Hispanic/Latino population continues to grow, the cultural diversity of the region may change as well, indicating a need for more culturally responsive services.

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



U.S. Census Bureau; 2014 American Community Survey 5-Year Estimates, Table B16001; generated by AZ FTF using American FactFinder; <<http://factfinder2.census.gov>>

Exhibit 1.8. Percentage of population that speaks English less than "very well" and percentage of limited English speaking households



U.S. Census Bureau; 2014 American Community Survey 5-Year Estimates, Tables B16001 & B16002; generated by AZ FTF using American FactFinder; <<http://factfinder2.census.gov>>

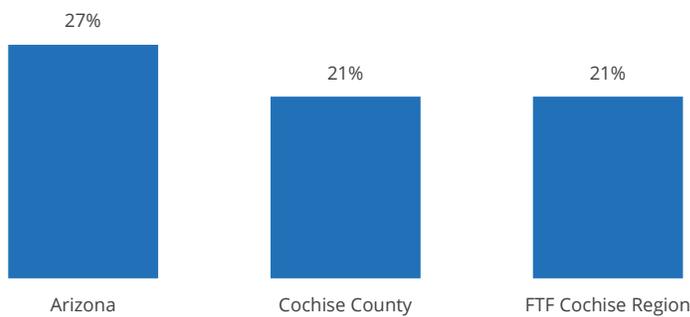
⁵ The United States Census Bureau defines limited English speaking households as a "household in which no one 14 and over speaks English only or speaks a language other than English at home and speaks English very well."

In the FTF Cochise Region, six percent of the population are not US citizens, compared to about eight percent in the state as a whole.⁶ Children under age six in the FTF Cochise Region are also less likely to be living with foreign-born parents than are children under age six in Arizona (see Exhibit 1.9). In Cochise County in 2008 there were an estimated 1,299 migrant farmworkers and 844 seasonal farmworkers (see Exhibit 1.10). Statewide data regarding refugees is available in Appendix 1.2.

6 Percent of the population in the **FTF Cochise Region** are not US Citizens

8 Percent of the population in **Arizona** are not US Citizens

Exhibit 1.9. Percentage of children 0–5 living with foreign-born parents



U.S. Census Bureau; 2014 American Community Survey 5-Year Estimates, Table B05009; generated by AZ FTF using American FactFinder; <<http://factfinder2.census.gov>>

Exhibit 1.10. Estimated number of migrant and seasonal farm workers

	Arizona	Cochise County
Number of migrant farm workers	39,913	1,299
Number of seasonal farm workers	27,791	844

Larson (2008). Migrant and Seasonal Farmworker Enumeration Profiles Study, Arizona. Retrieved from <http://aachc.org/wp-content/uploads/2014/01/PDF14-Arizona.pdf>

⁶ U.S. Census Bureau; American Community Survey, 2014 American Community Survey 5-Year Estimates, Table B05001; generated by AZ FTF; using American FactFinder; <<http://factfinder2.census.gov>>.

Household Characteristics

There are over 50,000 households in the FTF Cochise Region and 7,300 (14%) of them include children under age six (see Exhibit 1.11). Although the majority of young children in the region live in married-couple households, about one-third (33%) of households with children are single-parent households (see Exhibit 1.12). Five percent of children under age six in the region live with relatives or non-relatives. Additionally, 15 percent live in the same household as their grandparents.⁷ Of children under age 18 that live in the same household as a grandparent, 70 percent are primarily cared for by a grandparent. This is higher than the 53 percent for Arizona.⁸ There are several advantages to living in a multigenerational household, including an increase in emotional well-being and grandparents serving as role models in the socialization of children. However, this also indicates that young families may not have the resources to live on their own and may be living with their elderly parents as a result. Grandparents raising their grandchildren may also require additional support due to the nontraditional family structure, changes in parenting practices since grandparents were raising their children, and the fact that many older adults live on fixed incomes and may struggle with caring for dependents.

Exhibit 1.11. Number of households and household characteristics

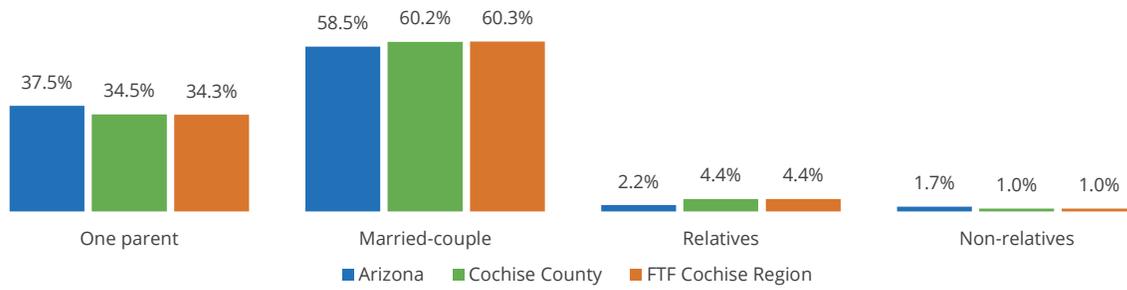
	Statewide	Cochise County	Cochise FTF Region
Total number of households	2,380,990	50,865	51,244
Households with children 0-5	16.1% (384,441)	14.3% (7,272)	14.3% (7,311)
Married-couple households with children 0-5	65.1% (250,217)	66.5% (4,838)	66.5% (4,865)
Single-male households with children 0-5	11.3% (43,485)	10.1% (736)	10.1% (742)
Single-female households with children 0-5	23.6% (90,739)	23.3% (1,698)	23.3% (1,704)

U.S. Census Bureau; 2010 Census Summary File 1; Table P20; generated by AZ FTF; using American FactFinder; <<http://factfinder2.census.gov>>

⁷ U.S. Census Bureau; American Community Survey. 2014 American Community Survey 5-Year Estimates, Tables B05009 & B17006; generated by AZ FTF; using American FactFinder; <<http://factfinder2.census.gov>>

⁸ U.S. Census Bureau; American Community Survey. 2014 American Community Survey 5-Year Estimates, Tables B05009 & B17006; generated by AZ FTF; using American FactFinder; <<http://factfinder2.census.gov>>

Exhibit 1.12. Living arrangements of children 0-5



U.S. Census Bureau; 2014 American Community Survey 5-Year Estimates, Tables B05009, B09001, & B17006; generated by AZ FTF using American FactFinder; <<http://factfinder2.census.gov>>

DEMOGRAPHIC HIGHLIGHTS

Cochise is a rural region with a large military base, a low population density, and a high population of children under the age of six. Therefore, ensuring children under six and their families have access to the services they need is critical. The ethnic profile of the region resembles the profile of the state of Arizona, with more than 60 percent of the population identifying as White and nearly one-fourth identifying as Hispanic or Latino. The majority of households speak English as their primary language and nearly a quarter primarily speak Spanish. Five percent of children under the age of six in the FTF Cochise Region live with relatives or non-relatives and 15% live in the same household as their grandparents.

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

Assets	Considerations
According to the Arizona Department of Administration, the population of children under the age of six is projected to grow at a modest and steady rate, allowing the region to foresee and prepare for the growing demands of their youngest residents.	Discuss tactics for planning ahead for the projected slow, but steady, growth of the under six population and the needs that accompany that growth.

Needs	Considerations
Based on the US Census, the percentage of children under age six identifying as Hispanic or Latino is greater than the percentage of the total population identifying as Hispanic or Latino in the FTF Cochise Region (47% vs 28%) and statewide (45% vs 25%).	Look into supporting culturally appropriate services for families that are more comfortable speaking in a language other than English.
According to the American Community survey, about one-third of children ages 0 to 5 live in single parent households and 15% live in households with grandparents. Compared to two-parent households, these living arrangements present additional barriers and difficulties for the parties involved.	Discuss supporting services specifically designed for single-parent and grandparent-led households to help them support the young children in their homes.



2. Economic Circumstances

Why It Matters

The economic situation of children and their families has a large impact on their ability to live successful, independent lives as adults. Outcomes such as school achievement, physical health, and emotional well-being are all impacted by a child's economic situation as they grow and develop.⁹ In Cochise County the largest employer is the Fort Huachuca Military Base with nearly 8,000 full-time equivalent employees. Other than Fort Huachuca there are no other employers that have more than 1,000 full-time equivalent employees.¹⁰ In the county, over one-third of workers are employed by the government and the top industries are professional, scientific, management, administrative, and waste management services.

With limited employment opportunities, it is critical to support young children and families to meet the demands of maintaining a household where children can thrive, including safe and stable housing and access to nutritious foods. Recent research has shown that housing quality, including the physical housing quality and neighborhood environment, as well as housing stability, play an important role in children's development and well-being.^{11, 12, 13} Poor housing conditions are a strong predictor of emotional and behavioral problems and poor health outcomes.^{14,15} Housing instability, which includes frequent moves, difficulty paying rent, being evicted or being homeless, is also associated with worse health, and poorer academic and social outcomes.¹⁶ Children that experience housing instability demonstrate higher grade retention, higher high school dropout rates, and lower educational attainment as adults.^{17,18} Thus, housing is an important component to consider when evaluating the conditions that affect a child's development and well-being during their first five years of life. Lack of access to healthy food and general food insecurity can also lead to numerous issues for children and mothers, including birth complications, delayed development, learning difficulties, and chronic health conditions.^{19,20} Due to the rural nature of Cochise County, low-income families have transportation barriers that can limit their ability to access services, including getting to grocery stores, food banks, or other places that could provide them with low-cost food options.

⁹ Brooks-Gunn, J., & Duncan, G. J. (1997). *The effects of poverty on children. The future of children*, 55-71.

¹⁰ Center for Economic Research (2015). *Data & Statistics: Labor Market – Top Employers*. Retrieved from <http://www.cochiseconomy.com/data---statistics.html>.

¹¹ <https://www.huduser.gov/portal/periodicals/em/fall14/highlight1.html>

¹² http://www.pewtrusts.org/~/media/legacy/uploadedfiles/wwwpewtrustsorg/reports/partnership_for_americas_economic_success/paeshousingreportfinalpdf.pdf

¹³ http://www.urban.org/research/publication/negative-effects-instability-child-development-research-synthesis/view/full_report

¹⁴ <https://www.huduser.gov/portal/periodicals/em/fall14/highlight1.html>

¹⁵ <http://www.nchh.org/Portals/0/Contents/Article0286.pdf>

¹⁶ Sandstrom, H. & Huerta, S. (September 2013). *The Negative Effects of Instability on Child Development: A Research Synthesis*. Urban Institute. Retrieved from http://www.urban.org/research/publication/negative-effects-instability-child-development-research-synthesis/view/full_report

¹⁷ http://www.urban.org/research/publication/negative-effects-instability-child-development-research-synthesis/view/full_report

¹⁸ <http://onlinelibrary.wiley.com/doi/10.1111/j.1525-1497.2005.00278.x/full>

¹⁹ <http://www.feedingamerica.org/hunger-in-america/impact-of-hunger/child-hunger/child-development.html>

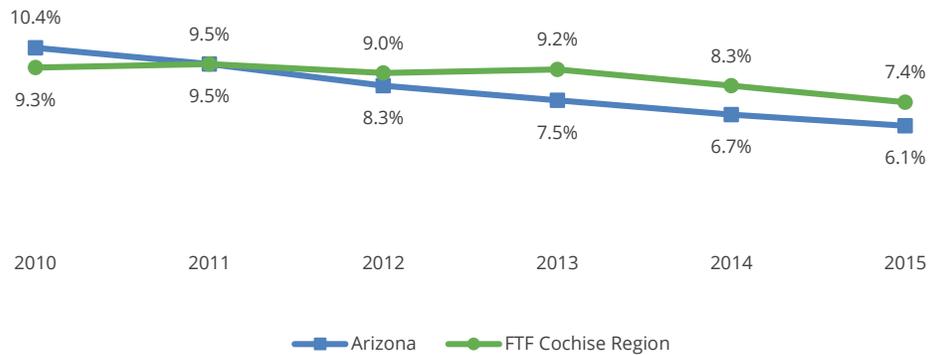
²⁰ Ke, Janice, and Elizabeth Lee Ford-Jones. "Food Insecurity and Hunger: A Review of the Effects on Children's Health and Behaviour." *Paediatrics & Child Health* 20.2 (2015): 89–91. Print.

What the Data Tell Us

Employment Indicators

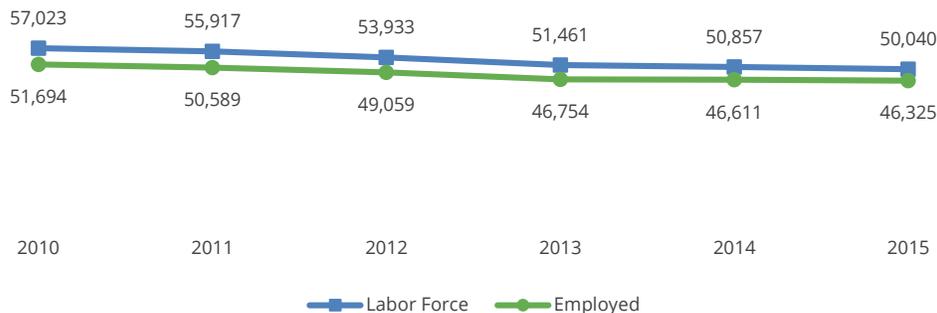
The unemployment rate in the FTF Cochise Region has been declining since 2011, though at a slower rate than statewide (see Exhibit 2.1). The number of people in the labor force and the number of people employed has also declined during the same period (see Exhibit 2.2). These trends indicate that the region is recovering from the 2008 economic recession at a slower rate than the state of Arizona in terms of placing individuals in the workforce.

Exhibit 2.1. Average unemployment rates



U.S. Department of Labor, Bureau of Labor Statistics (2016). Local Area Unemployment Statistics (LAUS), Arizona Office of Employment.

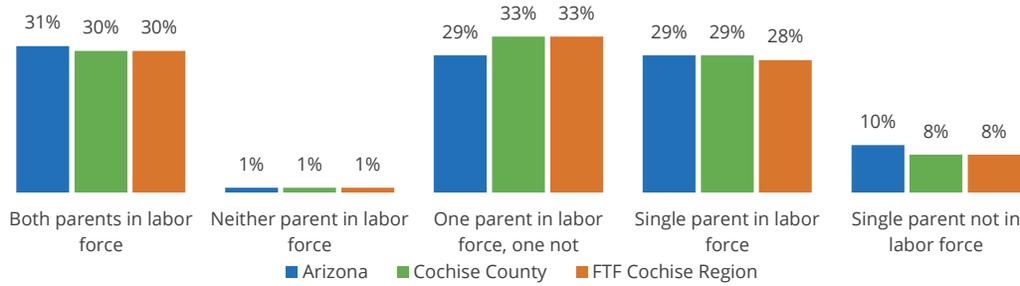
Exhibit 2.2. Number of people in the labor force in Cochise County



U.S. Department of Labor, Bureau of Labor Statistics (2016). Local Area Unemployment Statistics (LAUS), Arizona Office of Employment.

In the FTF Cochise Region, nearly 90 percent of children under age six live in a household where at least one adult is in the labor force (see Exhibit 2.3), which is similar to the percentage for Arizona. About 60 percent have either both parents in the labor force or a single parent in the labor force, indicating that they likely have some need for child care and that parents are likely working low wage jobs if both incomes together still place families in the lower income category.

Exhibit 2.3. Employment status of parents with children 0-5

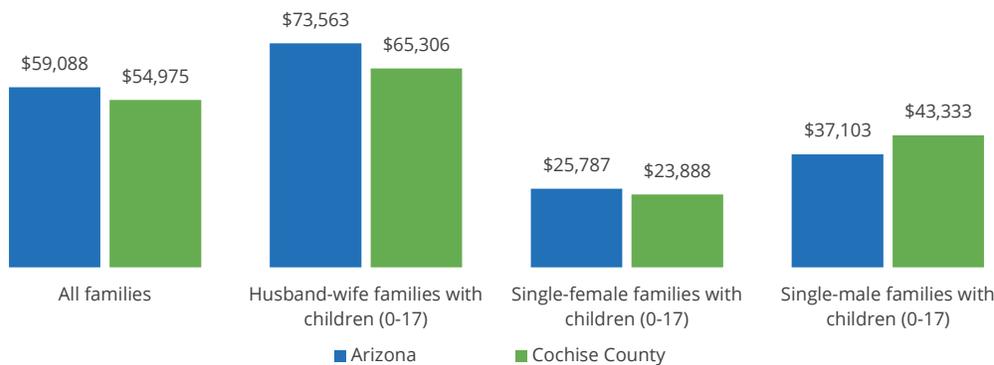


U.S. Census Bureau; American Community Survey, 2014 American Community Survey Table B23008; generated by AZ FTF; using American FactFinder; <<http://factfinder2.census.gov>>.

Median Income and Poverty

The median income of families with children in Cochise County is \$54,975, lower than the median income statewide, which is \$59,088. Single-parent families, which comprise over 30 percent of households with children under age six, make significantly less, on average, than husband-wife families. Exhibit 2.4 shows the difference in median income for husband-wife families, single-female families, and single-male families.

Exhibit 2.4. Median income for families with children 0-17



U.S. Census Bureau; American Community Survey, 2014 American Community Survey 5-Year Estimates, Table B19126; generated by AZ FTF; using American FactFinder; <<http://factfinder2.census.gov>>.

According to a 2012 report published by the Center for Women’s Welfare, the annual income needed to be self-sufficient in Cochise County for an adult living with an infant is \$31,445 and for an adult with a preschooler is \$32,416 (see Exhibit 2.5). This self-sufficiency standard income is \$10,000 more than the median income for single-female families with children in the FTF Cochise Region. Families who are living with fewer financial resources than required to afford basic needs are likely to encounter several challenges that may prevent them from living a healthy life.^{21,22} Securing affordable housing, child care,

²¹ Brooks-Gunn, J., & Duncan, G. J. (1997). *The effects of poverty on children. The future of children*, 55-71.

and nutritious food are likely significant barriers for these families.²³ Living below the self-sufficiency standard negatively impacts health and well-being and may place young children at higher risk for developmental delays and lower academic achievement.

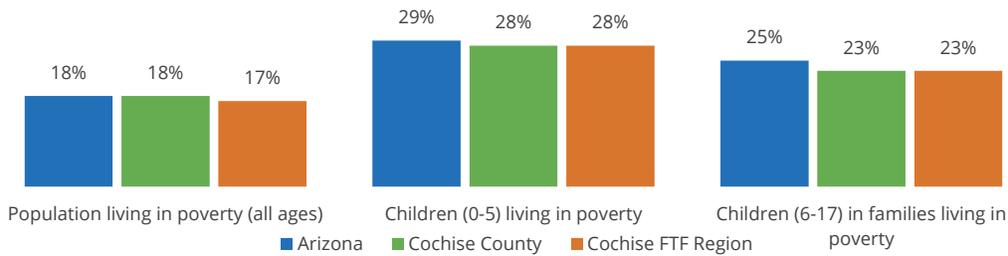
Exhibit 2.5. Self-sufficiency standard in Cochise County

Wage	Adult	Adult + infant	Adult + preschooler	Adult + school-age	Adult + teenager
Hourly	\$8.44	\$14.89	\$15.35	\$13.68	\$11.02
Monthly	\$1,486	\$2,621	\$2,701	\$2,408	\$1,940
Annual	\$17,834	\$31,445	\$32,416	\$28,894	\$23,285

Center for Women's Welfare (2012). *The Self-Sufficiency Standard for Arizona*. Retrieved from <http://selfsufficiencystandard.org/arizona>

The large number of single-parent families, combined with their low median income, contributes to a sizable portion of the Cochise population living in poverty. In the FTF Cochise Region, 17 percent of the population and 28 percent of children zero to five are living in poverty. This is similar to the 18 percent and 29 percent, respectively, for the state of Arizona as a whole (see Exhibit 2.6).

Exhibit 2.6. Percentage of population living in poverty



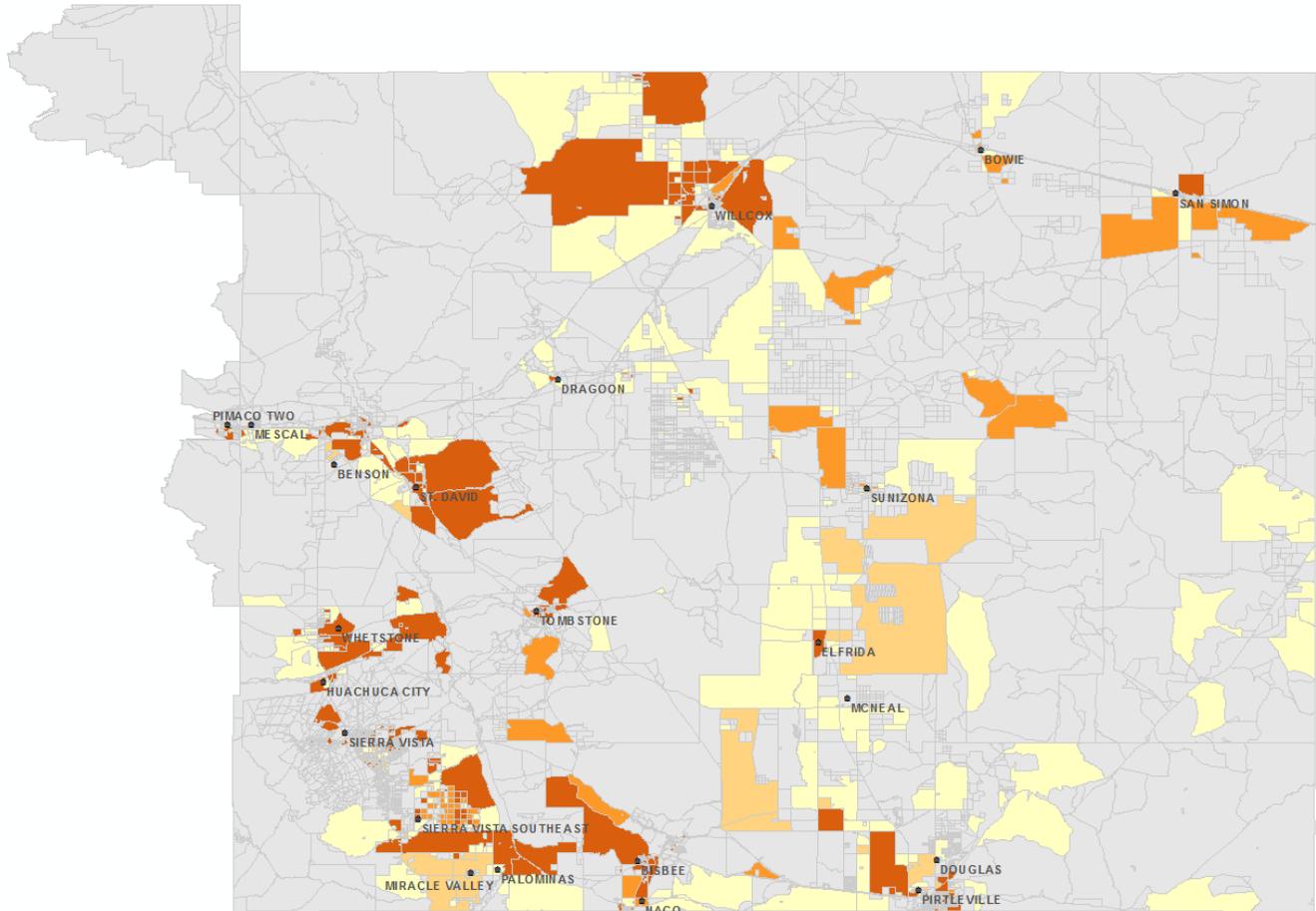
U.S. Census Bureau; American Community Survey, 2014 American Community Survey 5-Year Estimates, Table B17001; generated by AZ FTF; using American FactFinder; <<http://factfinder2.census.gov>>.

²² McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American psychologist*, 53(2), 185.

²³ Montgomery, L. E., Kiely, J. L., & Pappas, G. (1996). The effects of poverty, race, and family structure on US children's health: data from the NHIS, 1978 through 1980 and 1989 through 1991. *American Journal of Public Health*, 86(10), 1401-1405.

The relative population and poverty of areas within the FTF Cochise Region are mapped in Exhibit 2.7. The map identifies cities or towns by both their population and poverty density.

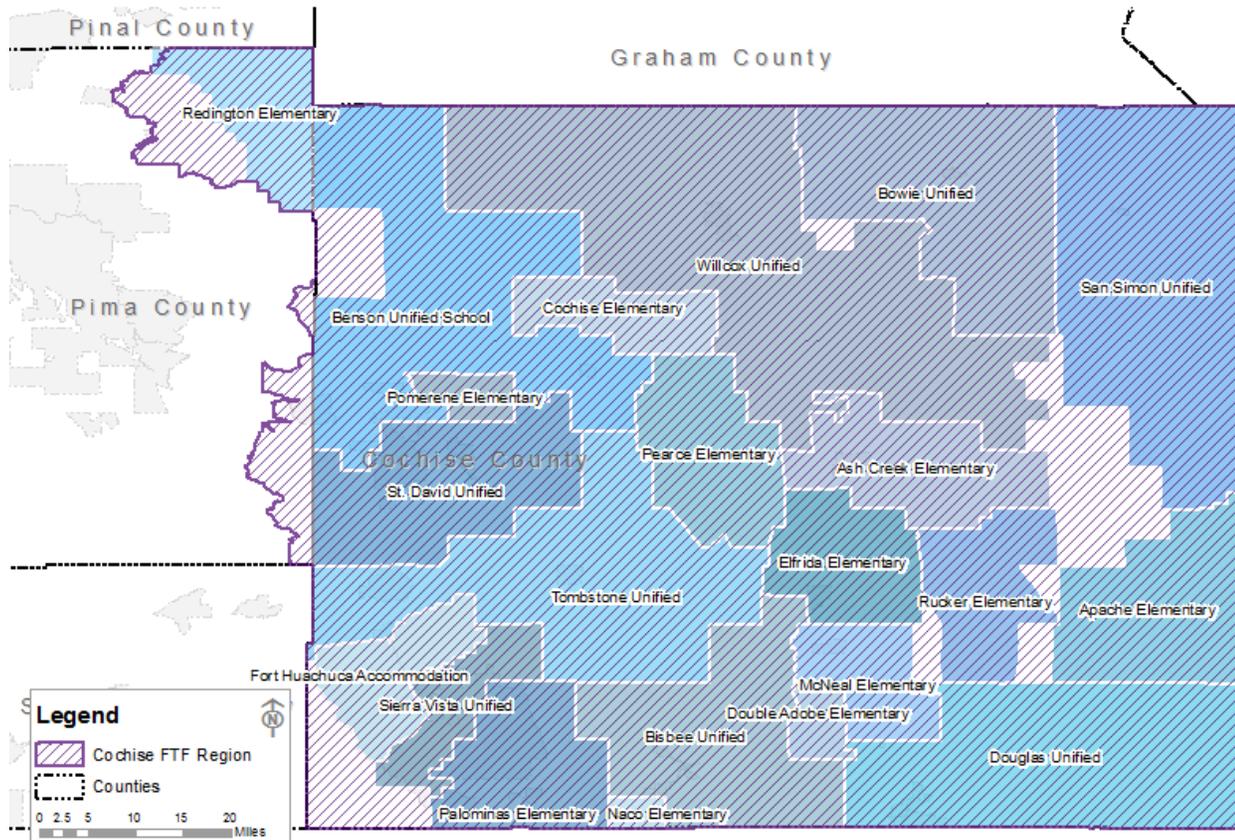
Exhibit 2.7. Map of FTF Cochise Region population and poverty



Legend	# of Census Blocks	Poverty 0-5	Population 0-5	% Poverty
High Poverty-High Population	723	2,190	6,545	33%
High Poverty-Low Population	223	254	466	54%
Low Poverty-High Population	217	105	1,019	10%
Low Poverty-Low Population	729	230	1,049	22%
No Poverty	7,371	0	1,098	0%
Total	9,263	2,779	10,177	27%

Exhibit 2.8 shows a map of the school districts within the FTF Cochise Region and Exhibit 2.9 shows the percentage of children ages five to 17 living in poverty by school district in Cochise County. Ash Creek Elementary and Douglas Unified Districts have the highest percentages of children in poverty (45% and 40%, respectively).

Exhibit 2.8. Map of FTF Cochise Region School Districts



Source:

U.S. Census Bureau (2015). TIGER/Line Shapefiles: Elementary School Districts, Unified School Districts. Retrieved from <http://www.census.gov/geo/maps-data/data/tiger-line.html>

Exhibit 2.9. Poverty estimates by school district

School District	Percent of Children 5-17 in Poverty	School District	Percent of Children 5-17 in Poverty
Apache Elementary District	36.4%	Naco Elementary District	32.6%
Ash Creek Elementary District	44.9%	Palominas Elementary District	26.5%
Benson Unified School District	26.5%	Pearce Elementary District	27.0%
Bisbee Unified District	32.5%	Pomerene Elementary District	22.8%
Bowie Unified District	17.1%	San Simon Unified District	22.2%
Cochise Elementary District	25.0%	Sierra Vista Unified District	19.0%
Double Adobe Elementary District	30.1%	St. David Unified District	19.1%
Douglas Unified District	40.3%	Tombstone Unified District	18.7%
Elfrida Elementary District	13.4%	Valley Union High School District	24.7%
Fort Huachuca Accommodation District	14.7%	Willcox Unified District	22.3%
McNeal Elementary District	19.0%		

U.S. Census Bureau; 2014 Small Area Income and Poverty Estimates; generated by Harder+Company Community Research; using American FactFinder; <<http://factfinder2.census.gov>>.

In Cochise County, over 25 percent of individuals who identify as American Indian or Alaskan Native, as two or more races, or as Hispanic or Latino are living below the federal poverty level (see Exhibit 2.10). While there is a sizable gap between different ethnic and racial groups in Cochise County, the regional disparities are smaller than the differences in poverty level between ethnicities at the statewide level, which range from 11 percent to 39 percent.

Exhibit 2.10. Population below the federal poverty level by race/ethnicity

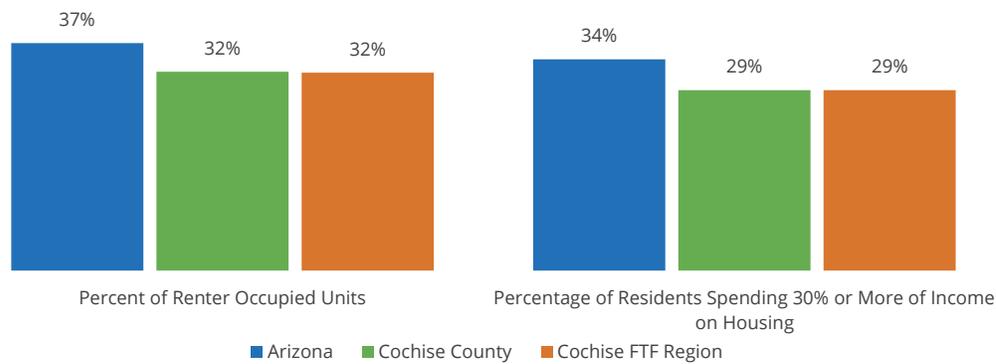
	Statewide <i>n</i> = 6,932,865	County <i>n</i> = 134,766
American Indian or Alaskan Native	38.5%	28.5%
Two or More Races	19.9%	26.9%
Hispanic or Latino	28.1%	25.6%
Other Race	29.3%	24.3%
Black or African-American	24.7%	14.5%
White, not Hispanic	11.3%	13.0%
Asian	13.7%	8.8%
Native Hawaiian and Other Pacific Islander	27.5%	6.2%

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

Housing and Food Insecurity

In the FTF Cochise Region, 32 percent of occupied housing units are rented and 29 percent of residents do not have affordable housing, based on the common definition of spending less than 30 percent of one's income on housing (see Exhibit 2.11). Additionally, some areas of Cochise County have a higher foreclosure rate than Arizona, such as the town of Cochise, which is experiencing foreclosures at nearly twice the rate of the county (see Exhibit 2.12). With nearly a third of the population in the FTF Cochise Region without affordable housing and a higher foreclosure rate than the state, residents are at high risk for housing instability.²⁴ The lack of affordable housing may lead to housing instability for many families, which can then affect a child's development and well-being by impacting their sleep and emotional security.

Exhibit 2.11. Percentage of rented housing units and residents spending 30 percent or more of income on housing



U.S. Census Bureau; American Community Survey, 2014 American Community Survey 5-Year Estimates, Table B25106; generated by AZ FTF; using American FactFinder; <<http://factfinder2.census.gov>>.

Exhibit 2.12. Residential foreclosure and pre-foreclosure rates

Location	Rate
Arizona	1 in every 1,721
Cochise County	1 in every 1,626
Cochise	1 in every 813
Sierra Vista City	1 in every 1,181
Saint David City	1 in every 1,216
Tombstone City	1 in every 1,227
Huachuca City	1 in every 1,302

RealtyTrac (July 2016). Arizona Real Estate and Market Info. Retrieved from <http://www.realtytrac.com/statsandtrends/foreclosuretrends/az>

²⁴http://www.pewtrusts.org/~media/legacy/uploadedfiles/wwwpewtrustsorg/reports/partnership_for_americas_economic_success/paeshousingreportfinalpdf.pdf

In Cochise County, 39 percent of the population has low access to grocery stores, compared to 19 percent for Arizona.²⁵ Additionally, Cochise County has fewer grocery stores and SNAP-authorized stores per 1,000 people than the state as a whole (see Exhibit 2.13). These environmental factors, combined with the poverty rate discussed above, contribute to a large portion of the population in Cochise County being food insecure, defined as limited or uncertain access to adequate food. In Cochise County, 16 percent of the population is food insecure and 27 percent of children younger than 18 are food insecure (see Exhibit 2.14). Not having access to adequate or nutritious food can have serious detrimental effects on young children, including on learning difficulties, delayed development, and chronic health conditions.^{26, 27}

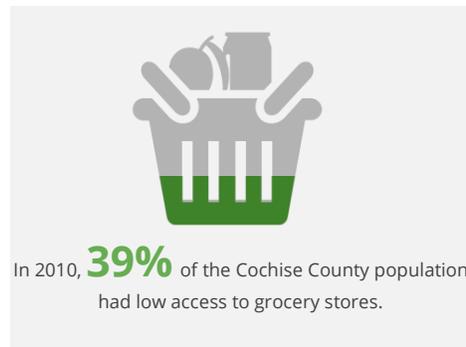
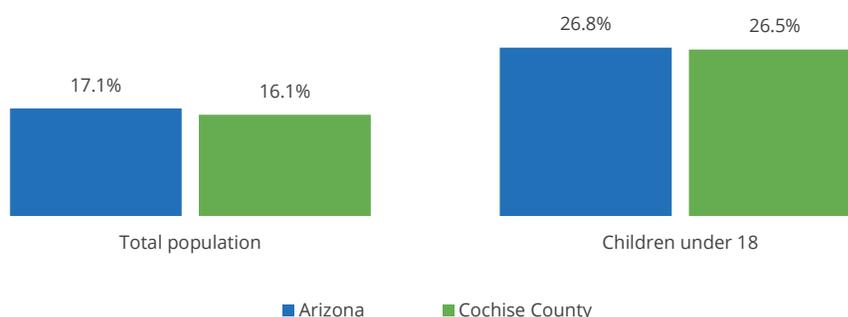


Exhibit 2.13. Food accessibility data indicators

	Year	Statewide	County
Percent of population with low access to grocery stores	2010	19.0%	39.3%
Grocery Stores per 1,000 people	2012	0.1259	0.1211
Fast Food restaurants per 1,000 people	2012	0.6467	0.4694
SNAP-authorized stores per 1,000 people	2012	0.5596	0.0757
WIC-authorized stores per 1,000 people	2012	0.1106	0.1211

United States Department of Agriculture and Economic Research Service (2012). Food Environment Atlas. Retrieved from <http://www.ers.usda.gov/data-products/food-environment-atlas/go-to-the-atlas.aspx>

Exhibit 2.14. Food insecurity rates



Gundersen, C., A. Dewey, A. Crumbaugh, M. Kato & E. Engelhard. Map the Meal Gap 2016: Food Insecurity and Child Food Insecurity Estimates at the County Level. Feeding America, 2016.

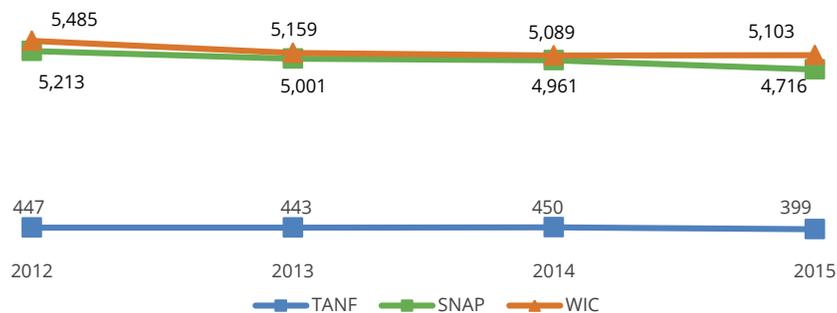
²⁵ United States Department of Agriculture and Economic Research Service (2012). Food Environment Atlas. Retrieved from <http://www.ers.usda.gov/data-products/food-environment-atlas/go-to-the-atlas.aspx>

²⁶ <http://www.feedingamerica.org/hunger-in-america/impact-of-hunger/child-hunger/child-development.html>

²⁷ Ke, Janice, and Elizabeth Lee Ford-Jones. "Food Insecurity and Hunger: A Review of the Effects on Children's Health and Behaviour." Paediatrics & Child Health 20.2 (2015): 89-91. Print.

There are several federal and local programs and services aimed at providing families with the food they need, including the Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), WIC, Child and Adult Care Food Program (CACFP), Summer Food Program (SFP), and free and reduced priced lunch programs for children in schools. Despite the prevalence of these programs, in recent years the number of children and families receiving assistance has decreased in the region. Federal programs such as SNAP and TANF have decreased in recent years due to the expiration of benefit increases instituted during the recession.^{28, 29} These decreases come as the number of families living in poverty has increased nationally.^{30, 31} Exhibit 2.15 and Exhibit 2.16 show that the number of children and families receiving assistance has decreased in recent years, with the notable exception of CACFP. At the September 2016 Regional Partnership Council meeting, community members and council members discussed potential reasons for the regional decrease in the number of people receiving services from food programs. Community members also discussed the rural nature of the community and families' difficulty finding transportation to services. Local services that provide fresh and healthy food options are also available in the Cochise Region, yet more outreach and education may be needed to inform community members of their availability. Additional information regarding free and reduced price lunches by school is available in Appendix 2.1.

Figure 2.15. Number of children served in the FTF Cochise Region by SNAP, TANF, and WIC



Arizona Department of Economic Security (2015). Temporary Assistance for Needy Families (TANF) program. Provided by AZ FTF. 1. Arizona Department of Economic Security (2015). Supplemental Nutrition Assistance Program (SNAP). 1. Arizona Department of Health Services (2015). Women, Infants & Children (WIC). Provided by AZ FTF.

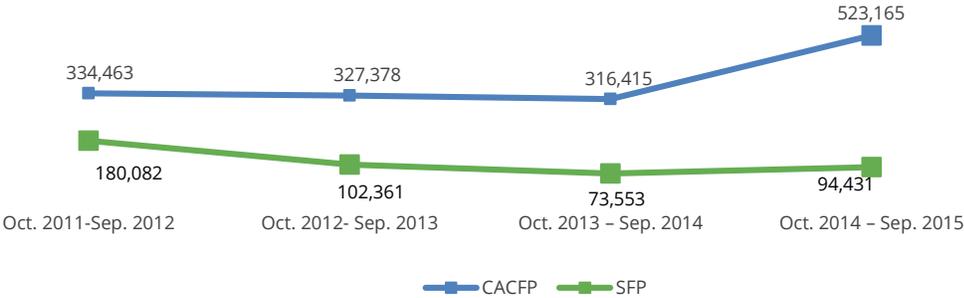
²⁸ <http://www.cbpp.org/research/food-assistance/snap-costs-and-caseloads-declining>

²⁹ http://www.ers.usda.gov/amber-waves/2015-june/wic-experienced-largest-decrease-in-participation-in-program%E2%80%99s-history-in-2014.aspx#.V_QG_48rIdU

³⁰ <http://www.cbpp.org/research/tanf-weakening-as-a-safety-net-for-poor-families>

³¹ <http://kypolicy.org/decline-tanf-caseloads-result-decreasing-poverty/>

Figure 2.16. Number of meals provided by CACFP and SFP to children and adults in Cochise County



Arizona Department of Education (2015). Child and Adult Food Care Program. Provided by AZ FTF.
Arizona Department of Education (2015). Summer Food Program. Provided by AZ FTF.

ECONOMIC CHARACTERISTICS HIGHLIGHTS

In the FTF Cochise Region, nearly 60 percent of children live in households with either both parents in the labor force or a single parent in the labor force. Single-parent families, which comprise over 30 percent of households with children under age six, earn significantly less, on average, than do dual-parent households. More than one in four children under age six in the region (28%) live under the poverty level and nearly a third of the population in the region do not have affordable housing and are experiencing a higher foreclosure rate than the state. These factors put families at higher risk for housing instability and the negative consequences of living below the self-sufficiency standard. Additionally, in Cochise County, 39 percent of the population have low access to grocery stores and the number of children and families receiving public assistance has decreased in recent years.

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

Assets	Considerations
The Cochise Region has several local programs aimed at supporting the availability of nutritious foods for children under six and their families.	Increase community awareness of the nutrition programs available to young children and their families

Needs	Considerations
According to the American Community Survey, about one-third of children under six in the county live in single-parent households, which earn substantially less money than do dual-parent households (\$27,792 to \$38,614 vs. \$79,792). Also, over a quarter of children under six live in poverty (27%).	Identify and promote supports or resources that can help subsidize child care and housing costs for single parents with young children.



3. Educational Indicators

Why It Matters

Research shows that children who participate in early care and education programs are more likely to perform better on future educational indicators than children who do not.^{32, 33} More specifically, the research shows that children enrolled in quality early learning are more likely to experience improved performance on standardized tests and are less likely to dropout or fail in comparison to their counterparts. Improved performance in turn increases their likelihood of graduating from high school, of achieving higher monthly earnings, and of owning a home. Essentially, a child's enrollment in early learning provides short-term and long-term benefits that will enable the child to successfully transition to kindergarten and prosper in adulthood.

Educational indicators that affect student outcomes and that are likely related to participation in early care and education include, but are not limited to, school attendance, proficiency exams, grades, graduation and dropout rates, and educational attainment. For example, poor attendance in school affects student outcomes because it limits children from gaining knowledge and thriving in an academic setting. Research has revealed an association between high school dropout rates and poor attendance as early as kindergarten; on average, dropouts have missed 124 days of school by the time they reach eighth grade.³⁴ In addition, irregular attendance has an effect on school budgets and can potentially lead to fewer funds for essential classroom needs.³⁵ Research has also shown that students dropping out high school have an increased likelihood of earning less than high school graduates, of being unemployed, of receiving public assistance, and of having a higher chance of being incarcerated, and therefore of confronting more barriers while raising a family.³⁶

What the Data Tell Us

Student Attendance

Between 2014 and 2015, the state and the FTF Cochise Region experienced an increase in the percentage of students missing 10 or more days of school, known as chronic absenteeism (see Exhibit 3.1). Compared to the state, the rate of absences in the FTF Cochise Region are higher for children in early elementary school. It can also be observed that the higher the grade level, the fewer the students that are missing 10 or more days of school, indicating that parents may be more willing to allow their children to miss school in earlier years. There are many potential explanations for such findings, including that younger children may get sick more frequently than older children or that the perception of the value of education changes as children grow.

³² Naudeau, S. (2011). *Investing in young children: An early childhood development guide for policy dialogue and project preparation*. World Bank Publications.

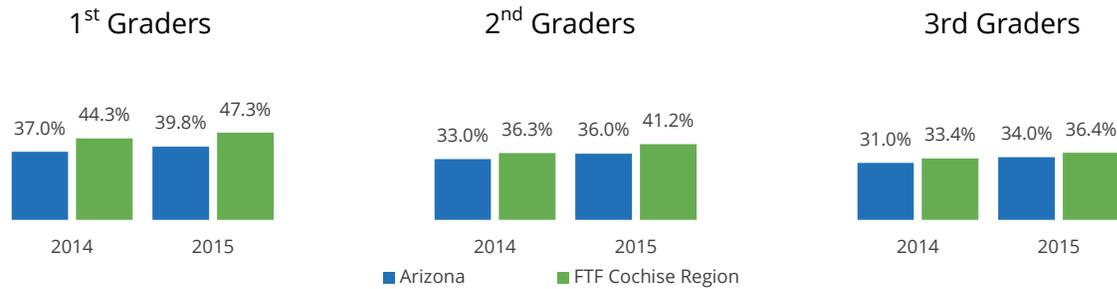
³³ Reynolds, A. J., Temple, J. A., Ou, S. R., Robertson, D. L., Merskv, J. P., Tomitzes, J. W., & Niles, M. D. (2007). *Effects of a school-based, early childhood intervention on adult health and well-being: A 19-year follow-up of low-income families*. *Archives of Pediatrics & Adolescent Medicine*, 161(8), 730-739.

³⁴ *Why attendance matters*. (2016, June 9). Retrieved from <http://www.areaschools.org/ak/articles/school-attendance-issues/>

³⁵ *Every school day counts: The forum guide to collecting and using attendance data*. (2009, February). Retrieved December 06, 2016, from <https://nces.ed.gov/pubs2009/attendancedata/chapter1a.asp>

³⁶ Christle, C. A., Jolivet, K., Nelson, M. C. (2007). *School characteristics related to high school dropout rates*. *Journal of Remedial and Special Education*, 28, 15. www.eric.ed.gov/ERICWebPortal/recordDetail?accno=EJ785964

Exhibit 3.1. Students absent 10 or more days of school

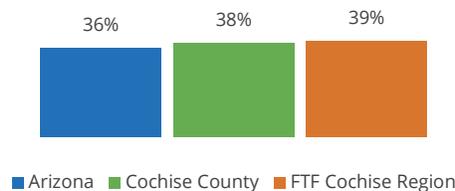


Arizona Department of Education (2015). Chronic Absences. Provided by AZ FTF.

Early Achievement

About two in five children (39%) in the FTF Cochise Region who are three or four years old are enrolled in nursery school, preschool, or kindergarten, which is slightly higher than Arizona (36%) and Cochise County (38%) (see Exhibit 3.2). Research shows that preschool attendance has an effect on future academic performance, specifically on English and math scores.³⁷ The AzMERIT, which replaced the AIMS in the 2014–2015 school year, is designed to assess students’ critical thinking skills and their mastery of the Arizona College and Career Ready Standards established in 2010. Students who receive a “proficient” or “highly proficient” score are considered adequately prepared for success in the next grade. The English language arts (ELA) assessment results on the AzMERIT demonstrated that about 37 percent of all third graders in the FTF Cochise Region scored “proficient” or “highly proficient,” which is about three percent lower than Arizona (see Exhibit 3.3). Slightly more, about 41 percent of third graders, scored “proficient” or “highly proficient” on the math assessment test across the FTF Cochise Region and the state (see Exhibit 3.4). Although math assessment results were slightly higher than the ELA assessment results, overall more than half of all third graders in both the state and the region are not meeting the standard proficiency for either subject.

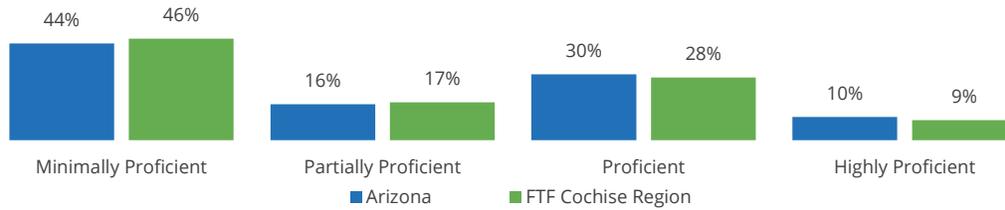
Exhibit 3.2. Children ages 3-4 enrolled in nursery school, preschool, or kindergarten



U.S. Census Bureau American Community Survey, 2014 American Community Survey 5-Year Estimates, Table B14003; generated by AZ FTF; using American Fact Finder; <<http://factfinder2.census.gov>>.

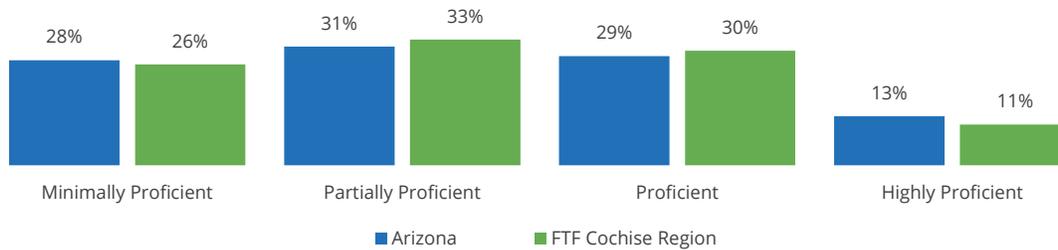
³⁷ Andrews, R. J., Jaraowski, P., & Kuhne, K. (2012). The effects of Texas's targeted pre-kindergarten program on academic performance (No. w18598). National Bureau of Economic Research.

Exhibit 3.3. 2015 AzMERIT English language arts assessment results for third grade students



Arizona Department of Education (2015). AzMERIT Reports. Provided by AZ FTF.

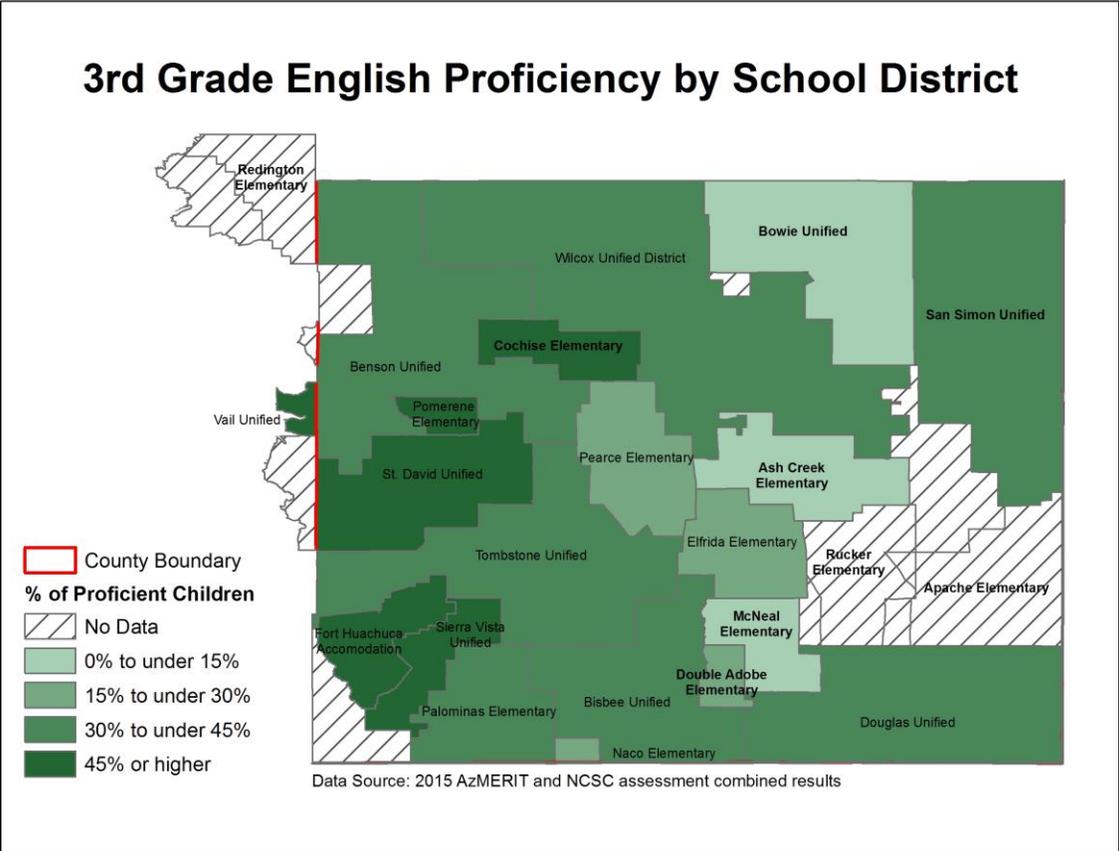
Exhibit 3.4. 2015 AzMERIT math assessment results for third grade students



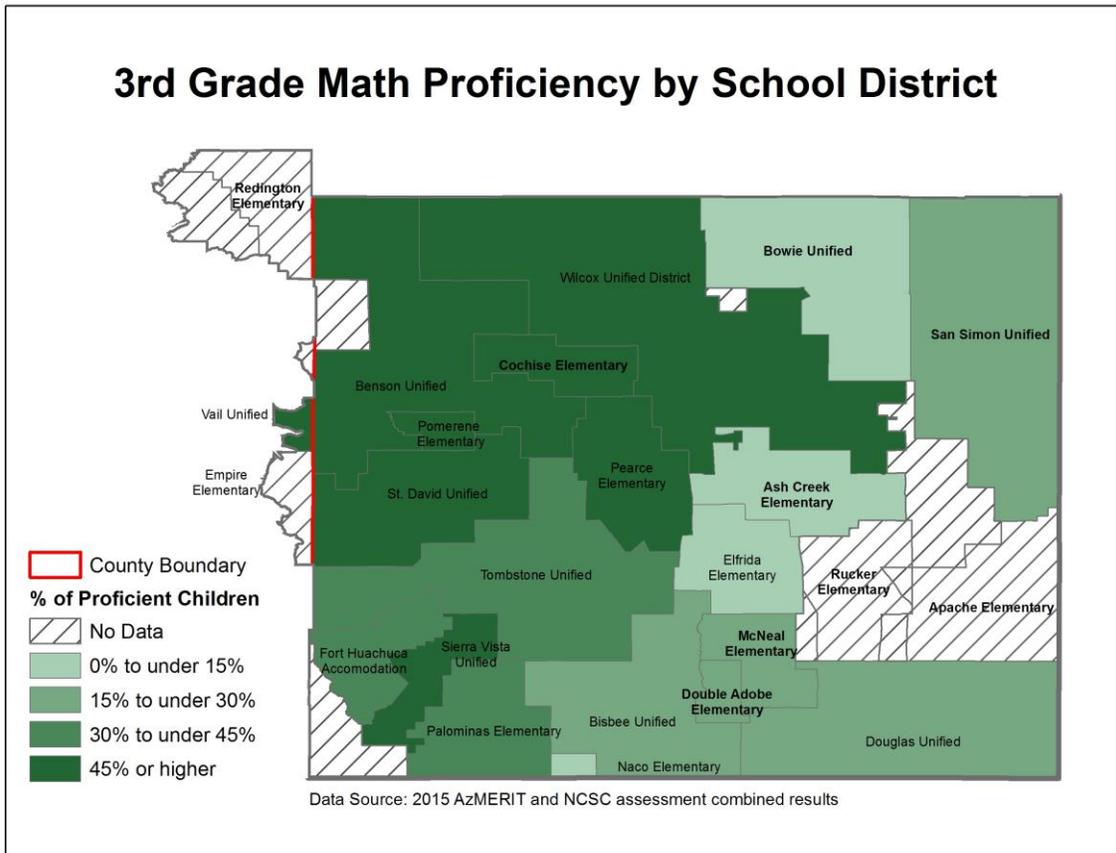
Arizona Department of Education (2015). AzMERIT Reports. Provided by AZ FTF.

The third grade proficiency data available, mapped by school district, indicate that the districts towards the western side of the region have higher percentages of children proficient in ELA while the school districts in the center of the region have lower percentages of children proficient in ELA (see Exhibit 3.5). Additionally, the northwestern school districts have higher percentages of children proficient in math than most of the southern or eastern school districts. Cochise Elementary, Pomerene Elementary, St. David Unified, and Sierra Vista Unified have the highest percentage of children proficient in both math and English, while Bowie Unified, Ash Creek Elementary, McNeal Elementary, and Elfrida Elementary report the lowest percentage of children proficient in math and ELA.

Exhibit 3.5. Geographic representation of third grade English language arts and math AzMERIT proficiency by school district



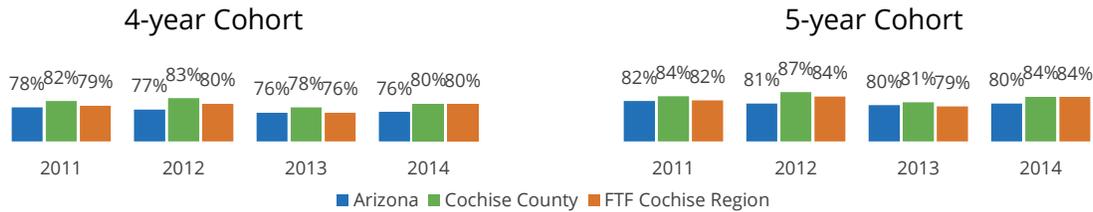
3rd Grade Math Proficiency by School District



High School Graduation & Dropout Rates

Between 2011 and 2014, the four-year graduation rate fluctuated for Cochise County and the FTF Cochise Region but remained at roughly 80 percent (see Exhibit 3.6). The four-year graduation rate in the FTF Cochise Region was higher than the state by four percent in 2014. From 2012 to 2015, the percent of students dropping out of high school in Arizona fluctuated between three to four percent while the percent of students dropping out in the FTF Cochise Region remained at a roughly three percent dropout rate (see Exhibit 3.7).

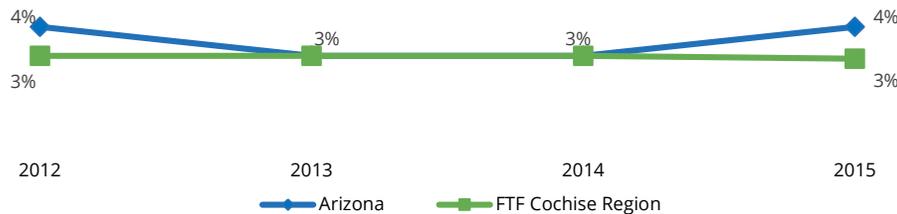
Exhibit 3.6. High school graduation rates*



Arizona Department of Education (2014). Graduation Rate 2018 Cycle. Provided by AZ FTF.

*The four-year graduation rate counts a student who graduates with a regular high school diploma in four years or less as a high school graduate in his or her original cohort

Exhibit 3.7. High school dropout rates

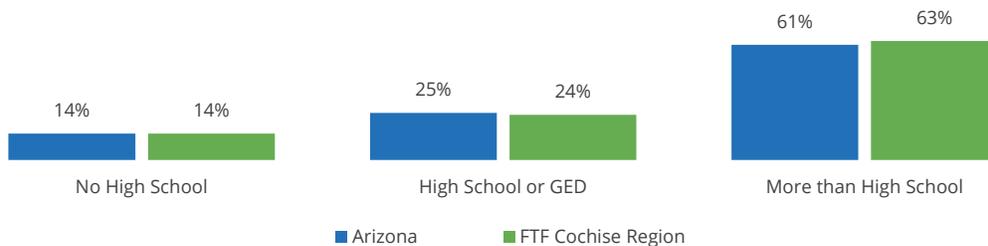


Arizona Department of Education (2014). Graduation Rate 2018 Cycle. Provided by AZ FTF.

Educational Attainment

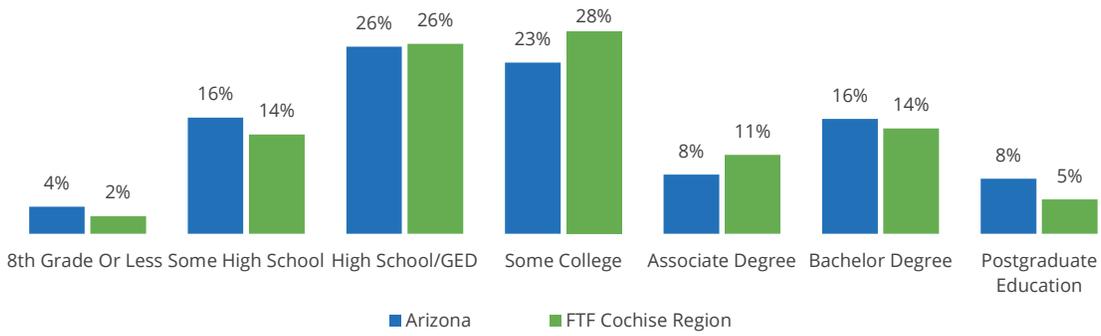
In both the region and the state, 86% of adults 25 and older have completed at least a high school education (see Exhibit 3.8). Approximately 14 percent of adults 25 and older do not have a high school diploma in both Arizona and the FTF Cochise Region. Slightly more mothers in the Cochise Region (84%) have completed high school in the region than the state (80%) (see Exhibit 3.9). For more information about race or ethnicity of children by school, school report card letter grades, and school enrollment data (by school and district), refer to Appendices 3.1–3.3.

Exhibit 3.8. Educational attainment of adults 25 and older in 2014



U.S. Census Bureau; American Community Survey, 2014 American Community Survey; generated by AZ FTF; using American FactFinder; <<http://factfinder2.census.gov>>.

Exhibit 3.9. Percentage of live births by mother's educational attainment in 2014*



Arizona Department of Health Services (2014). Vital Statistics. Provided by AZ FTF.
 *Sum rounded to nearest tens unit due to non-zero addend less than 6

EDUCATION HIGHLIGHTS

A child’s development during their first five years of life makes an impact on their performance in future educational endeavors. Overall, students in the FTF Cochise Region are performing similarly to or better than their statewide counterparts. Student absences are increasing across Arizona, Cochise County, and the FTF Cochise Region. About 39 percent of children ages three or four are enrolled in early education and a similar percentage of third grade students in the FTF Cochise Region are scoring proficiently in math (41%) and ELA (37%). Since 2012, high school graduation and dropout rates remained steady and the majority of adults have completed high school, received a GED, or pursued further education (87%).

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

Assets	Considerations
According to the American Community Survey, the majority of adults in the region have completed high school, received a GED, or pursued further education (87%).	Increase awareness for parents to support each other and share knowledge and attitudes around the importance of education.

Needs	Considerations
Based on data from the Arizona Department of Education, the percentage of students in first, second, or third grade missing less than 10 days of school increased by 2-3% from 2014 to 2015.	Further explore the most common reasons for absences and parent attitudes around absences.
AzMERIT reports from the Arizona Department of Education show that less than half of third graders are meeting proficiency requirements for ELA and math (37-41%) and less than half of preschool-aged children in the FTF Cochise Region are enrolled in early education (39%).	Increase awareness of early education programs to support learning and school readiness from an early age.



4. Early Learning

Why It Matters

Early care and education (ECE) consists of educational programs and strategies designed to improve future school performance for children under the age of eight.³⁸ Research suggests that the first five years of life are the most crucial stage in children's development, as they undergo the most rapid phase of growth during this period.^{38, 39} Research also shows that children's participation in high-quality learning environments leads to higher educational achievement later in life. Children who participate in early care and education programs are better prepared for kindergarten, have greater success in elementary school, and are more likely to graduate from high school and prosper well into adulthood.^{40, 41} The quality and type of care provided to children also significantly influences their development of social and behavioral skills.⁴²

The adult-to-child ratio for licensed child care centers is set by DHS and the Bureau of Child Care Licensing (BCCL) and should not be exceeded. Research suggests that a smaller adult-to-child ratio in child care settings leads to a higher quality of interaction between children and their caregivers, which in turn leads to better outcomes for young children.⁴³ On average, services that are delivered in the home have an adult-to-child ratio between 1:5 and 1:6.⁴⁴ However, the adult-to-child ratio changes for DHS licensed child care centers. State licensing requires specific adult-to-child ratios, set by the child's age. These requirements impact the ability of child care centers to care for children, and they limit the opportunities for families to access child care services. The requirements also make it difficult to track the number of vacancies and the total number of children enrolled, because the data used to demonstrate enrollment compliance can only be collected at a specific point in time. Although it is difficult to track, understanding the number of children enrolled in early learning can help provide an estimate of the number of children who may be in need of quality early care and education.

Key indicators of early learning that help identify the needs of children include, but are not limited to, the availability of early care and education centers and homes, enrollment in ECE programs, the compensation and retention of ECE professionals, costs of child care and availability of child care subsidies or scholarships, and capacity to serve children with special needs. Research shows that investments in early childhood programs yield long-term benefits and can reduce crime rates, increase earnings, and encourage education.⁴⁵ In addition, the research shows that investments in ECE have

³⁸Early Childhood Education. (2016, September 06). Retrieved from <http://k6educators.about.com/od/educationglossary/g/earlychildhoode.htm>

³⁹ Early Childhood Education. (n.d.). Retrieved from <https://teach.com/where/levels-of-schooling/early-childhood-education/>

⁴⁰ Reynolds, A. J., Temple, J. A., Ou, S. R., Robertson, D. L., Mersky, J. P., Topitzes, J. W., & Niles, M. D. (2007). Effects of a school-based, early childhood intervention on adult health and well-being: A 19-year follow-up of low-income families. *Archives of Pediatrics & Adolescent Medicine*, 161(8), 730-739.

⁴¹ Weiland, C., & Yoshikawa, H. (2013). Impacts of a prekindergarten program on children's mathematics, language, literacy, executive function, and emotional skills. *Child Development*, 84(6), 2112-2130.

⁴² Stein, R. (2010, May 14). Study finds that effects of low-quality child care last into adolescence. Retrieved from <http://www.washingtonpost.com/wp-dyn/content/story/2010/05/14/ST2010051401954.html?sid=ST2010051401954>

⁴³ De Schimmer, F. I., Marianne Riksen-Walraven, I., & Geurts, S. A. (2006). Effects of child-caregiver ratio on the interactions between caregivers and children in child-care centers: An experimental study. *Child Development*, 77(4), 861-874.

⁴⁴ Child Care Resource and Referral (CCR&R). *Meetina Arizona's Childcare Needs: Quality Indicators*. Retrieved from <http://www.arizonachildcare.org/childcare-indicators.html?lana=en>

⁴⁵ Campbell, F., Conti, G., Heckman, J. J., Moon, S. H., Pinto, R., Pungello, E., & Pan, Y. (2014). Early childhood investments substantially boost adult health. *Science*, 343(6178), 1478-1485.

long-term health effects and help prevent disease and promote health.

What the Data Tell Us

Early Care and Education

There are 95 early care and education centers and homes with a total capacity for 3,378 children in the FTF Cochise Region.⁴⁶ Although the capacity is determined by the square footage of the facility, the facility may not always serve the total number of children they are licensed to serve. The number of children served mainly depends on the center's ability to meet the adult-to-child ratio, which varies by child's age, in order to keep compliance with licensing requirements.

As previously mentioned, 39 percent of children between the ages of three and four are enrolled in early care and education programs in the FTF Cochise Region (see Exhibit 3.2). This is lower than the 60% assumed to need child care since all adults in the household are employed (see Exhibit 2.3). Parents who do not have access to stable child care may find themselves missing work to care for their children. In addition, research has consistently demonstrated that lack of access to child care has negative effects on families and decreases parents' chances of sustaining employment.⁴⁷

Early care and education professionals are tasked with the education of young children. The responsibilities of ECE professionals include guiding children (often through play and activities) and acting as their partners in the learning process. In addition, they are responsible for shaping the intellectual and social development of young children, which can have an effect on a child's future academic performance.⁴⁸ However, a teacher's ability to provide quality early care and education can depend on many factors. As previously mentioned, Arizona pays its teachers one of the lowest annual salaries in the country. This may help explain why almost half of teachers (45%) maintain their employment for less than five years. The exception is the 71 percent of Head Start teachers who stay five or more years, which may be due to the trend that Head Start teachers are paid the highest of all providers.⁴⁹ For additional data on ECE professionals, see Appendices 4.1–4.5.



About **45%** of Early care and education teachers in Arizona are employed less than five years.

Head Start and Early Head Start

Head Start and Early Head Start are federally funded programs that promote the school readiness of children ages five and under from low income families. These programs provide comprehensive services to support child development, including early learning, health services, and family well-being and engagement. The Office of Head Start funds agencies in local communities to implement Head

⁴⁶ Arizona Department of Economic Security (2015). *Childcare Providers and Capacity*. Provided by AZ FTF.

⁴⁷ Greenberg, M. (2007). Next steps for federal child care policy. *The Next Generation of Antipoverty Policies*, 17, 2. <http://www.futureofchildren.org/publications/journals/article/index.xml?journalid=33&articleid=67§ionid=353>

⁴⁸ Bano, N., Ansari, M., & Ganai, M. Y. (2016). *A study of personality characteristics and values of secondary school teachers in relation to their classroom performance and students' likings*. Anchor Academic Publishing.

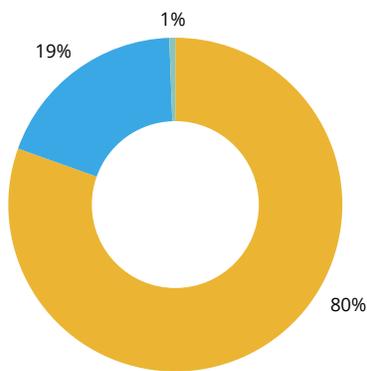
⁴⁹ First Things First – Arizona's Unknown Education Issue (2013). *Early Learning Workforce Trends*. Provided by AZ FTF.

Start and Early Head Start programs.⁵⁰ Research shows that Head Start children generally tend to score higher on all domains of cognitive and social–emotional development in comparison to children not enrolled in Head Start who are of the same socioeconomic background.⁵¹ In addition, Head Start children are also more likely to improve their social skills, impulse control, and approaches to learning while concurrently decreasing their problem behaviors, becoming less aggressive and hyperactive over the course of a year.⁵²

As of 2016, there were eight Head Start or Early Head Start centers in the Cochise Region funded by Child–Parent Centers, Inc., the Head Start grantee for the five southern Arizona counties, including Cochise, Pima, Graham, Greenlee, and Santa Cruz Counties. The data presented in this section are aggregated for all five counties.

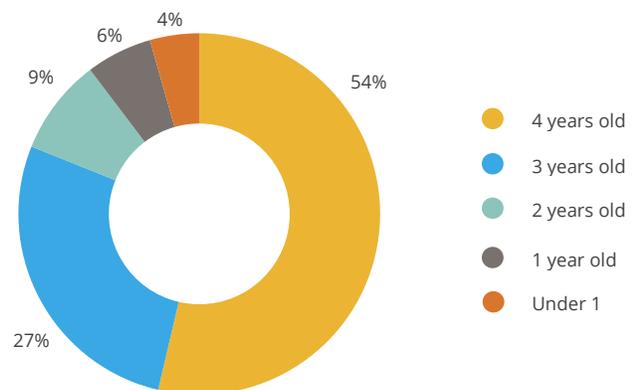
In 2016, a cumulative total of 3,249 children enrolled in Head Start and Early Head Start in the southern Arizona counties. Of those enrolled, about 80 percent were enrolled in Head Start and 19 percent were enrolled in Early Head Start (see Exhibit 4.1.). In addition, over half (54%) of children enrolled in Head Start were four years old (see Exhibit 4.2). The lower enrollment rates of younger children are due to limited availability of Early Head Start services; the Early Head Start program was introduced much later than Head Start nationwide and also requires a higher level of funding due to costs associated with providing high quality infant and toddler care.

Exhibit 4.1. Cumulative enrollment in Head Start and Early Head Start programs



Office of Head Start (2016). Head Start Data. Retrieved from: <https://hses.ohs.acf.hhs.gov/pir/>

Exhibit 4.2. Cumulative enrollment of children in Head Start and Early Head Start by age*



Office of Head Start (2016). Head Start Data. Retrieved from <https://hses.ohs.acf.hhs.gov/pir/>

*5 years and older omitted due to suppression guidelines

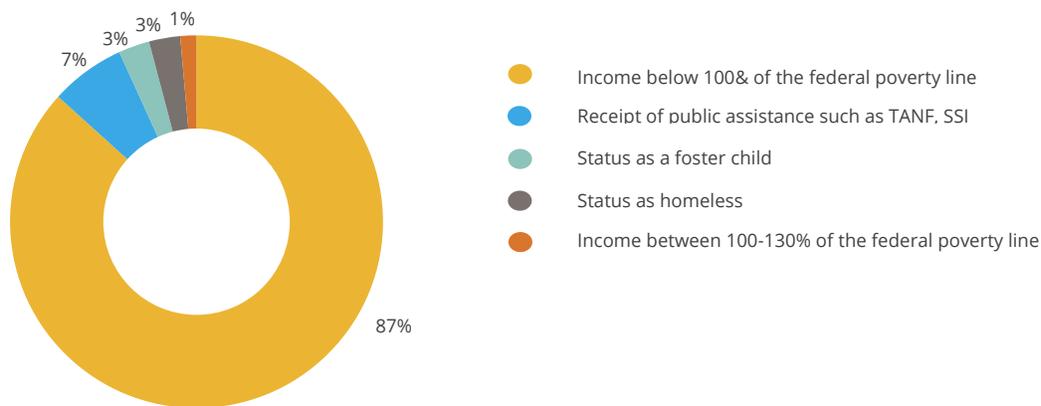
⁵⁰ Head Start Programs. (2016, August 15). Retrieved from <http://www.acf.hhs.gov/ohs/about/head-start>

⁵¹ Head Start impact study: Final report. (2010, January). Retrieved from http://www.acf.hhs.gov/sites/default/files/opre/executive_summary_final.pdf

⁵² Aikens, N., Kopack Klein, A., Tarullo, L. & West, J. (2013). Getting ready for kindergarten: Children's progress during Head Start. FACES 2009 report. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Eighty seven percent of children and pregnant women who were eligible for Head Start qualified because their income was below 100 percent of the federal poverty level (see Exhibit 4.3). In addition, seven percent of children and pregnant women were eligible because their income did not exceed 130 percent of the federal poverty level. Those whose income exceeded 130 percent of the federal poverty line were not eligible to receive services. Although low-income families benefit from their qualification for free early education services through Head Start, there are likely many families that lie just outside of the qualifying income brackets yet cannot afford other quality early education programs. Children with disabilities typically make up 10 percent of HS/EHS enrollment and can be enrolled regardless of income level.

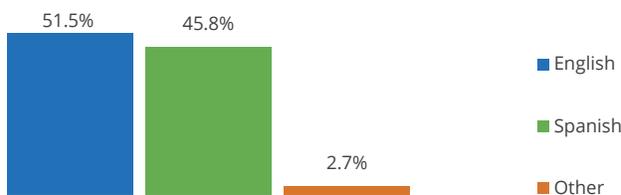
Exhibit 4.3. 2015 Head Start: Type of eligibility



Office of Head Start (2016). Head Start Data. Retrieved from <https://hses.ohs.acf.hhs.gov/pir/>

Of the children and families that were enrolled in Head Start, 52 percent reported speaking English and 46 percent reported speaking Spanish (see Exhibit 4.4). The high percentage of Spanish speakers may indicate a need for more early education services offered in Spanish. For additional Head Start data for the southern Arizona regions, such as enrollment by race and ethnicity and funded enrollment information, see Appendices 4.6–4.9.

Exhibit 4.4. Primary language for children and pregnant women enrolled in Head Start in southern Arizona



Office of Head Start (2016). Head Start Data. Retrieved from: <https://hses.ohs.acf.hhs.gov/pir/>

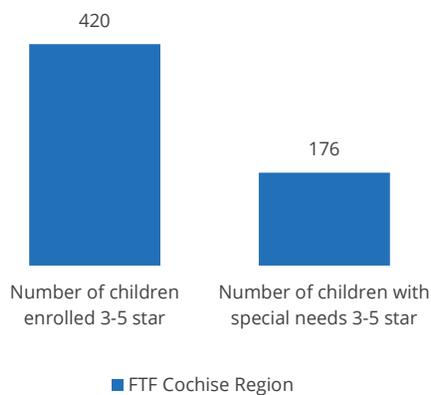
Quality of Early Care and Education Programs

Quality First is a signature program of FTF that is designed to improve the quality of early learning for children birth to five years old. Quality First partners with early care and education providers across Arizona to provide coaching and funding meant to improve the quality of their services. Quality First implemented a statewide standard of quality for early care and education programs, along with associated star ratings. The star ratings allow parents to more easily take quality into consideration when deciding on care providers. The star ratings range from one to five, and indicate the level of quality and attainment of care standards.⁵³

	Highest Quality	Far exceeds quality standards
	Quality Plus	Exceeds quality standards
	Quality	Meets quality standards
	Progressing Star	Approaching quality standards
	Rising Star	Committed to quality improvement
	No Rating	Program is enrolled in Quality First but does not yet have a public rating

In the FTF Cochise Region, 420 children are enrolled in three to five star centers or homes and, of those, 176 children are identified with special needs (see Exhibit 4.4). For additional data on Quality First star ratings for centers and providers, see Appendix 4.10.

Exhibit 4.4. Quality First enrollment by Quality First star ratings in the FTF Cochise Region



Arizona First Things First (July 2015). Quality First.

⁵³ Arizona First Things First (October 2016). Quality First.

Costs of Child Care & Access

In addition to supporting improvements in the quality of child care settings, FTF provides scholarships for low-income families to enroll in quality child care programs. Research has shown that low-income mothers receiving child care subsidies, a form of financial assistance, are more likely than other low-income mothers to work, to sustain employment, and to work longer hours.⁴⁷ Further, the negative effects of not accessing child care include the possibility of incurring financial debt, choosing child care that is low quality and less stable, and losing time from work.

Across the state and District 6 (Cochise, Graham, Greenlee, and Santa Cruz counties), licensed centers have the highest cost per day, certified group homes have the second highest cost per day, and approved family homes have the lowest cost per day (see Exhibit 4.5). The median cost per day of licensed centers and certified group homes in District 6 is slightly lower than the state, while approved family homes in District 6 have a higher cost per day in comparison to the state. High child care prices likely place a financial strain on families who already report barely making ends meet and who have difficulty affording housing and food.

Based on the median cost per day, the median cost of child care per year for one infant in District 6 is approximately \$8,476 a year for licensed centers and approximately \$6,500 a year for approved family homes and certified group homes. Compared against the median income of husband–wife families in Cochise County with children under 18 (see Exhibit 2.4), licensed centers comprise approximately 13 percent of the median income, and approved family homes and certified group homes comprise nearly 10 percent of the same.

Exhibit 4.5. Median cost per day of Early Childhood Care

	Arizona	District 6*
Cost for one infant Licensed Centers	\$42.00	\$32.60
Cost for one infant Approved Family Homes	\$22.00	\$25.00
Cost for one infant Certified Group Homes	\$27.00	\$25.00
Cost for one child (1-2) Licensed Centers	\$38.00	\$29.77
Cost for one child (1-2) Approved Family Homes	\$20.00	\$25.00
Cost for one child (1-2) Certified Group Homes	\$25.00	\$25.00
Cost for one child (3-5) Licensed Centers	\$33.00	\$28.00
Cost for one child (3-5) Approved Family Homes	\$20.00	\$24.00
Cost for one child (3-5) Certified Group	\$25.00	\$25.00

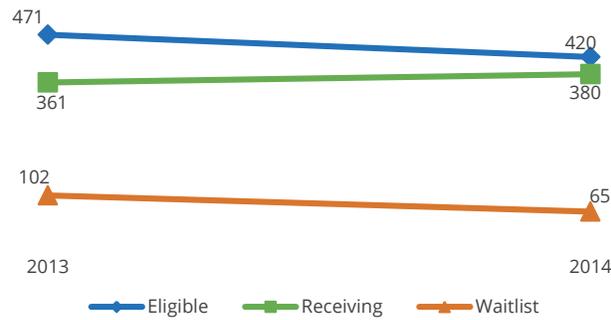
Arizona Department of Economic Security (2014). Child Care Market Rate Survey. Provided by AZ FTF.

* District 6 represents Cochise, Graham, Greenlee, and Santa Cruz counties

The median cost per year of child care comprises an even higher proportion of the median income for single-parent families with children under 18 in the county and is considerably higher for single-female families compared to single-male families (see Exhibit 2.4). Based on the median income of single-female families, licensed centers make up 35 percent of their median income and approved family homes and certified group homes make up 27 percent of the median income. High costs can be a barrier to affording quality child care, especially for single-female families.

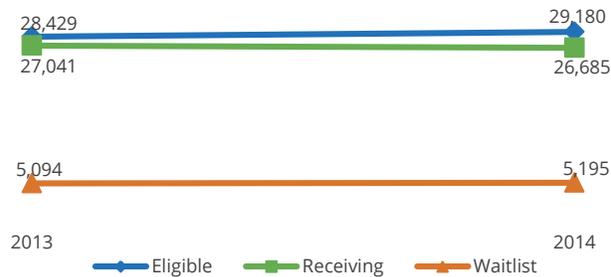
Between 2013 and 2014, the FTF Cochise Region experienced a decrease in the number of children eligible for child care subsidies (see Exhibit 4.6). Overall, although fewer children are eligible, slightly more children are receiving child care subsidies and fewer are remaining on the waitlist. The trends in the region differ from the state where more children are eligible, fewer children are receiving subsidies, and more children are on the waitlist (see Exhibit 4.7).

Exhibit 4.6. Children eligible, receiving, and on waitlist for child care subsidies in FTF Cochise Region



Arizona Department of Economic Security (2015). *Child Care (CCA) Subsidies*. Provided by AZ FTF.

Exhibit 4.7. Children eligible, receiving, and on waitlist for child care subsidies in Arizona



Arizona Department of Economic Security (2015). *Child Care (CCA) Subsidies*. Provided by AZ FTF.

Developmental Delays and Special Needs

Issues in teaching young children with special needs reflect significant changes in public policy and professional philosophy across the nation. Diverse perspectives on how to effectively teach young children with developmental delays and special needs are held.⁵⁴ The Individuals with Disabilities Education Act (IDEA) is a law ensuring services to children with disabilities throughout the nation. IDEA governs how states and public agencies provide early intervention, special education, and related services to more than 6.5 million eligible infants, toddlers, children, and youth with disabilities. Infants and toddlers with disabilities (birth- age two) and their families receive early intervention services under IDEA Part C. Children and youth (ages three to 21) receive special education and related services under IDEA Part B.⁵⁵ The Arizona Early Intervention Program (AzEIP) is a statewide system that offers

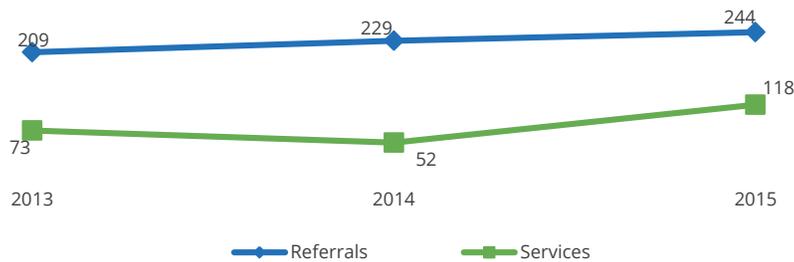
⁵⁴ Dyson, A. (2001). *Special needs education as the way to equity: an alternative approach?* *Support for Learning*, 16, 3.

⁵⁵ US Department of Education: Office of Special Education and Rehabilitative Services. <https://www2.ed.gov/about/offices/list/osers/osep/osep-idea.html>

services and assistance to families and their children with disabilities or delays under the age of three. The purpose of the program is to intervene at an early stage to help children develop to their highest potential.⁵⁶ Research shows that compared to their peers children and youth with mild intellectual disabilities are behind in academic skills.⁵⁷ Without proper intervention, this can lead to delays in learning to read, in performing basic math, and to further difficulties in other academic areas that require use of those skills. A child is eligible for AzEIP if he/she is between birth and 36 months of age and is developmentally delayed or has an established condition which has a high probability of resulting in a developmental delay, as defined by the State.⁵⁸

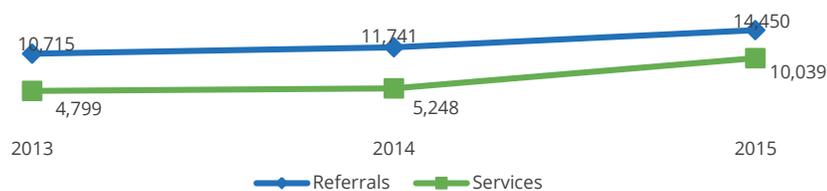
In the FTF Cochise Region, of those who received referrals to AzEIP, less than 50 percent received services (see Exhibit 4.8). However, the number receiving services increased by nearly double between 2013 and 2015 for the state and the region (see Exhibit 4.9).

Exhibit 4.8. Children receiving AzEIP referrals and services in FTF Cochise Region



Arizona Department of Economic Security (2015). AzEIP Referred and Served Children. Provided by AZ FTF.

Exhibit 4.9. 2013-2015 Children receiving AzEIP referrals and services in Arizona



Arizona Department of Economic Security (2015). AzEIP Referred and Served Children. Provided by AZ FTF.

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

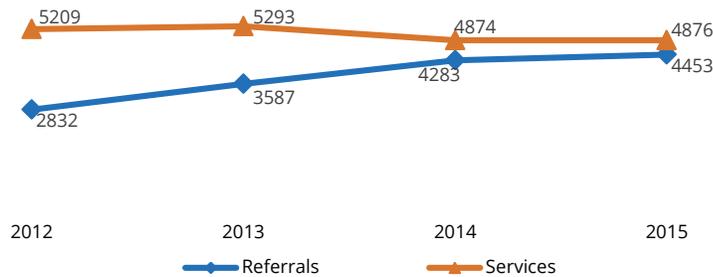
⁵⁶ ADES, 2016 - <https://des.az.gov/services/disabilities/early-intervention/about-arizona-early-intervention-program-azeip>

⁵⁷ Rosenberg, 2013 - <http://www.education.com/reference/article/characteristics-intellectual-disabilities/>

⁵⁸ ADES, 2016: <https://des.az.gov/services/disabilities/early-intervention/arizona-early-intervention-program-azeip-eligibility>

physical, cognitive, communication, social-emotional, or self-help.⁵⁹ Between 2012 to 2015, the number of children receiving referrals for developmental screenings through the DDD increased for the state and the Cochise FTF region (see Exhibit 4.10 and 4.11). In 2015, the statewide referrals increased by 1.5 times since 2012. (See Appendix 4.11 and 4.12 for a further breakdown and unduplicated counts of children under age two and children ages three to five receiving screenings and services through DDD.)

Exhibit 4.10. Number of children receiving referrals and services from the DDD in Arizona



Arizona Department of Economic Security (2015). Division of Developmental Disabilities. Provided by AZ FTF.

Exhibit 4.11. Total number of children receiving referrals for screenings

Year	FTF Cochise Region
2012	<25
2013	28
2014	27
2015	30

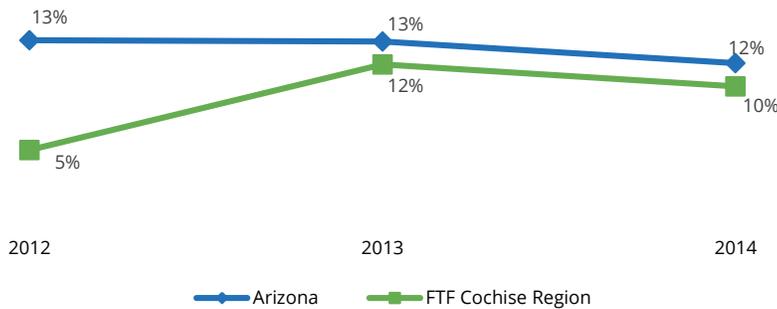
Arizona Department of Economic Security (2015). Division of Developmental Disabilities. Provided by AZ FTF.

⁵⁹ Arizona Department of Economic Security (2015). Division of Developmental Disabilities Criteria for Children Birth to Age 6 (200-H). Retrieved from: <https://des.az.gov/sites/default/files/200-Requirements-for-Division-Eligibility.pdf>

Special Education

The Arizona Department of Education collects information on special education pre-k children who entered kindergarten without the need for an IEP. The percentage of students who participate in preschool special education but no longer require special education in kindergarten decreased from 2012 to 2014 for the state (see Exhibit 4.12). In comparison, the FTF Cochise Region experienced an increase in the percent of students transitioning out of special education programs.

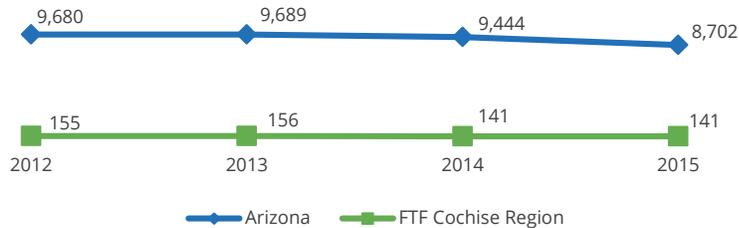
Exhibit 4.12. Percentage of students transitioning out of special education between preschool and kindergarten



Arizona Department of Education (2015). Special Education. Provided by AZ FTF.

From 2012 to 2015, the total number of preschool children identified with developmental disabilities decreased by 978 for Arizona and by 14 for the FTF Cochise Region (see Exhibit 4.13). The most common types of disabilities for preschool children were developmental delays and speech or language impairments. For further information on disabilities, including types of disabilities of preschool children and Head Start children, types of speech or language and hearing service providers, and information on Individual Family Service plans, see Appendices 4.13–4.15.

Exhibit 4.13. Total number of preschool children with disabilities*



Arizona Department of Education (2015). Special Education. Provided by AZ FTF.

*The data presented are unduplicated (i.e., children diagnosed with multiple disabilities are counted only one time in the Federal Primary Need [FPN] category).

EARLY LEARNING HIGHLIGHTS

About 39 percent of preschool-aged children in the region were enrolled in nursery school, preschool or kindergarten programs, which is less than the 60 percent assumed to need child care based on their parents' employment status. A contributing factor may be the high cost of child care. With respect to child care subsidies, fewer children are eligible, more children are receiving them, and fewer are remaining on the waitlist. Overall, the number of preschoolers identified with disabilities is decreasing in the region with the most common disabilities being developmental delays and speech or language impairments.

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

Assets	Considerations
Quality First has been increasing the quality of child care programs in the region.	Recognize that Quality First efforts in the region increase the opportunities for children to receive quality early care and education experiences.

Needs	Considerations
According to the FTF Arizona's Unknown Education Issue brief, wages of ECE professionals hardly increased between 2007 and 2012 and almost half of ECE teachers (45%) leave the profession within five years.	Identify professional development and networking opportunities for quality early childhood professionals to retain their skills in the early childhood field and reduce staff turnover.
Based on data from the Arizona Department of Economic Security, of those who received referrals to AzEIP, less than 50% received services.	Identify gaps in follow-up referrals to ensure that developmental needs of child are being met.



5. Child Health

Why It Matters

Ensuring healthy development through early identification and treatment of children's health issues helps prepare children for school.⁶⁰ In addition, helping families understand healthy developmental pathways and how health issues affect children's learning supports their school readiness. There are many health factors that impact the well-being of young children and their families. The availability of resources and services for expecting families is one key factor that contributes to their overall health. For example, during prenatal care visits, expecting mothers are provided with information and resources to promote a healthy pregnancy and to increase the healthy development of their child. At a routine prenatal visit, physicians often remind expectant mothers of the importance of abstaining from substance use, maintaining a healthy diet, and the benefits of breastfeeding. Discussing risky health behaviors can be very important since they may influence a baby's development. For example, being overweight during pregnancy has been associated with many negative health consequences, such as miscarriages, pre-term birth, low-birth weight, birth defects, lower IQ, hypertension, diabetes, and developmental delays.⁶¹

Engaging in healthy preventative practices, such as breastfeeding and vaccinating children during early childhood, may help protect children from negative health outcomes and developmental delays. Breastfeeding provides children with the nutrition they need early in life.⁶² Children who have not been vaccinated are at a higher risk of contracting diseases and tend to have more health issues later in life. Research has found that it is important for children to receive their immunizations early on in life because children under the age of five are at the highest risk of contracting severe illnesses since their bodies have not yet built a strong immune system.⁶³ Another factor that may impact health outcomes and may be deemed less important by parents is early oral health. According to the Center for Disease Control and Prevention (CDC), tooth decay is one of the most chronic diseases in children.⁶⁴ Tooth decay can cause infections that can spread to multiple teeth and may affect a child's growth. Fortunately, tooth decay is also one of the most preventable diseases in children. This chapter provides an overview of the health indicators for the FTF Cochise Region that highlight the well-being of children ages zero to five and their families.

Healthy People 2020 (HP 2020) set 10-year national objectives for improving the health of all Americans. HP 2020 established these benchmarks to encourage collaboration across communities and sectors, to empower individuals toward making informed health decisions, and to measure the impact of prevention activities.⁶⁵ When appropriate, these benchmarks are presented throughout the chapter as comparison points for certain indicators.

⁶⁰ Schools & Health (2016). *Impact of Health on Education*. Retrieved from <http://www.schoolsandhealth.org/pages/Anthropometricstatusgrowth.aspx>

⁶¹ The State of Obesity, N.D). *Prenatal and Maternal Health*. Retrieved from <http://stateofobesity.org/prenatal-maternal-health/>

⁶² Office on Women's Health (2014). *Why breastfeeding is important*. Retrieved from <https://www.womenshealth.gov/breastfeeding/breastfeeding-benefits.html>

⁶³ Centers for Disease Control and Prevention (2016). *Infant Immunizations*. Retrieved from <http://www.cdc.gov/vaccines/parents/parent-questions.html>

⁶⁴ Center for Disease Control and Prevention Division of Oral Health (n.d) *Oral Health Care*. Retrieved from http://www.cdc.gov/oralhealth/children_adults/child.htm

⁶⁵ Healthy People 2020. *About Health People* Retrieved from <https://www.healthypeople.gov/2020/About-Healthy-People>

What the Data Tell Us

Access to Health Services

Lack of access to affordable health care is a major impediment to receiving proper care and is an issue that disproportionately affects women living in poverty, placing their children at risk for health issues even before they are born, and perpetuating health disparities.⁶⁶ Consequently, lack of medical attention negatively impacts a child's ability to grow and thrive. In a rural region with limited transportation, being geographically distant from health service providers and lacking adequate health insurance are challenging barriers for community members to overcome. Such barriers are exacerbated by the lack of financial resources that are needed to travel from remote areas to where providers are located.⁶⁷

Exhibit 5.1. Ratio of population (all ages) to primary care providers, by Primary Care Area

Location	Ratio-Population: Provider
Statewide	449:1
Cochise County	624:1
Primary Care Area (Number)	
Benson (121)	763:1
Sierra Vista (123)	492:1
Willcox & Bowie (120)	862:1
Bisbee (124)	687:1
Douglas & Pirtleville (122)	917:1

Arizona Department of Health Services (2015). Primary Care Area Statistical Profiles. Retrieved from <http://www.azdhs.gov/prevention/health-systems-development/data-reports-maps/index.php#statistical-profiles-pca>

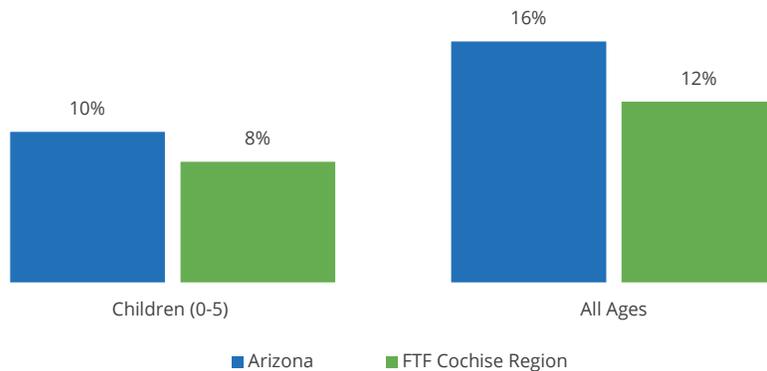
There is generally a greater lack of access to providers and healthcare in Cochise County than the statewide average. The ratio of population to primary caregivers is almost double in some areas, such as Douglas and Pirtleville, compared to the state (see Exhibit 5.1). Additionally, in 2014, eight percent of children under age six in the FTF Cochise Region reported not having any health insurance (see Exhibit 5.2). The HP 2020 target is for 100 percent of Americans to have medical insurance by 2020.⁶⁸ Though lower than the state and other age groups, the combination of the limited number of providers in rural regions such as Cochise who are lacking health insurance can potentially place children in the region at risk for long-term health complications if they fall ill while providers are not available or their parents do not have the sufficient funds to seek care.

⁶⁶ LaVeist, Gaskin and Richard (2009). *The Economic Burden of Health Inequalities in the United States*. Joint Center for Political and Economic Studies.

⁶⁷ Rural Health Information Hub (n.d.). *Healthcare Access in Rural Communities Introduction*. Retrieved from <https://www.ruralhealthinfo.org/topics/healthcare-access>

⁶⁸ Healthy People 2020. *About Health People* Retrieved from <https://www.healthypeople.gov/2020/About-Healthy-People>

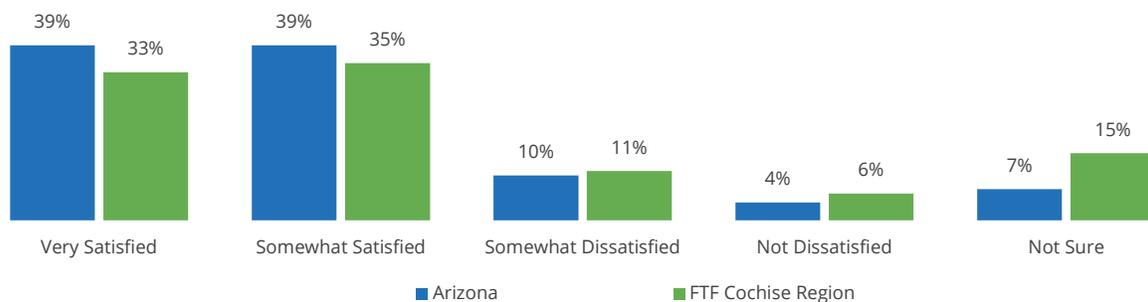
Exhibit 5.2. Estimated percentage without health insurance



U.S. Census Bureau; American Community Survey, 2014 American Community Survey 5-Year Estimates, Table B27001; generated by AZ FTF; using American FactFinder; <<http://factfinder2.census.gov>>.

Despite challenges such as lack of transportation and health insurance, most families (84%) in the FTF Cochise Region report taking their children to regular doctor visits.⁶⁹ To better understand parents’ and families perceptions and knowledge of the services available to them and their children in their community, FTF conducted a survey in 2012 asking parents about their satisfaction with and perception of these programs. When asked about the perception of services available in the region, 68 percent of parents in the region reported being “somewhat” or “very satisfied” with the resources available to support their child’s healthy development (see Exhibit 5.3). Additional information regarding health access is provided in Appendix 5.1–Appendix 5.4.

Exhibit 5.3. Percentage of parents satisfied with the community information and resources available about children’s development and health



Arizona First Things First (2012). Family and Community Survey.

⁶⁹ Arizona First Things First (2012). Family and Community Survey.

Prenatal Care

Research suggests that the lack of prenatal care is associated with many negative health issues for both the mother and the child.⁷⁰ Research also shows that children of mothers who did not obtain prenatal care were three times more likely to have a low birth weight and five times more likely to experience fatal outcomes than those born to mothers who did receive prenatal care.⁷¹ In addition, studies show that women who are at highest risk of not receiving prenatal care are mothers younger than 19-years-old and unwed mothers.^{72,73} Educational attainment has also been associated with mothers receiving prenatal care, such that the higher a mother's educational attainment, the more likely she is to seek prenatal care.⁷⁴ It is important that mothers seek and receive prenatal care at an early stage in their pregnancy so that physicians can treat and prevent any health issues that may occur.⁷⁵

HP 2020 aims to bring the proportion of pregnant women receiving prenatal care in the first trimester to 77.9 percent.⁷⁶ In the FTF Cochise Region, that target was consistently reached from 2009 to 2012 but dropped slightly in 2013. In 2014, a new version of the birth certificate introduced changes in the way prenatal care by trimester is assessed. The month when prenatal care began is no longer directly reported but rather is calculated using the date of the mother's last menstrual period and the date of the first prenatal care visit. Due to this structural change, prenatal care is not comparable between 2013 and 2014 and onward. Based on the new methodology, 60 percent of mothers in the region started prenatal care in the first trimester in 2014. Additionally, only 27 percent of respondents to the Family and Community Survey in the Cochise Region reported believing they could impact their child's brain during the prenatal period.⁷⁷ This may indicate a lack of knowledge around the importance of prenatal care and its impact on a child's growth and development.

⁷⁰ Prenatal Care Effects Felt Long After Birth. (n.d.). Retrieved from <http://toosmall.org/blog/prenatal-care-effects-felt-long-after-birth>

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

⁷² Center for Disease Control and Prevention (n.d.). Vital Statistics Online. Retrieved from http://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

⁷³ Institute of Medicine (US) Committee to Study Outreach for Prenatal Care; Brown SS, editor. Prenatal Care: Reaching Mothers, Reaching Infants. Washington (DC): National Academies Press (US); 1988. Chapter 1, Who Obtains Insufficient Prenatal Care? Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK217693/>

⁷⁴ National Center for Health Statistics (1994). Vital and Health Statistics: Data from the National Vital Statistics System. Retrieved from https://books.google.com/books?id=zIFPAQAAIAAJ&pg=RA2-PA19&lpg=RA2PA19&dq=lack+of+prenatal+care+linked+with+mothers+educational+attainment&source=bl&ots=ilqp_JVnA&sig=SQBGbmtlhOG9JNrgFLEjMOVkt90&hl=en&sa=X&ved=0ahUKEwjM6vH_6vfPAhWCjIQKHWRjCwkQ6AEIVDAH#v=onepage&q&f=false

⁷⁵ Womens Health (n.d.). Prenatal care fact sheet. Retrieved from <https://www.womenshealth.gov/publications/our-publications/fact-sheet/prenatal-care.html#b>

⁷⁶ Healthy People 2020. About Healthy People Retrieved from <https://www.healthypeople.gov/2020/About-Healthy-People>

⁷⁷ Arizona First Things First (2012). Family and Community Survey.

Exhibit 5.4. Percentage of women who began prenatal care in the first trimester

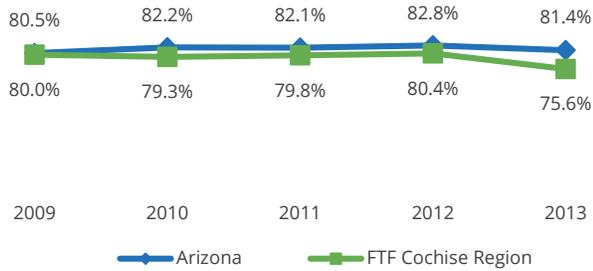
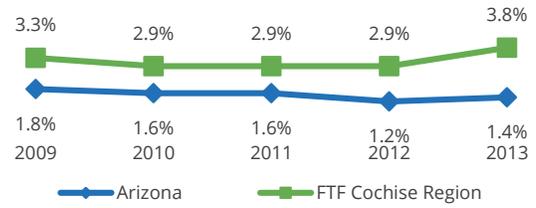


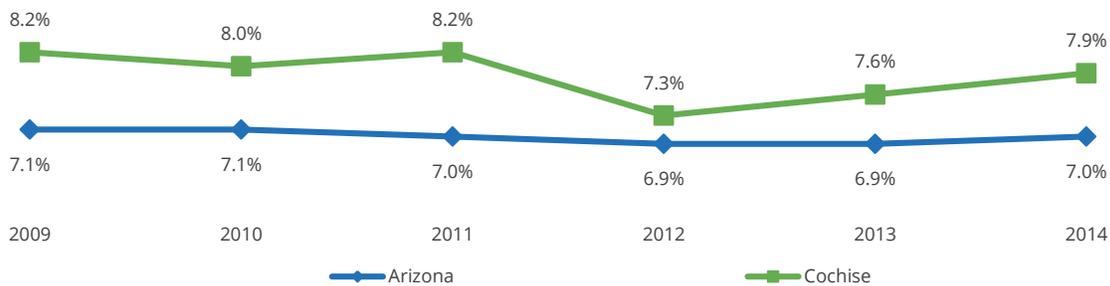
Exhibit 5.5. Percentage of women who did not receive any prenatal care



Arizona Department of Health Services (2014). Vital Statistics. Provided by AZ FTF.

In the FTF Cochise Region, the percentage of infants born with low-birth weight had decreased from 2009 to 2011. However, since then the number has slowly started to increase (see Exhibit 5.6). Additionally, the percentage of births with medical risks was on the rise between 2009 to 2013 (see Exhibit 5.7). In 2014, the definition of medical risk was modified to exclude cardiac disease, lung disease, and other medical conditions that were previously included, and therefore the rate dropped to 2 percent for the region and 18 percent for the state.⁷⁸ The percentage of infants born with abnormal conditions in the region decreased from 2009 to 2013, prior to the definition changing in 2014 (Exhibit 5.8). Over 90 percent of mothers in the FTF Cochise Region reported not drinking or smoking during their pregnancy, and the number of infants born with drug withdrawal symptoms stayed lower than 25 infants.⁷⁹ This indicates a high rate of public awareness about the risks of engaging in substances while pregnant.⁸⁰

Exhibit 5.6. Percentage of low-birth weight babies



Arizona Department of Health Services (2014). Vital Statistics. Provided by AZ FTF.

⁷⁸ Arizona Department of Health Services (2014). Vital Statistics. Provided by AZ FTF.

⁷⁹ Arizona Department of Health Services (2014). Vital Statistics. Provided by AZ FTF.

⁸⁰ Arizona Department of Health Services (2014). Vital Statistics. Provided by AZ FTF.

Exhibit 5.7. Percentage of births with medical risks*

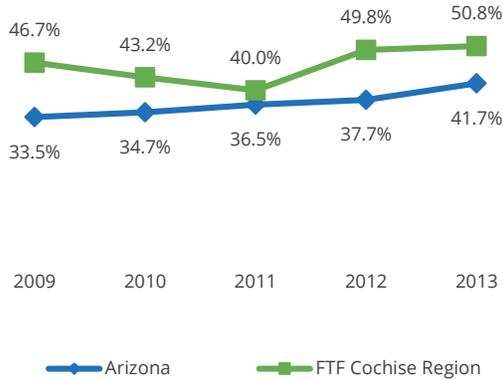
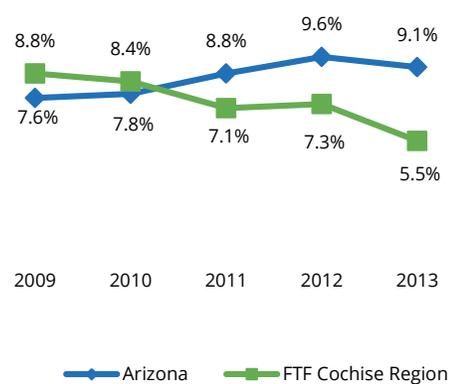


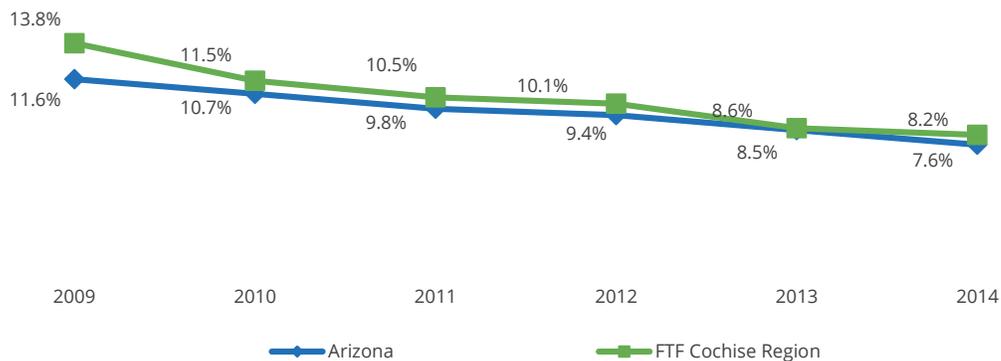
Exhibit 5.8. Percentage of infants born with abnormal conditions



Arizona Department of Health Services (2014). Vital Statistics. Provided by AZ FTF.
 *In 2014, Anemia, Cardiac disease, Lung disease and others were removed from the list of medical risks

Additional factors that place mothers at risk of not receiving prenatal care, such as teen pregnancy, unwed mothers, and mothers with lower education levels, have decreased or remained steady over the past few years. In the FTF Cochise Region, the percentage of teen mothers decreased from 2009 to 2014, though it was still slightly higher than the state (see Exhibit 5.9). The percentage of mothers who are not married remained stable from 2009 to 2014 and in 2014 was lower than the state (39% versus 46%).⁸¹ In addition, the high majority of mothers in the region (84%) have a high school education or more (see Exhibit 3.9). Additional details regarding child fatality and prenatal care are provided in Appendix 5.5–Appendix 5.13.

Exhibit 5.9. Percentage of mothers who were 19-years-old or younger



Arizona Department of Health Services (2014). Vital Statistics. Provided by AZ FTF.

⁸¹ Arizona Department of Health Services (2014). Vital Statistics. Provided by AZ FTF.

Obesity

Obesity has been a concern in the United States due to associated health outcomes, such as higher risk for diabetes, cancer, and heart disease.⁸² Diabetes has also been associated with many negative health complications, such as blindness, kidney failure, and amputation of limbs.⁸³

According to the College of Obstetricians and Gynecologists (ACOG), mothers who are obese during pregnancy are at risk of developing gestational diabetes, preeclampsia, and sleep apnea.⁸⁴ According to the CDC, diabetes and obesity can be prevented by increasing physical activity and by maintaining a healthy diet.⁸⁵ HP 2020 aims to reduce the proportion of adults who are obese to 30.5 percent and the proportion of children and adolescents who are obese to 14.5 percent.⁸⁶ In Cochise County, the percentage of adults with obesity has increased from 23 percent to 26 percent between the years 2004–2013 (see Exhibit 5.10). Within the same timeframe the percentage of adults with diabetes has increased from eight percent to 10 percent (see Exhibit 5.10).

Exhibit 5.10. Percentage of adults with obesity or diabetes in Cochise County



Centers for Disease Control and Prevention (2013). Diagnosed Diabetes.
Centers for Disease Control and Prevention (2013). Obesity.

In the FTF Cochise Region and the state as a whole, over 50 percent of mothers participating in WIC reported being overweight or obese pre-pregnancy in 2015 and that percentage has been increasing since 2012 (see Exhibit 5.11). As previously described, almost 40 percent of the population in Cochise County has low access to grocery stores, double the rate of the state (see Exhibit 2.11). Additionally, families participating in WIC are likely opting for less expensive food options, which tend also to be less healthy. Furthermore, there are very few recreation and fitness facilities, parks, and outdoor use facilities where the residents of Cochise can stay active.⁸⁷ The combination of having few grocery

⁸² Center for Disease Control and Prevention. (n.d.). Adult Obesity Facts. Retrieved from <https://www.cdc.gov/obesity/data/adult.html>

⁸³ Chronic Disease Prevention and Health Promotion. (n.d.). Diabetes At A Glance Reports. Retrieved from <http://www.cdc.gov/chronicdisease/resources/publications/aag/diabetes.htm>

⁸⁴ ACOG (2016). Obesity and Pregnancy. Retrieved from <http://www.acog.org/Patients/FAQs/Obesity-and-Pregnancy>

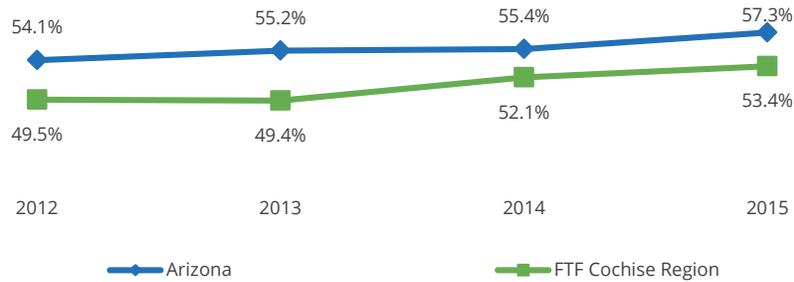
⁸⁵ Chronic Disease Prevention and Health Promotion. (n.d.). Diabetes At A Glance Reports. Retrieved from <http://www.cdc.gov/chronicdisease/resources/publications/aag/diabetes.htm>

⁸⁶ Healthy People 2020. About Health People Retrieved from <https://www.healthypeople.gov/2020/About-Healthy-People>

⁸⁷ United States Department of Agriculture and Economic Research Service (2012). Food Environment Atlas.

stores and places where residents can engage in fitness activities may contribute to the increasing percentages of mothers and children participating in WIC who are obese or have diabetes in the FTF Cochise Region. Head Start reports that 34 percent of children enrolled across the five southern Arizona counties, including Cochise, are considered overweight or obese.⁸⁸ Additional information regarding obesity and diabetes is provided in Appendices 5.14–5.16.

Exhibit 5.11. Percentage of mothers overweight or obese pre-pregnancy



Arizona Department of Health Services (2015). Women, Infants & Children (WIC). Provided by AZ FTF.

Engaging in Healthy Preventative Practices

The American Academy of Pediatrics recommends that mothers breastfeed for the first six months after giving birth.⁸⁹ Breast milk has antibodies that prevent babies from getting ill and it has been shown to decrease the likelihood of babies becoming obese.⁹⁰ In addition, vaccinations can protect children from measles, mumps, and whooping cough, which are severe illnesses currently still active today and are potentially fatal to young children.⁹¹ Further, receiving timely vaccinations is not only a protective factor to oneself, but to the community's immunity.⁹²

HP 2020 aims to increase the proportion of infants who are breastfed to six months to 60.6 percent.⁹³ In the FTF Cochise Region, breastfeeding rates among mothers participating in WIC have increased from 2012 to 2015. However, the regional rate was still about 10 percent lower than the state rate in 2014 (see Exhibit 5.12).

⁸⁸ Office of Head Start (2016). Head Start Data. Retrieved from: <https://hses.ohs.acf.hhs.gov/pir/>

⁸⁹ American Academy of Pediatrics (2012). Breastfeeding and the Use of Human Milk. Retrieved from <http://pediatrics.aappublications.org/content/129/3/e827.full#content-block>

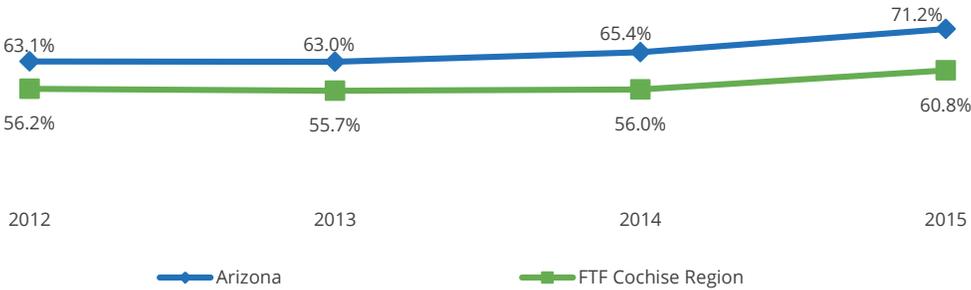
⁹⁰ Office on Women's Health (2014). Why breastfeeding is important. Retrieved from <https://www.womenshealth.gov/breastfeeding/breastfeeding-benefits.html>

⁹¹ Basic Vaccines (2016). Importance of Vaccines. Retrieved from <http://www.vaccineinformation.org/vaccines-save-lives/>

⁹² U.S Department of Health and Human Services (2016). Community Immunity. Retrieved from http://www.health.ny.gov/prevention/immunization/vaccine_safety/

⁹³ Healthy People 2020. About Health People Retrieved from <https://www.healthypeople.gov/2020/About-Healthy-People>

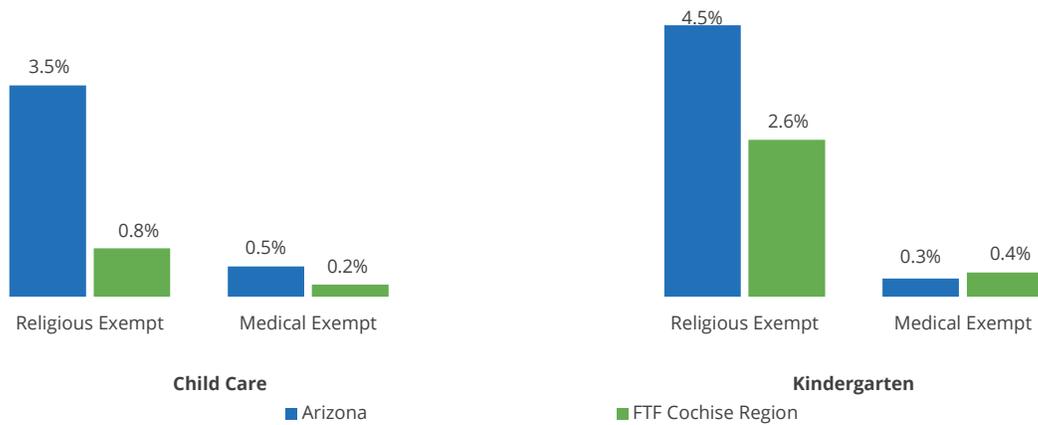
Exhibit 5.12. Percentage of mothers who breastfed their infant on average at least once a day



Arizona Department of Health Services (2015). Women, Infants & Children (WIC). Provided by AZ FTF.
*Breastfeeding is defined as the practice of feeding a mother's breast milk to her infant(s) on the average of at least once a day

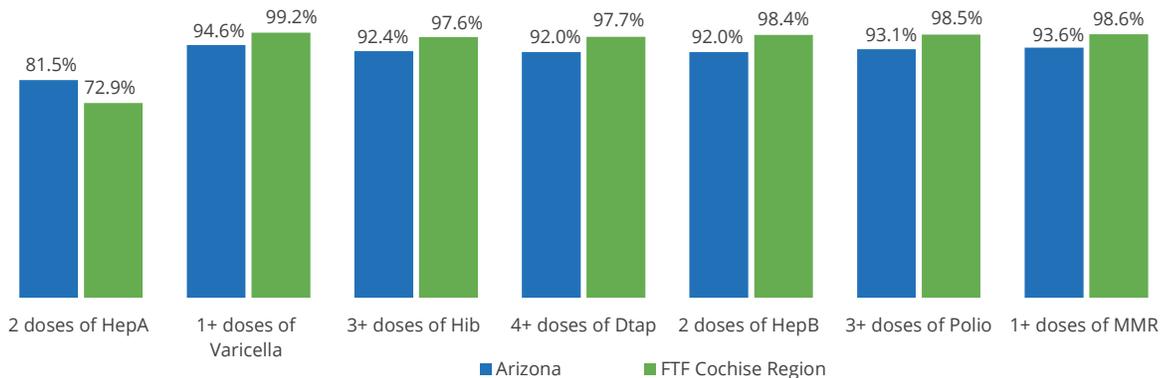
In the FTF Cochise Region, the rates of children who were exempt from immunizations for religious or medical reasons was lower than for the state overall (see Exhibit 5.13). Compared to the state, the FTF Cochise Region has higher rates of children in childcare who received Hib, DTaP, MMR, Hep B, and Polio immunizations (see Exhibit 5.14). This may be due to the provision of immunizations at local schools, which allows easy access to vaccinations without requiring lengthy travel or health insurance issues. Additional information regarding immunization data from Head Start is provided in Appendix 5.17.

Exhibit 5.13. Percentage of children in child care and kindergarten exempt from receiving immunizations



Immunization Data Reports (2015). Provided by AZ FTF.

Exhibit 5.14. Percentage of children in childcare receiving immunizations by type of immunization



Immunization Data Reports (2015). Provided by AZ FTF.

Oral Health

Severe forms of tooth decay can have negative effects on a child's speech and jaw development, can cause malnourishment or anemia, and may lead to life-threatening infections.^{94,95} Fortunately, tooth decay is also one of the most preventable diseases. It can be prevented by using fluoridated water, by brushing and flossing teeth, by taking a child to see a dentist regularly starting by the age of one, and by mothers practicing good oral health care during pregnancy.

The Healthy Smiles Healthy Bodies Survey was designed to obtain information on the prevalence and severity of tooth decay among Arizona's kindergarten children.⁹⁶ In addition, the survey collected information on behavioral and demographic characteristics associated with this condition. Healthy Smiles Healthy Bodies included the following primary components: (1) a dental screening and (2) an optional parent/caregiver questionnaire. During the 2014–2015 school year, Healthy Smiles Healthy Bodies collected information from children at 84 non-reservation district and charter schools throughout Arizona.⁹⁷ A total of 3,630 kindergarten children in Arizona received a dental screening. In the FTF Cochise Region, 165 children received a dental screening. The parent/caregiver questionnaire was optional and was returned for only 44% (N= 1,583) of the children screened. Because of this, information obtained from the questionnaire may not be representative of the state or region.

Healthy Smiles Healthy Bodies sampled children in kindergarten and third grade. District and charter elementary schools with at least 20 children in kindergarten were included in the sampling frame. The following were excluded from the sampling frame: (1) alternative, detention, and state schools for the deaf and the blind; and (2) schools located in tribal communities (based on the ADHS list of tribal communities). To ensure a representative sample from every county and FTF region, the sampling frame was initially stratified by county. Where a county included more than one FTF region (Maricopa and Pima), the sampling frame was further stratified by FTF region. This resulted in 21 sampling strata, 13 county-level strata, two FTF strata within Pima County, and six FTF strata within Maricopa County. Within each stratum, schools were ordered by their National School Lunch Program (NSLP) participation rate. A systematic probability proportional to size sampling scheme was used to select a sample of five schools per stratum.⁹⁸

Although the original sample was representative of the state, not all schools participated, which may bias the results. The percentage of children eligible for the NSLP was 58% for schools in the sampling frame but was 72% for schools that participated, suggesting that lower income schools were more likely to participate. Given that lower income children have more disease, this survey may overestimate the prevalence of disease in the non-tribal communities in the state. Another limitation was the exclusion of tribal communities, resulting in small sample sizes for the American Indian and Alaska Native population.

⁹⁴ National Children's Oral Health Foundation (2015). *Facts About Tooth Decay*. Retrieved from <http://www.ncohf.org/resources/tooth-decay-facts/>

⁹⁵ Raising Children Network. (n.d.). *Tooth decay*. Retrieved from http://raisingchildren.net.au/articles/tooth_decay.html

⁹⁶ Using another funding source, ADHS expanded data collection to include 3rd grade children but that information is not included in this report.

⁹⁷ Schools serving children with special needs and schools located in tribal communities were excluded.

⁹⁸ Probability proportional to size sampling: a sampling technique where the probability that a particular school will be chosen in the sample is proportional to the enrollment size of the school

The parent/caregiver questionnaire was optional and was returned for only 44% (N=1,583) of the children screened. Because of this, information obtained from the questionnaire may not be representative of the state. In addition, the information was self-reported and may be affected by both recall and social desirability bias. Because of small sample sizes, caution should be taken when interpreting results at the regional and county level.

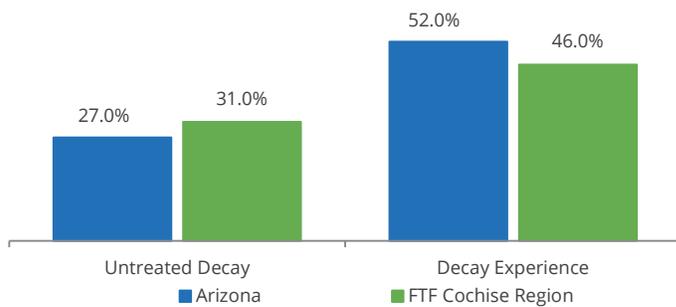
In the FTF Cochise Region, 80 percent of survey respondents reported having some type of dental insurance, which is four percent higher than the state (76%).⁹⁹ Of the Healthy Smiles Healthy Bodies respondents, almost half (48%) had AHCCCS insurance yet many (22%) were unaware that AHCCCS includes dental benefits for their children.¹⁰⁰



73% of parents indicated their child(ren) regularly visited the same dental provider.

Additionally, nearly three fourths (73%) of Family and Community Survey respondents reported that they regularly take their children to dental visits.¹⁰¹ However, about 50% of the children screened in the Healthy Smiles Healthy Bodies survey still suffer from tooth decay (see Exhibit 5.15). Further, in 2014, about half of the residents living in Arizona did not have access to fluoridated public water systems.¹⁰² Additional information regarding oral health from Head Start is provided in Appendix 5.18.

Exhibit 5.15. Percentage of children who have experienced tooth decay



Arizona First Things First (2016). Oral Health Report.

⁹⁹ Arizona First Things First (2016). Oral Health Report.

¹⁰⁰ Ibid.

¹⁰¹ Arizona First Things First (2012). Family and Community Survey.

¹⁰² Fluoride Action Network (2014). State Fluoride Database. Retrieved from <http://fluoridealert.org/researchers/states/arizona/>

HEALTH HIGHLIGHTS

The rural nature of the FTF Cochise Region presents some challenges around accessing needed healthcare and maintaining healthy lifestyles. The ratio of population to health care providers is high, indicating a limited availability of physicians, which may be related to the decrease in early prenatal care. Additionally, the lack of access to grocery stores and fitness facilities may contribute to the increasing rates of obesity and diabetes in the area. On the other hand, the region is performing higher than the state in healthy preventative practices, such as breastfeeding and immunizations, perhaps due to education around the value of breastfeeding and programs that provide immunizations in schools.

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

Assets	Considerations
Almost all children in childcare in the region are receiving immunizations.	Continue to promote and raise awareness regarding immunizations within schools and other convenient locations to reduce barriers to accessing immunizations.

Needs	Considerations
The region has a higher ratio of population-to healthcare providers than the state, indicating limited access to healthcare.	Work with partners in the region to attract and retain healthcare providers to the region and engage in supporting infrastructure for tele-health services.
Almost three fourths (73%) of parents who completed the FTF Family and Community Survey are unaware of the impact they have on their child’s development during the prenatal stage.	Provide more outreach and education regarding prenatal care, especially targeting first-time and teen mothers.
Almost half of children whose parents completed the Healthy Smiles Healthy Bodies survey (46%) have experienced tooth decay, and 31% of children had untreated tooth decay.	Promote oral health services and education, to inform parents of the importance of early oral healthcare.



6. Family Support and Literacy

Why It Matters

The first five years of life have a significant impact on children's intellectual, social, and emotional development, and research shows that parents have a profound impact on their child's development during this time.¹⁰³ Support for young families is an essential piece of the holistic efforts around kindergarten readiness and long-term success for children. FTF supports families through home visitation and parent outreach and education programs. Evidence-based parenting education and supports to improve parenting practices can reduce stressors and can lead to enriched child development and reduction of removals of children from their homes.

Given the importance of the first years of life on children's development, it is crucial that parents understand their child's needs and use effective parenting techniques while raising their child. Gaining more knowledge about parenting and child development allows parents to improve their parenting practices and to provide their children with the experiences they need to succeed in kindergarten and beyond.¹⁰⁴

Furthermore, the adverse effects of the trauma accrued from children being removed from their parents and placed in foster care are well-documented. Early abuse and neglect have been shown to affect neuro- and psychosocial development and potentially impacts long-term mental, medical, and social outcomes.¹⁰⁵ Children exposed to domestic violence, or who are the victims of abuse or neglect, are also at increased risk of experiencing depression and anxiety and are more disposed to physical aggression and behavior problems.¹⁰⁶

Understanding the impact of trauma has led to identifying opportunities to both prevent and mitigate these adverse effects through family support services, such as home visitation and parent education, and by prioritizing out-of-home placements with family members or foster families before congregate care. Given the negative outcomes associated with children who enter the system or are exposed to trauma or violence at a young age, it is important to understand the prevalence of these experiences in the Cochise Region to provide the necessary support to children and their families.

What the Data Tell Us

Parent Knowledge

In 2012, FTF developed and administered a phone-based survey for parents and caregivers throughout the state to better understand parents' knowledge of parenting practices and child development. The Family and Community Survey was designed to measure many critical areas of parent knowledge, skills, and behaviors related to their young children. The survey contained over 60 questions, some of which were drawn from the national survey, What Grown-Ups Understand About Child

¹⁰³ Center for the Study of Social Policy (2013). *Knowledge of Parenting and Child Development*. Retrieved from http://www.cssp.org/reform/strengthening-families/2013/SF_Knowledge-of-Parenting-and-Child-Development.pdf

¹⁰⁴ Center for the Study of Social Policy (2013). *Knowledge of Parenting and Child Development*. Retrieved from http://www.cssp.org/reform/strengthening-families/2013/SF_Knowledge-of-Parenting-and-Child-Development.pdf

¹⁰⁵ Putnam, F. (2006). *The impact of trauma on child development*. *Juvenile and Family Court Journal*, 57 (1) 1-11.

¹⁰⁶ Evans, S. E., Davies, C., & DiIillo, D. (2008). *Exposure to domestic violence: A meta-analysis of child and adolescent outcomes*. *Aggression and violent behavior*, 13(2), 131-140.

Development.¹⁰⁷ Survey items explored multiple facets of parenting. The FTF Family and Community Survey had six major areas of inquiry, including:

- Early childhood development,
- Developmentally appropriate child behavior,
- Child care and sources of parenting advice and support,
- Family literacy activities,
- Perceptions of early childhood services, and
- Perceptions of early childhood policies.

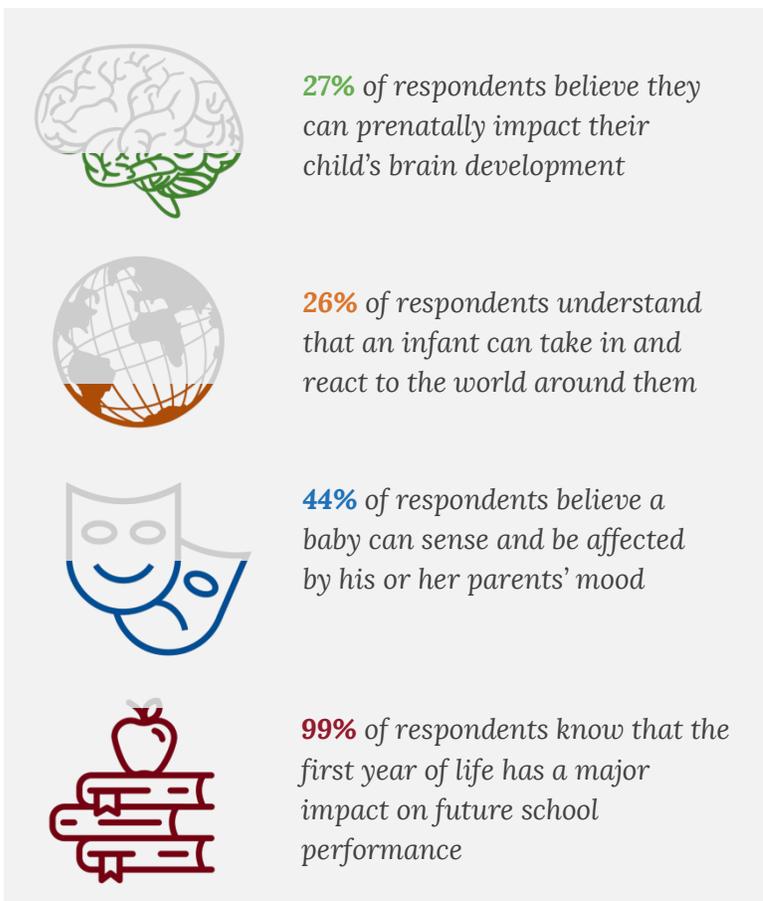
A total of 3,708 parents with children under six (FTF's target population) responded to the survey. The majority of respondents (83%) were the child's parent. The remaining respondents were grandparents (13%) or other relatives (4%). In the FTF Cochise Region, 145 parents participated in the survey.

The sample data were weighted so that the sample would match the population of the state on four characteristics, including family income, educational attainment, sex, and race/ethnicity. Data were weighted at both the statewide level, to arrive at the Arizona results, and at the regional level, to arrive at the regional results. Please note that regional estimates are necessarily less precise than the state estimates (i.e., small differences observed may be due to sampling variability).

¹⁰⁷ CIVITAS Initiative, ZERO TO THREE, and BRIO Corporation, Researched by DYG, Inc. 2000. *What Grown-ups Understand About Child Development: A National Benchmark Survey*. Online, INTERNET, 06/20/02.
http://www.civitasinitiative.com/html/read/surveypdf/survey_public.htm

As discussed in the health chapter, less than one third (27%) of respondents in the FTF Cochise Region understand they can significantly impact their child's brain development prenatally, compared to 32 percent of respondents statewide. Similarly, results also show that 26 percent of respondents in the region understand that an infant can take in and react to the world around them right from birth, compared to 35 percent in Arizona. Less than half of respondents in the region (44%) understand that a baby can sense whether or not his or her parent is depressed or angry and can be affected by his parents' mood from birth to one month. Almost all respondents in the region (99%) understand that the first year of life has a major impact on school performance, which is 16 percent higher than statewide.¹⁰⁸ This indicates that while most parents may

understand the importance of early child development, survey results indicate that not all parents are aware of all the stages of development and the impact they have on their child, beginning prenatally.



¹⁰⁸ Arizona First Things First (2012). Family and Community Survey.

Over three-quarters of respondents in the state of Arizona (77%) and FTF Cochise Region (78%) understand that a child’s capacity for learning is not set from birth and can be increased or decreased by parental interaction. Survey results also show that over half of respondents (58%) understand that children receive a greater benefit from talking to a person in the same room compared to hearing someone talk on the TV. Additionally, 99 percent of respondents in the FTF Cochise Region understand emotional closeness can strongly influence a child’s intellectual development, which is three percent higher than the state.¹⁰⁹



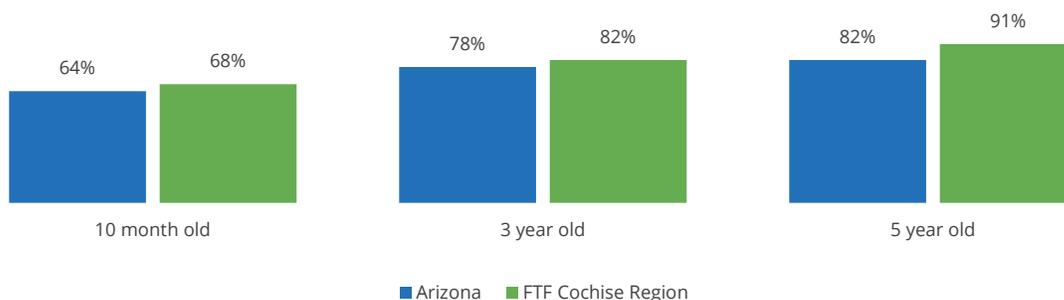
78% of respondents understand that parental interaction impacts a child’s capacity for learning

58% of respondents know that children receive a greater benefit from talking to a person than hearing someone on TV

99% of respondents believe that emotional closeness can strongly influence a child’s intellectual development

In the FTF Cochise Region, parents also understand the importance of play for young children of all ages. Over two-thirds of respondents (68%) recognize the crucial importance of play for children 10 months old, more than 80 percent understand that play is important for three-year-olds, and more than 90 percent understand that play is important for five-year-olds. All of these are higher in the FTF Cochise Region than the state (see Exhibit 6.1).

Exhibit 6.1. Percentage of respondents that understand the crucial importance of play for children of different ages



Arizona First Things First (2012). Family and Community Survey.

¹⁰⁹ Arizona First Things First (2012). Family and Community Survey.

About 60 percent of respondents in the FTF Cochise Region reported either reading, drawing, or telling stories or singing songs to their children six or seven days a week.¹¹⁰ About 40 percent of parents in the FTF Cochise Region indicated that they have more than 100 books in their home, and 20 percent reported having 100 or more children's books in their home. Both of these numbers are 10 percent lower than the statewide numbers.¹¹¹

61%

of respondents correctly said a 15-month-old should not be expected to share her toys with other children.

72%

of respondents correctly said a three-year-old should not be expected to sit quietly for an hour or so.

39%

of respondents correctly thought a six-month-old is too young to spoil.

Read stories to your child/children



36% 1–5 days a week
56% 6 or 7 days a week

Scribble, pretend to draw or draw



27% 1–5 days a week
66% 6 or 7 days a week

Tell stories or sing songs



38% 1–5 days a week
59% 6 or 7 days a week

The FTF Family and Community Survey also asked respondents about their understanding of age appropriate behaviors and expectations for children. A series of questions asked about a scenario where a child walks up to the TV and begins to turn the TV on and off repeatedly. More than 90 percent of respondents in the region correctly identified that this behavior likely means that the child wants to get his or her parents' attention or enjoys learning about what happens when buttons are pressed. Additionally, 86 percent correctly responded that it is not at all likely that the child is angry at his or her parents (see Exhibit 6.2).

¹¹⁰ Arizona First Things First (2012). Family and Community Survey.

¹¹¹ Arizona First Things First (2012). Family and Community Survey.

Exhibit 6.2. Parent understanding of child behaviors in the FTF Cochise Region

If a child walks up to the TV and begins to turn the TV on and off repeatedly, how likely is it that...	Very likely	Somewhat likely	Not at all likely	Not sure
The child wants to get his or her parents' attention	63%	33%	4%	0%
The child enjoys learning about what happens when buttons are pressed	52%	46%	1%	0%
The child is angry at his or her parents for some reason or is trying to get back at them	1%	12%	86%	1%

Arizona First Things First (2012). Family and Community Survey.

The FTF Family and Community Survey also assessed parent or caregiver perceptions around developmentally appropriate behaviors. About 60 percent of survey respondents in the region correctly responded that a 15-month-old baby should not be expected to share her toys with other children, and more than 70 percent correctly responded that a three-year-old child should not be expected to sit quietly for an hour or so. Although more than half of respondents correctly identified appropriate behaviors for children, less than half (39%) correctly responded that a six-month-old is too young to spoil. Just over half of respondents correctly identified that picking up a three-month-old every time she cries, and letting a two-year-old get down from the dinner table to play before the rest of the family is finished, as appropriate behavior (see Exhibit 6.3).

Exhibit 6.3. Parent understanding of appropriate and spoiling behavior with their child in the FTF Cochise Region

Please rate the following behavior, on the part of a parent or caregiver, as appropriate, or as something that will likely spoil a child, if done too often	Appropriate	Will likely spoil the child	Not sure
Picking up a three-month-old every time she cries	56%	41%	3%
Letting a two-year-old get down from the dinner table to play before the rest of the family	52%	41%	7%
Letting a five-year-old choose what to wear to school every day	81%	9%	11%

Arizona First Things First (2012). Family and Community Survey.

Child Safety and Domestic Violence

Maltreatment of children during early childhood has been shown to negatively affect child development, including cognitive development, attachment, and academic achievement.¹¹² Research shows that family support services, like home visiting, can improve parenting skills and home environments, which are likely associated with improved child well-being and decreases in maltreatment over time.¹¹³

From October 2014 to September 2015 there were 847 reports of maltreatment of children under age 18 in Cochise County.¹¹⁴ Of those, 35 cases of child abuse and neglect were substantiated (i.e., determined to be true), by the Department of Child Services, with the majority of these being neglect cases (see Exhibit 6.4). During the same period there were 18,657 children under 18 already in foster placements in Arizona and 12,754 children under 18 who entered out-of-home care, such as foster care, kinship care, or residential and group care, including 135 in Cochise County (see Exhibit 6.5).

Exhibit 6.4 Substantiated cases of child abuse and neglect for children under 18 between Oct 2014 to Sept 2015

	Arizona	Cochise County
Total	5,461	35
Neglect	4,619	31
Physical abuse	712	3
Sexual abuse	125	1
Emotional abuse	5	0

Arizona Department of Child Services (2015). *Child Welfare Reporting Requirements Semi-Annual Report*. Retrieved from https://dcs.az.gov/sites/default/files/SEMIANNUAL-CHILD-WELFARE-REPORTING-REQUIREMENTS-4-15-9-15_FINAL-Revised.pdf

¹¹² Child Welfare Information Gateway. Retrieved from <https://www.childwelfare.gov/topics/can/impact/development/>

¹¹³ Howard, K.& Brooks-Gunn, J. (2009). *The Role of Home-Visiting Programs in Preventing Child Abuse and Neglect*. *The Future of Children* 19 (2) 119-146.

¹¹⁴ Arizona Department of Child Services (2015). *Child Welfare Reporting Requirements Semi-Annual Report*. Retrieved from https://dcs.az.gov/sites/default/files/SEMIANNUAL-CHILD-WELFARE-REPORTING-REQUIREMENTS-4-15-9-15_FINAL-Revised.pdf

Exhibit 6.5 Children under 18 in foster placements and number who entered out-of-home care between Oct 2014 to Sept 2015

	Arizona	Cochise County
Children under 18 in foster placements	18,657	**
Children under 18 entering out-of-home care	12,754	135

****Data not available at County level**

Arizona Department of Child Services (2015). *Child Welfare Reporting Requirements Semi-Annual Report*. Retrieved from https://dcs.az.gov/sites/default/files/SEMIANNUAL-CHILD-WELFARE-REPORTING-REQUIREMENTS-4-15-9-15_FINAL-Revised.pdf

In Cochise County there are two domestic violence shelters and in 2015 they served a total of 222 people and provided over 700 hours of support services (see Exhibit 6.6). There were also 1,001 arrests for domestic violence. The zip codes of 85626 and 85607 had the highest rates of domestic violence arrests in the county, with more than one domestic violence arrest per 100 people (see Exhibit 6.7). Exhibit 6.8 maps the percent of domestic violence arrests out of all arrests by zip code. The zip codes with the highest percentages of domestic violence arrests were 85615, 85626, 85607, 85625, 85609, 85650, and 85608.

Exhibit 6.6 Domestic violence shelters, people served, and hours of support services provided

	Arizona	Cochise County
Number of domestic violence shelters	31	2
Number of adults served	3,862	115
Number of children served	3,705	107
Hours of support services provided	144,025	722
Average length of stay in emergency shelter (days)	39	45

Arizona Department of Economic Security (2015). Domestic Violence Shelter Fund Report. Retrieved from <https://des.az.gov/services/basic-needs/domestic-violence-program>

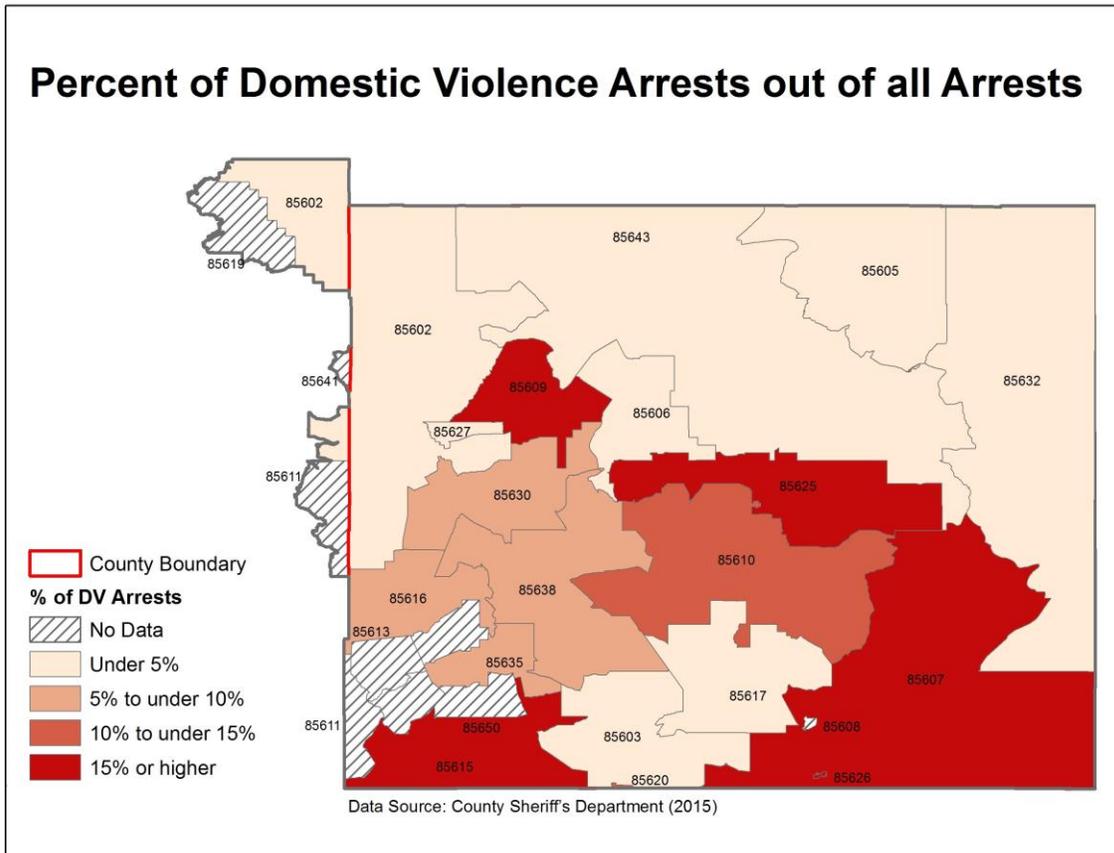
Exhibit 6.7 Domestic violence arrests in Cochise County for 2015

Zip Code*	Population	Number of domestic violence arrests	Domestic violence arrests per 100 people	Domestic violence arrests out of all arrests
Cochise County	131,346	1,001	0.76	10.1%
85602 - Benson	8,912	11	0.12	3.4%
85607 - Douglas	17,229	226	1.31	16.8%
85615 - Hereford	9,481	31	0.33	26.7%
85616 - Huachuca City	5,403	22	0.41	9.2%
85625 - Pearce	1,602	11	0.69	16.4%
85626 - Pirtivelle	867	21	2.42	24.1%
85635 - Sierra Vista	35,850	53	0.15	9.0%

Cochise County Sheriff's Department. August 2016.

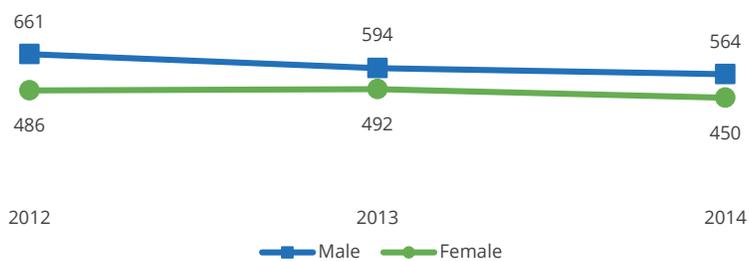
*Zip Codes with counts of less than 10 are not reported in this table but are included in the Cochise County totals.

Exhibit 6.8 Map of domestic violence arrests in Cochise County for 2015



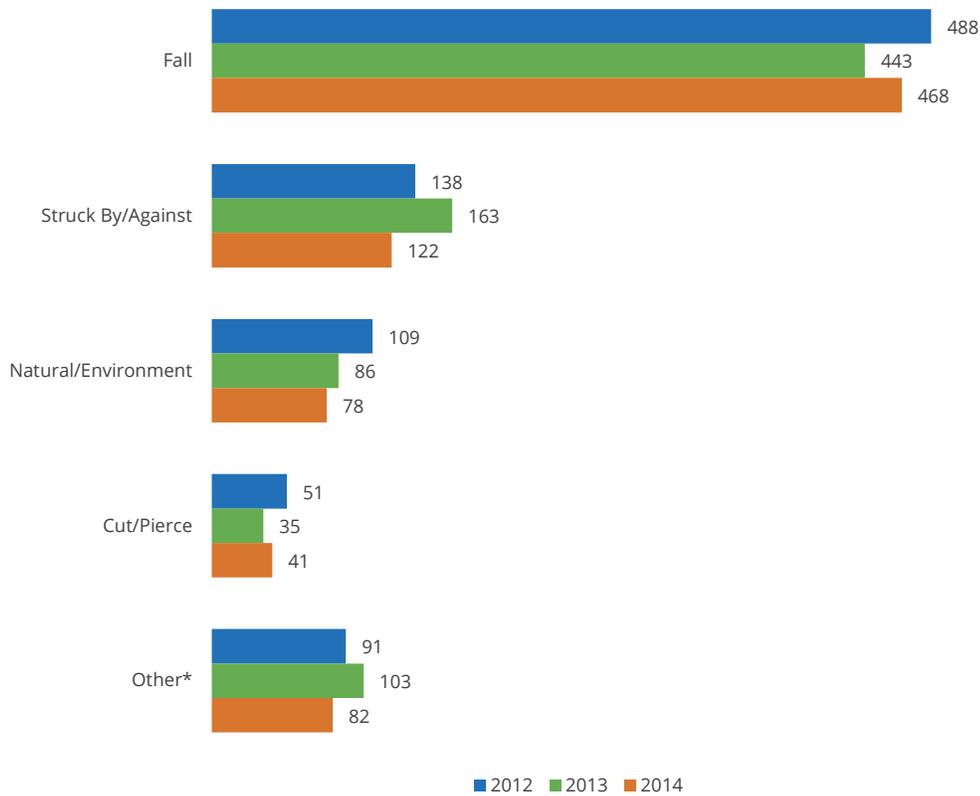
The number of children birth to five years old in the region that went to the emergency department for a non-fatal injury decreased from 2012 to 2014. During this time period male children were more likely to be injured than female children, and the most common reasons for visiting the emergency department were falls and being struck by or against an object (see Exhibit 6.9 and Exhibit 6.10).

Exhibit 6.9. Non-fatal emergency department visits for children 0–5 in the FTF Cochise Region



Arizona Department of Health Services (March 2016). Unintentional Injuries in Children 0–5, Arizona 2012–2014. Provided AZFTF

Exhibit 6.10. Non-fatal emergency department visits by type of injury for children birth to five years old in the FTF Cochise Region

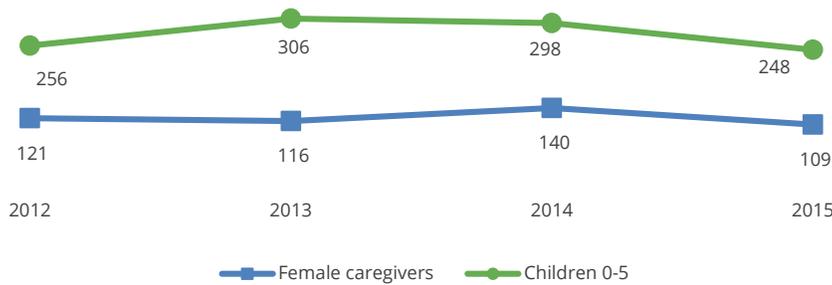


Arizona Department of Health Services (March 2016). Unintentional Injuries in Children 0-5, Arizona 2012-2014. Provided AZFTF
 *Other types of injury include Fire/Hot object, Motor Vehicle, Pedal-Cycle and Poisoning

Behavioral Health Services

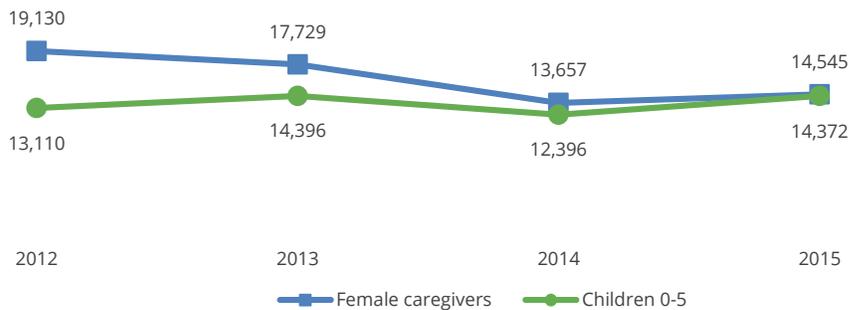
Behavioral health focuses on the promotion of family well-being through the prevention or intervention of mental health issues, such as depression or addiction. Children of parents with mental health issues often grow up in inconsistent and unpredictable family environments and are at risk for developing social, emotional, and/or behavioral problems.¹¹⁵ The behavioral health services discussed in this section include behavioral health day programs, crisis intervention services, inpatient services, medical services, rehabilitation services, support services, and treatment services. In the FTF Cochise Region, over 100 female caregivers and nearly 250 children under six received behavioral health services from the ADHS in 2015. Exhibit 6.11 and Exhibit 6.12 show how the number of female caregivers and children receiving services has varied over the years in the region and statewide.

Exhibit 6.11 Number of female caregivers and children receiving behavioral health services in the FTF Cochise Region



Arizona Department of Health Services (2014). Behavioral Health. Provided by AZ FTF.

Exhibit 6.12 Number of female caregivers and children receiving behavioral health services in Arizona



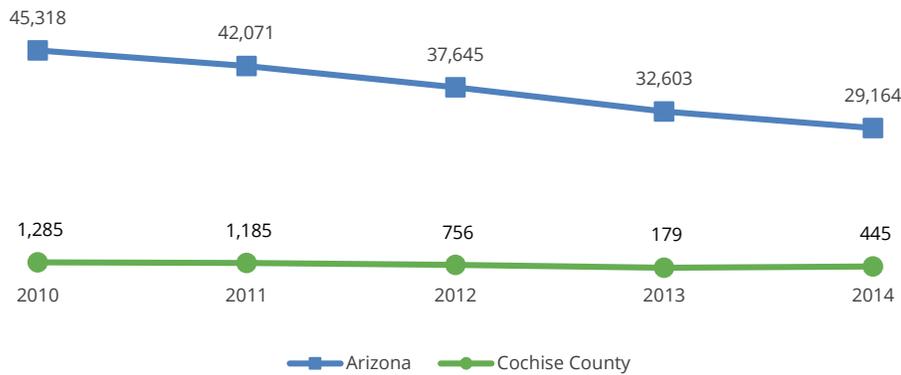
Arizona Department of Health Services (2014). Behavioral Health. Provided by AZ FTF.

¹¹⁵ Mental Health America. Retrieved from <http://www.mentalhealthamerica.net/parenting>

Juvenile Arrests and Substance Use

The number of juvenile arrests for children ages 8 to 17 decreased drastically from 2010 to 2014, falling by 65 percent for Cochise County and 36% for the state (see Exhibit 6.13). See Appendices 6.1–6.2 for additional information on the type and number of arrests for Arizona.

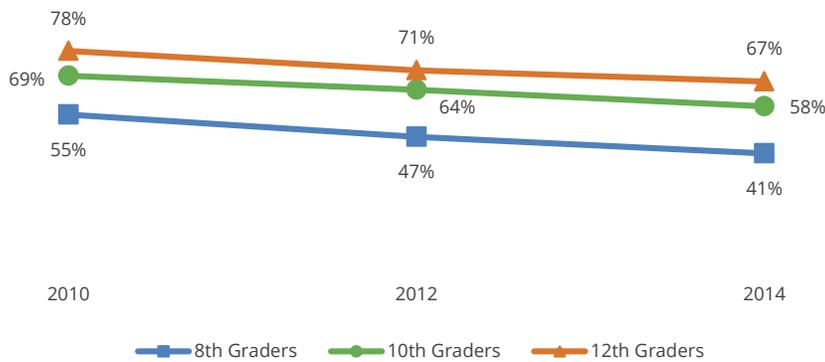
Exhibit 6.13. Arrests of children ages 8 to 17



Kids Count Data Center (2014). Juvenile Arrests. Retrieved from <http://datacenter.kidscount.org/>

In Cochise County, the use of alcohol and cigarettes among adolescents has shown a steady decline from 2010 to 2014. In 2014, 67 percent of twelfth graders reported using alcohol compared to 78 percent in 2010 and, in 2014, 43 percent of twelfth graders reported using cigarettes compared to 60 percent in 2010 (see Exhibit 6.14 and Exhibit 6.15). While use of alcohol and cigarettes among adolescents has shown a consistent decline in recent years, marijuana usage rates have not shown a consistent trend. In 2014, 35 percent of twelfth graders in the county reported using marijuana (see Exhibit 6.16).

Exhibit 6.14. Alcohol use by adolescents in Cochise County



Arizona Criminal Justice Commission (2014) Arizona Youth Survey State Report. Retrieved from <http://www.azcjc.gov/acjc.web/sac/ays.aspx>

Exhibit 6.15. Cigarette use by adolescents in Cochise County



Arizona Criminal Justice Commission (2014) Arizona Youth Survey State Report. Retrieved from <http://www.azcjc.gov/acjc.web/sac/ays.aspx>

Exhibit 6.16. Marijuana use by adolescents in Cochise County



Arizona Criminal Justice Commission (2014) Arizona Youth Survey State Report. Retrieved from <http://www.azcjc.gov/acjc.web/sac/ays.aspx>

FAMILY SUPPORT AND LITERACY HIGHLIGHTS

Parents in the FTF Cochise Region who responded to the Family and Community Survey exhibited a high understanding of the impact of the first year of life on future school performance, the importance of play, and the impact of emotional closeness on a child’s intellectual development. The majority of respondents also reported that they engage their child in activities like reading, drawing, or singing six or seven days a week. However, only a quarter of respondents understood that parents can significantly impact their child’s brain development prenatally and that infants can react to the world around them right from birth. About half of respondents correctly identified developmentally appropriate behaviors. In Cochise County there were 35 substantiated cases of abuse or neglect from October 2014 to September 2015 and 135 children under 18 entered out-of-home care.

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

Assets	Considerations
The majority of parents understand the importance of play and engage in activities with their child almost every day.	Promote and raise awareness to educate parents on the importance of play and engaging in developmentally stimulating activities with their children daily.
There were less than 50 substantiated cases of abuse or neglect in FY 2014–2015 and the number of arrests for children 8 to 17 has decreased substantially in recent years.	Continue to promote safe environments for families and adolescents in the region.

Needs	Considerations
Parent knowledge of child development is lower in the FTF Cochise Region than statewide.	Consider supporting community education campaigns to increase awareness of parents’ impact on their child’s development, especially starting in the prenatal stage.



7. Communication, Public Information, and Awareness

Why It Matters

In fiscal year 2016 FTF granted more than \$30 million, 25 percent of their expenditures, to strengthening families and early literacy programs. These programs play a vital role in supporting families and children in overcoming many of the barriers to health and well-being that are described in the previous sections of this report. Understanding parent knowledge and perception of services is important for informing improvements to service delivery and the structure of programs, and to making them more accessible for families. Additionally, knowing where there are gaps in parent knowledge allows for more targeted public awareness campaigns.

Public awareness of the importance of early childhood development and health is a crucial component of efforts to build a comprehensive and effective early childhood system in Arizona. Building public awareness and support for early childhood is a foundational step that can impact individual behavior and the broader objectives of system building. For the general public, information and awareness is the first step to taking positive action in support of children ages zero to five, whether that is by influencing others and sharing information they have learned within their networks or by taking higher-level action, such as elevating the public discourse on early childhood and encouraging increased support for programs and services that impact young children. For parents and other caregivers, awareness is the first step toward engaging in programs or behaviors that will better support their child's health and development.

Unlike marketing or advocacy campaigns, which focus on getting a narrowly defined audience to take short-term action, communications efforts to raise awareness of the importance of early childhood development and health focus on changing what diverse people across Arizona value, providing them with multiple opportunities over an extended time to act on that commitment.

There is no one single communications strategy that will achieve the goal of making early childhood an issue that more Arizonians 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 earned media, to grassroots, community-based tactics, such as community outreach—will ensure that diverse audiences, wherever they are, are reached more effectively across multiple mediums.

Other communications strategies include consistent strategic messaging, brand awareness, community awareness tactics, such as distribution of collateral and sponsorship of community events, social media, and paid media, which include both traditional and digital advertising. Each of these strategies alone cannot achieve the desired outcome of a more informed community, so a thoughtful and disciplined combination of multiple information delivery vehicles is required. The depth and breadth of these elements are designed to ensure multiple touch-points and message saturation for diverse audiences that include families, civic organizations, faith communities, businesses, policymakers, and more. This chapter of the report provides an overview of the status of communication, public information, and awareness in the FTF Cochise Region.

What the Data Tell Us

Since state fiscal year 2011, FTF has led a collaborative, concerted effort to build public awareness and support across Arizona, employing the integrated communications strategies listed above.

Results of these statewide efforts from SFY2011 through SFY2016 include:

- More than 2,000 formal presentations to community groups, which shared information about the importance of early childhood;
- Nearly 230 tours of early childhood programs to show community members and community leaders in-person how these programs impact young children and their families;
- Training of almost 8,700 individuals in using tested, impactful early childhood messaging and how to best share that message with others;
- The placement of more than 2,400 stories about early childhood in media outlets statewide;
- Increased digital engagement through online platforms for early childhood information, with particular success in the growth of FTF Facebook page likes, which grew from just 3,000 in 2012 to 124,000 in 2016;
- Statewide paid media campaigns on the importance of early childhood from FY2010 through FY2015, including through traditional advertising such as television, radio, billboards, and digital marketing. These broad-based campaigns generated millions of media impressions over that time frame. For example, in FY15 alone the media campaign yielded over 40 million media impressions.

In addition, FTF began a community engagement effort in SFY2014 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 that fund the FTF community outreach strategy. This effort focuses on engaging individuals across sectors—including business, faith, K-12 educators, and early childhood providers—in the work of spreading the word about the importance of early childhood. These are trusted, credible messengers in their communities. FTF characterizes these individuals, depending on their level of involvement, as friends, supporters, and champions. Friends are stakeholders who have a general awareness of early childhood development and health and agree to receive more information and to stay connected through regular email newsletters. Supporters have been trained in early childhood messaging and are willing to share that information with their personal and professional networks. Champions are those who have been trained and are taking the most active role in spreading the word about early childhood.

Supporters and champions in the engagement program reported a total of 1,088 positive actions taken on behalf of young children throughout Arizona as of the end SFY2016. These actions range from sharing early childhood information at community events, writing letters to the editor to connect parents to early childhood resources, and more. The text box below shows total recruitment of individuals in the tiered engagement program through SFY2016.

In addition to these strategic communications efforts, FTF has also led a concerted effort of policymaker awareness-building throughout the state. This effort includes meeting with all members of the legislature to build their awareness around the importance of early childhood. FTF sends emails to all policymakers that provide information on the impact of early childhood investments, such as the FTF annual report, and has also instituted a quarterly email newsletter for policymakers and their staff with the latest news regarding early childhood.

Furthermore, the Arizona Early Childhood Alliance—comprised of early childhood system leaders like FTF, the United Ways, Southwest Human Development, Children’s Action Alliance, Read On Arizona, Stand for Children, Expect More Arizona, and the Helios Foundation—represent the united voice of the early childhood community in advocating for early childhood programs and services.

Finally, FTF recently launched enhanced online information for parents of young children, including the more intentional and strategic placement of early childhood content and resources in the digital platforms that today’s parents frequent. Future plans for this parenting site include a searchable database of early childhood programs funded in all regions, as well as continuously growing the amount of high-quality parenting content available on the site being “pushed out” through digital sources.

Parent Knowledge and Perception of Services

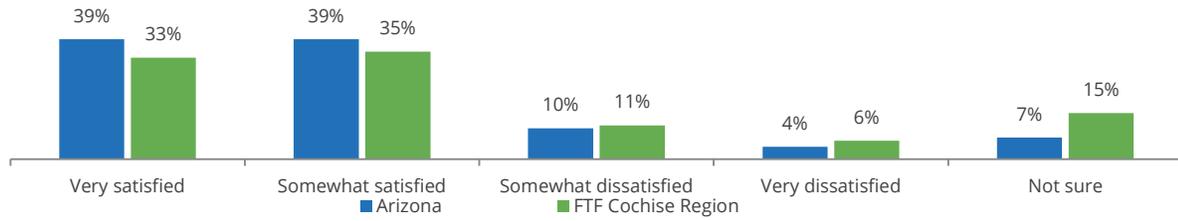
To better understand parents’ and families’ knowledge and perception of the services available to them and their children in their community, FTF’s Family and Community survey asked parents about their satisfaction with and perception of services and programs. The FTF Family and Community Survey included questions intended to capture parents’ and families’ perceptions and knowledge of the services available to them and their children in their community. In the FTF Cochise Region 145 people responded to the survey. The data presented in this section describe the results of this section of the survey.

The majority of respondents in both Arizona and the FTF Cochise Region reported being either “very” or “somewhat” satisfied (78% and 68%, respectively) with the community information and resources available to them about children’s development and health, although satisfaction levels were slightly lower in the FTF Cochise Region than in the state as a whole (see Exhibit 7.1).

First Things First
engagement of early childhood
supporters in Arizona, SFY2014
through SFY2016.

- 21,369 Friends
- 3,102 Supporters
- 908 Champions

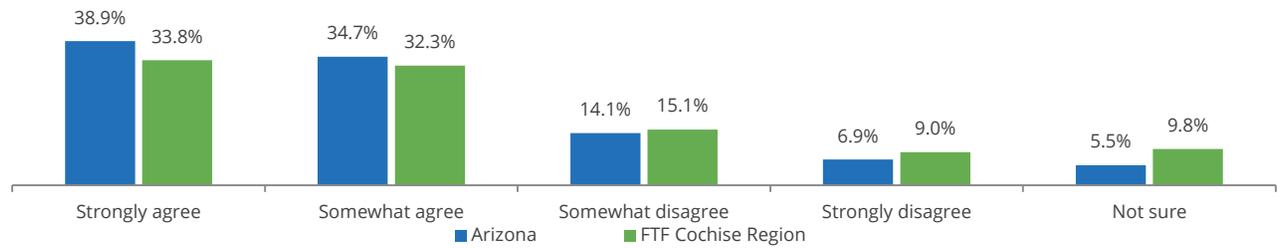
Exhibit 7.1. Satisfaction with community information and resources available about children's development and health



First Things First Family and Community Survey (2012) . Provided by AZ FTF.

When asked about the ease of locating needed services, about two-thirds (66%) of respondents in the FTF Cochise Region “strongly” or “somewhat” agreed that it is easy to locate services that they need or want, compared to nearly three-quarters statewide. Less than one-fourth of respondents in the region and in Arizona “somewhat” or “strongly” disagreed and 10 percent of FTF Cochise Region and five percent of statewide respondents were unsure (see Exhibit 7.2). This indicates that, although Cochise is a large rural region and transportation is an issue, services are distributed widely enough that the majority of parents can access them fairly easily.

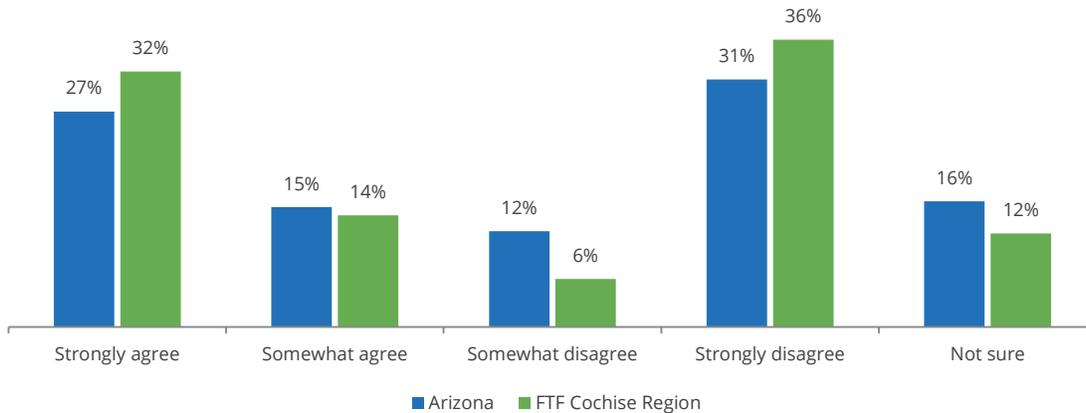
Exhibit 7.2 It is easy to locate services that I need or want



First Things First Family and Community Survey (2012). Provided by AZ FTF.

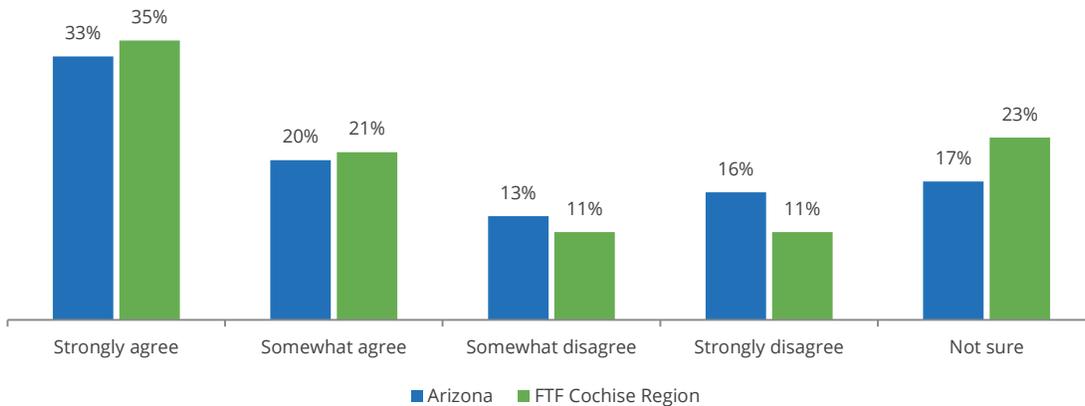
Nearly half of respondents (48%) in the region “strongly” or “somewhat” agreed that they do not know if they are eligible to receive services (see Exhibit 7.3), and over half (56%) “strongly” or “somewhat” agreed that they are asked to fill out paperwork or eligibility forms multiple times when trying to access services (see Exhibit 7.4). Both of these percentages are higher in the FTF Cochise Region than statewide indicating opportunity for streamlining of eligibility and enrollment processes.

Exhibit 7.3 I do not know if I am eligible to receive services



First Things First Family and Community Survey (2012). Provided by AZ FTF.

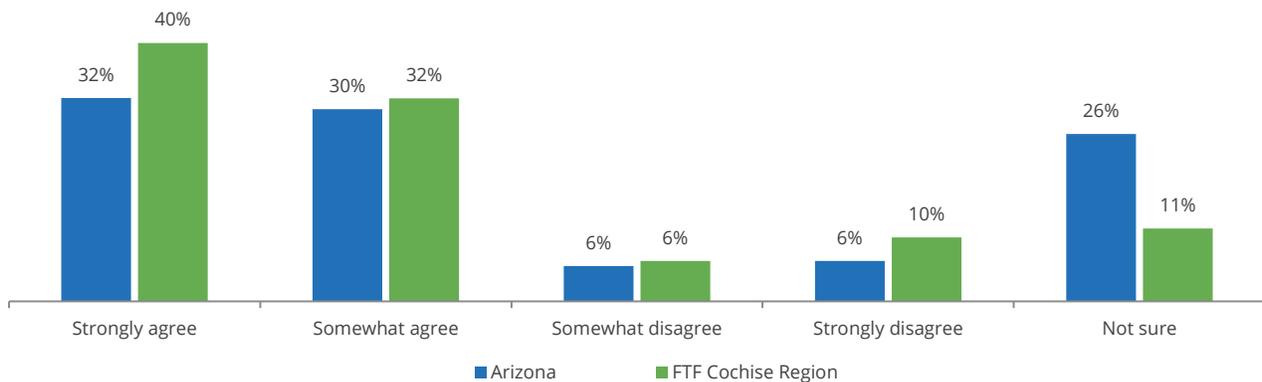
Exhibit 7.4 I am asked to fill out paperwork or eligibility forms multiple times



First Things First Family and Community Survey (2012). Provided by AZ FTF.

The FTF Family and Community Survey also asked respondents about the quality of services available to them. The majority of respondents (72%) felt that available services are very good, with a higher percentage of respondents “strongly” or “somewhat” agreeing with the statement in the FTF Cochise Region than in the state overall (see Exhibit 7.5).

Exhibit 7.5 Available services are very good

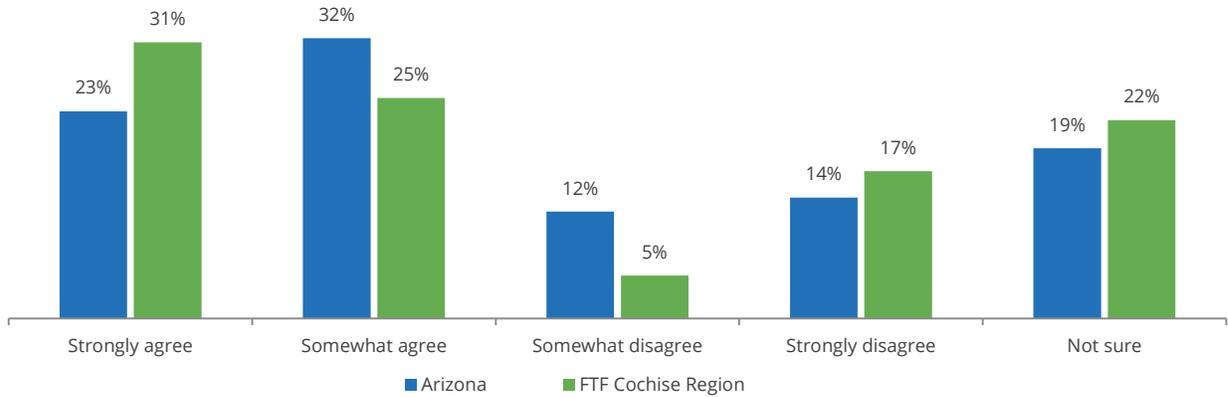


First Things First Family and Community Survey (2012). Provided by AZ FTF.

Just over half of survey respondents (56%) in the region felt that the available services reflect their cultural values, while 22 percent of FTF Cochise Region and 19 percent of statewide respondents were not sure (see Exhibit 7.6). Additionally, the majority of respondents in the FTF Cochise Region (67%) felt services and materials were provided in their language, however, only 27% felt that services are

available at times or locations that are convenient.¹¹⁶ As the Hispanic and Latino population continues to grow, the need for linguistically and culturally appropriate services will likely increase.

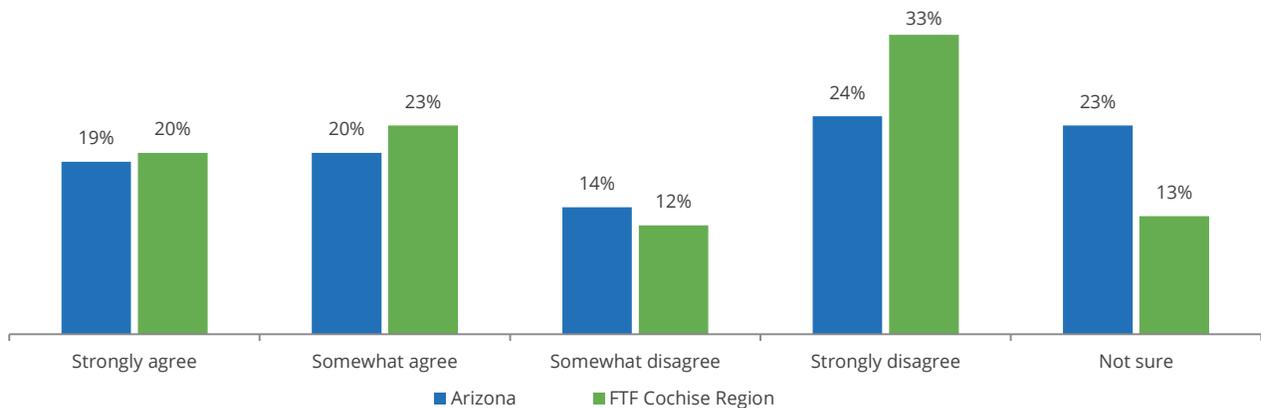
Exhibit 7.6 Available services reflect my cultural values



First Things First Family and Community Survey (2012). Provided by AZ FTF.

Survey respondents were asked about the ability of available services to fill their needs. Almost half, 43% of respondents in the region, “strongly” or “somewhat” agreed that available services fill some of their needs, but do not meet the needs of their whole family. While the percentage of statewide respondents who agreed was similar (49%), the percentage of respondents who “strongly” disagreed that services filled their needs but not the needs of their family was higher in the FTF Cochise Region than statewide (see Exhibit 7.7).

Exhibit 7.7 Available services fill some needs, but do not meet the needs of the whole family

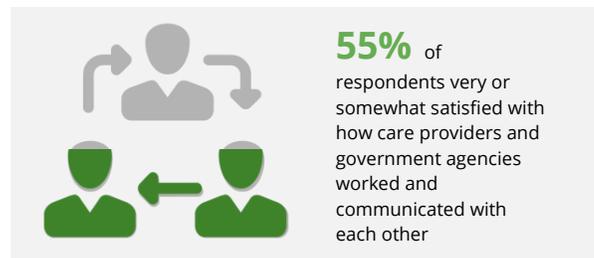
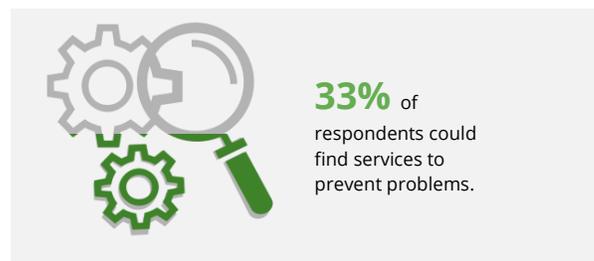
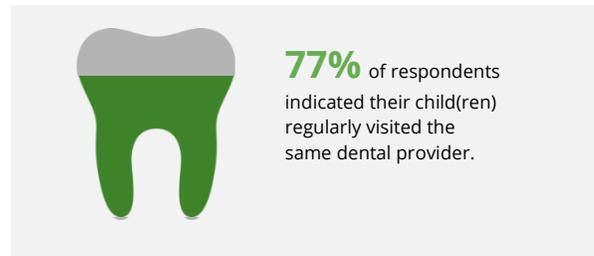
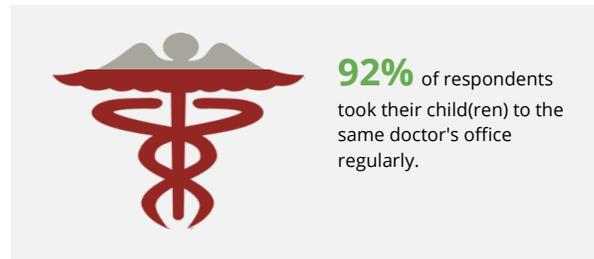


First Things First Family and Community Survey (2012). Provided by AZ FTF.

¹¹⁶ First Things First Family and Community Survey (2012). Provided by AZ FTF.

Nearly all respondents (92%) in the FTF Cochise Region “strongly” or “somewhat” agreed that their children birth to five years have regular visits at the same doctor’s office and the majority reported that their child/children birth to five years have regular visits with the same dental provider.¹¹⁷ However, only 33 percent of those in the FTF Cochise Region reported being able to access preventive services, as most only qualified when problems became severe.¹¹⁸

When asked about inter-agency cooperation, just over half of respondents (55%) were “very” or “somewhat” satisfied with how care providers and government agencies worked and communicated with each other.¹¹⁹



¹¹⁷ First Things First Family and Community Survey (2012). Provided by AZ FTF.

¹¹⁸ First Things First Family and Community Survey (2012). Provided by AZ FTF.

¹¹⁹ First Things First Family and Community Survey (2012). Provided by AZ FTF.

COMMUNICATION, PUBLIC INFORMATION AND AWARENESS HIGHLIGHTS

Public awareness of the importance of early childhood development and health is a crucial component of efforts to build a comprehensive, effective early childhood system in Arizona. FTF has led a collaborative, concerted effort to build public awareness and support across Arizona employing several integrated communications strategies. Additionally, in the FTF Cochise Region 145 people completed the FTF Family and Community Survey providing feedback on the programs and services available in their communities. Overall the findings from the survey suggest that parents are satisfied with the services in their communities. Sixty-eight percent of respondents in the region are satisfied with the community information and resources available to them, 66 percent agreed that it is easy to locate the services they want or need, and 72 percent agreed that available services are very good. In addition to these positive findings, there are areas for improvement. Nearly half of respondents agreed that they do not know if they are eligible to receive services, and only 27 percent felt services were available at convenient times and locations. Additionally, over half of respondents agreed that they cannot find services to prevent problems.

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

Assets	Considerations
FTF is investing in public awareness and support efforts across the state.	Continue to support public awareness of the important of early childhood.
More than two-thirds of Family and Community Survey respondents (68%) are satisfied with the quality of services in the region.	Promote and raise awareness to the current infrastructure in the region so children and their families have access to high quality programs and services.

Needs	Considerations
Nearly three-quarters of respondents (73%) do not agree that services are available at convenient times and locations and more than half (56%) agree that they are asked to fill out paperwork or eligibility forms multiple times.	Consider supporting a care coordination system that helps link families to information and services and reduces redundancies in paperwork.



8. System Coordination Among Early Childhood Programs and Services

Why It Matters

The partners in Arizona’s early childhood system—encompassing a diverse array of public and private entities dedicated to improving overall well-being and school readiness for ages zero to five statewide—work to promote and establish a seamless, coordinated, and comprehensive array of services that can meet the multiple and changing needs of young children and families.

In January 2010, the Arizona Early Childhood Taskforce was convened by FTF to establish a common vision for young children in Arizona, and to identify priorities and roles to build an early childhood system that will lead to this vision. System coordination was identified as one of the priority areas by Arizona’s early childhood system partners. The Task Force identified six system outcomes, including that the “early childhood system is coordinated, integrated, and comprehensive.” FTF’s role in realizing this outcome is to foster cross-system collaboration among and between local, state, federal, and tribal organizations to improve the coordination and integration of Arizona programs, services, and resources for young children and their families.

Through strategic planning and system-building efforts that are both FTF funded and non-FTF funded, FTF is focused on developing approaches to connect various areas of the early childhood system. When the system operates holistically, the expectation is a more seamless system of coordinated services that families can more easily access and navigate in order to meet their needs. Agencies that work together and achieve a high level of coordination and collaboration help to establish and support a coordinated, integrated, and comprehensive system. At the same time, agencies also increase their own capacity to deliver services as they work collectively to identify and address gaps in the service delivery continuum.

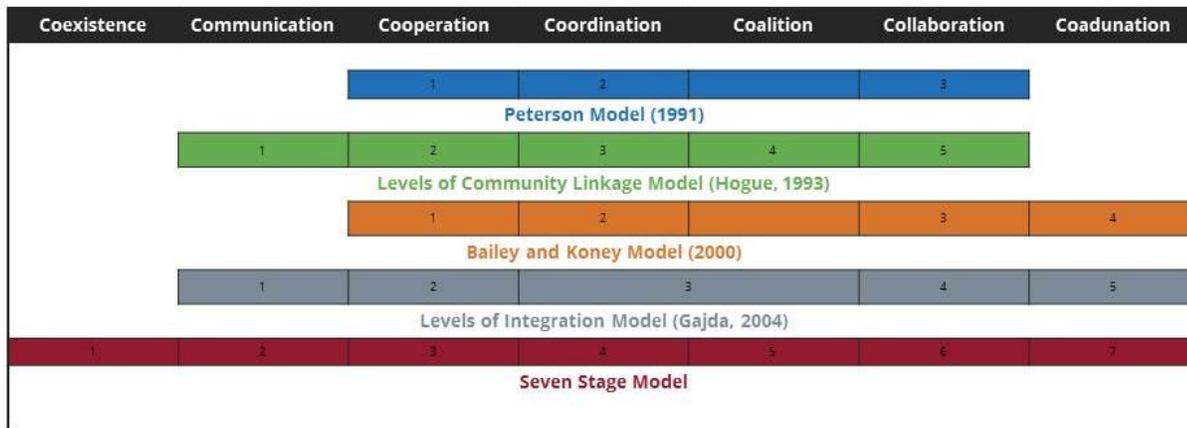
Service coordination and collaboration approaches work to advance the early childhood system in the following ways:

- Build stronger collaborative relationships amongst providers,
- Increase availability and access of services for families and children,
- Reduce duplication,
- Maximize resources,
- Address long-term sustainability,
- Leverage existing assets,
- Improve communication,
- Reduce fragmentation,
- Foster leadership capacity among providers,
- Improve quality,
- Share expertise and training resources, and
- Influence policy and program changes.

Several authors have examined coordination and collaboration efforts in terms of stages or levels of

collaboration among organizations (see Exhibit 8.1 below). Frey et al. (2006) noted that stage theories describe levels of collaboration, with the lowest level being little or no collaboration and the highest level being full collaboration or some form of coadunation or unification.¹²⁰ These models may differ on the number of stages, the range of levels included, and the definitions of various stages, but they have much in common. The figure below depicts numerous stage models in the research literature along a continuum of collaboration.

Exhibit 8.1. Levels of collaboration



Grounded in the work of stage theorists, FTF adopted a five-stage level of collaboration model based on the following levels of a continuum of collaboration, including no interaction, networking, cooperation, coordination and collaboration.

- No interaction: No interactions occurring at all.
- Networking: Activities that result in bringing individuals or organizations together for relationship building and information sharing. Networking results in an increased understanding of the current system of services. There is no effort directed at changing the existing system. There is no risk associated with networking.
- Cooperation: Characterized by short-term, informal relationships that exist without a clearly defined mission, structure, or planning effort. Cooperative partners share information only about the subject at hand. Each organization retains authority and keeps resources separate. There is very little risk associated with cooperation.
- Coordination: Involves more formal relationships in response to an established mission. Coordination involves some planning and division of roles and opens communication channels between organizations. Authority rests with individual organizations, however, risk increases.

¹²⁰ Frey, B.B., Lohmeier, J.H., Lee, S.W., & Tollefson, N. (2006) *Measuring collaboration among grant partners*. *American Journal of Evaluation*, 27, 383.

Resources are made available to participants and rewards are shared.

- Collaboration: Collaboration is characterized by a more durable and pervasive relationship. Participants bring separate organizations into a new structure, often with a formal commitment to a common mission. The collaborative structure determines authority and leadership roles. Risk is greater. Partners pool or jointly secure resources, and they share the results and rewards.

Coordination and Collaboration Survey

To gain a better understanding of the coordination and collaboration occurring among early childhood system partners within FTF regions, FTF developed the Coordination and Collaboration Survey that was disseminated to system partners via an online survey in October of 2016. Data were collected from system partners in 18 FTF county-based regions. Ten regions elected to conduct independent surveys, including Cochise, Coconino, Gila, Graham/Greenlee, La Paz Mohave, Navajo Apache, Pinal, Santa Cruz, Yavapai, and Yuma.

FTF regional staff identified potential respondents of the survey. Each region was asked to determine who (across the categories listed below) the early childhood system stakeholders were in their communities that would be able to speak to their experience in the system. If there were no stakeholders representing a category, it was acceptable to not have representation from that category. Thus, the list of possible respondents was not a systematic or exhaustive list of potential respondents, and the pool of system partners who were invited to participate is not necessarily comparable across different regions.

Possible stakeholder areas:

- Higher education
- K-12 education
- Community family support programs
- Public/community health programs
- Child care/early learning/Head Start programs
- Professional development
- State/city/county governments
- Public library
- Philanthropy/foundations
- Faith-based organizations
- Military
- Coalition/networking groups (including Read On)
- Community service groups
- FTF grant partners
-

Prospective participants received an email invitation to participate from the FTF Regional Directors in October of 2016 and were given three weeks to respond. Potential respondents were also contacted to remind them about the participation via email and/or phone call. Responses were collected via Survey

Monkey. Data were then cleaned and compiled by region by the FTF Research and Evaluation Unit.

The Coordination and Collaboration Survey asked system partners about their organization’s role in the early childhood system; the system-building efforts within each area of the early childhood system in the region and county (i.e., family support and literacy, early learning, child’s health, and professional development); the level of collaboration that is occurring among system partners; the sectors engaged in system building work; and the FTF regional partnership councils’ role in system-building efforts.

What the Data Tell Us

The results are based on the responses from 29 respondents that participated in the survey from the FTF Cochise Region out of 69 that were contacted to participate, a 42 percent survey response rate. The respondents represent the FTF Cochise Regional Partnerships (shown in Exhibit 8.2). The majority of the respondents work for K–12 education (28%), local public entities (28%), and state agencies (14%), while philanthropic organizations, higher education organizations, businesses, and advocacy organizations were not largely represented in this survey (see Exhibit 8.2).

Exhibit 8.2. Sectors with which organizations work (n=29)

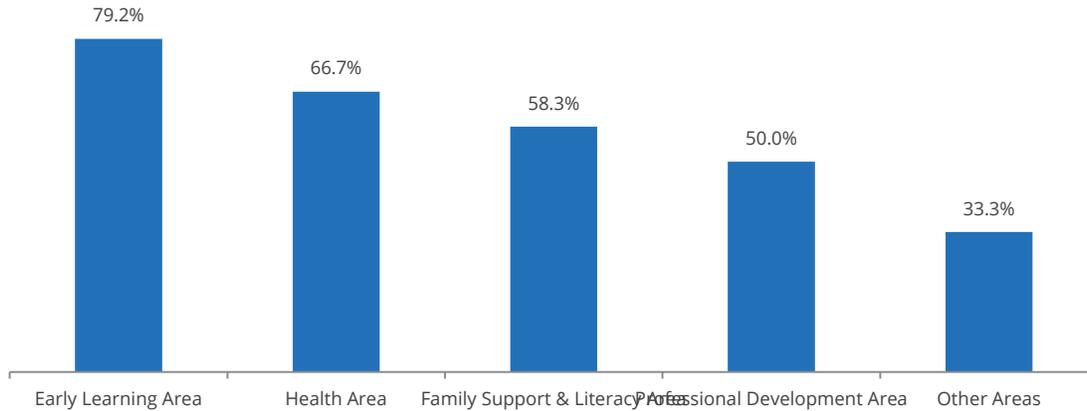
Sector	Percentage
State Agency	13.8%
Early Care and Education	3.5%
Family Support/Social Service	3.5%
Philanthropic Organization	3.5%
K–12 Education	27.6%
Local/Public Entity	27.6%
Higher Education Organization	3.5%
Business	3.5%
Health Care or Medical Organization	3.5%
Other Type of Organization	10.3%

System Partners’ View of Their Role in the Early Childhood System

The majority of respondents (83%) consider themselves to be a part of the early childhood system in the FTF Cochise Region. Furthermore, survey respondents reported that they engaged with all four areas of the early childhood system: family support and literacy, early learning, child’s health, and professional development. Not surprisingly, given the distribution of respondents from multiple

sectors (see Exhibit 8.2), the distribution of engagement was across multiple areas (see Exhibit 8.3). However, 79% of respondents indicated their role to be primarily centered around Early Learning, while 67% indicated Health as their area of focus.

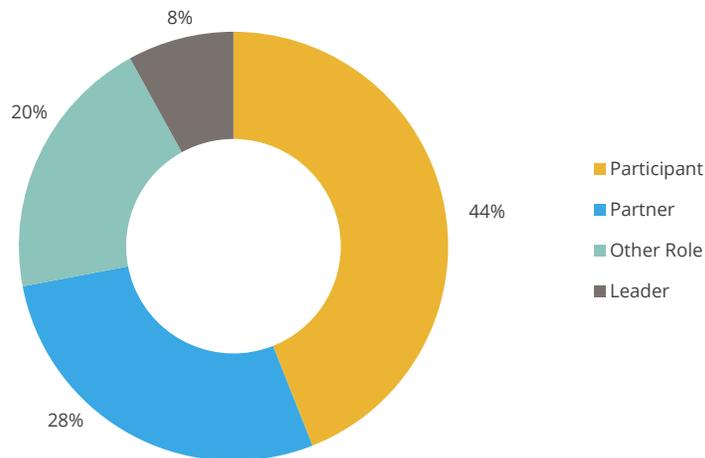
Exhibit 8.3. Area(s) of the early childhood system that organizations engage with (n=24)



Role of an Organization in the Early Childhood System

An organization may take on different roles in an early childhood system. An organization may be a participant, a partner, or a leader. As a participant, the organization is one of many community members involved in a community-based initiative. As a partner, the organization is part of a group responsible for co-convening and/or facilitation and is one of many community members involved in a community-based initiative. Finally, as a leader, the organization is responsible for convening and facilitating a group of community members (i.e., taking a lead role in bringing community members together to implement an initiative).

Exhibit 8.4. Role of organization in the development and advancement of the early childhood system in the FTF Cochise Region (n=25)



When asked about their organizations' role in the development and advancement of the early childhood system in the FTF Cochise Region, the majority of respondents viewed their organization's role as a participant (44%), one of many community organizations involved in supporting the early childhood system. This was followed by partner (28%) and then leader (8%; see Exhibit 8.4).

In their role as participant, partner, or leader, survey respondents noted several successful partnerships. Numerous respondents mentioned FTF as a key partnership, lending support and funding to multiple preschool programs, to early education professional development within Cochise County, and in supporting an FTF-funded project to implement a Parents As Teachers evidence-based home visitation program.

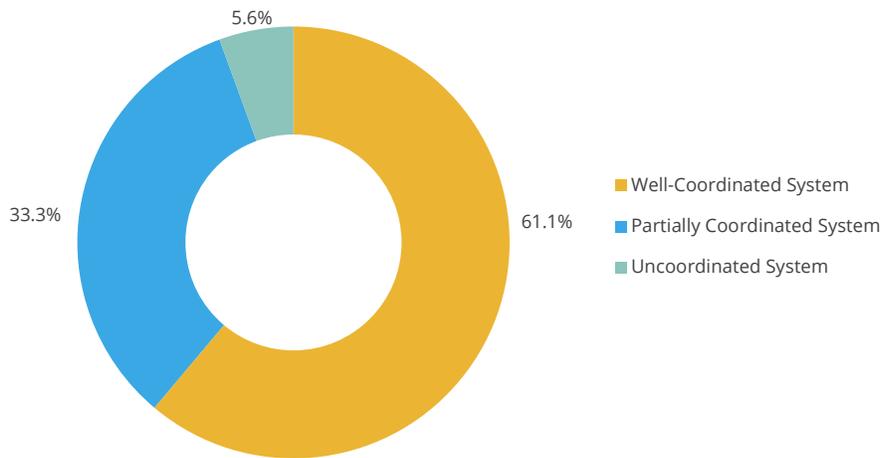
Other key areas of success included partnerships with AzEIP and early childhood reporting to make screenings available for preschool children ages three to five years old, partnerships with ADHS MIECHV to develop and support a collaboration of home visitation agencies and programs in Cochise County, and partnerships with the MWR for military families, CCHCI working closely with school districts for children with special healthcare needs, and partnerships with farmers, the County Health Department and Baja and Community Food Bank to help feed preschool children. One respondent highlighted their partnership with Court Team for Infants and Toddlers in Cochise County, who works together with the court, the Department of Child Safety, AzCA, Cenpatico, Catholic Community Services, Easter Seals Blake Foundation, and other organizations to implement improvements to the court system regarding infants and toddlers.

System Partners' Perspective on Systems Building

Respondents were also asked to provide their perspective on the early childhood system and systems building. Early childhood system building is the ongoing process of developing approaches and connections that make all the components of an early childhood system operate as a whole to promote shared results for children and families. In Arizona, early childhood system partners work to promote and establish a seamless, coordinated, and comprehensive array of services that can meet the multiple and changing needs of young children and families to help ensure that kids arrive at school healthy and ready to succeed.

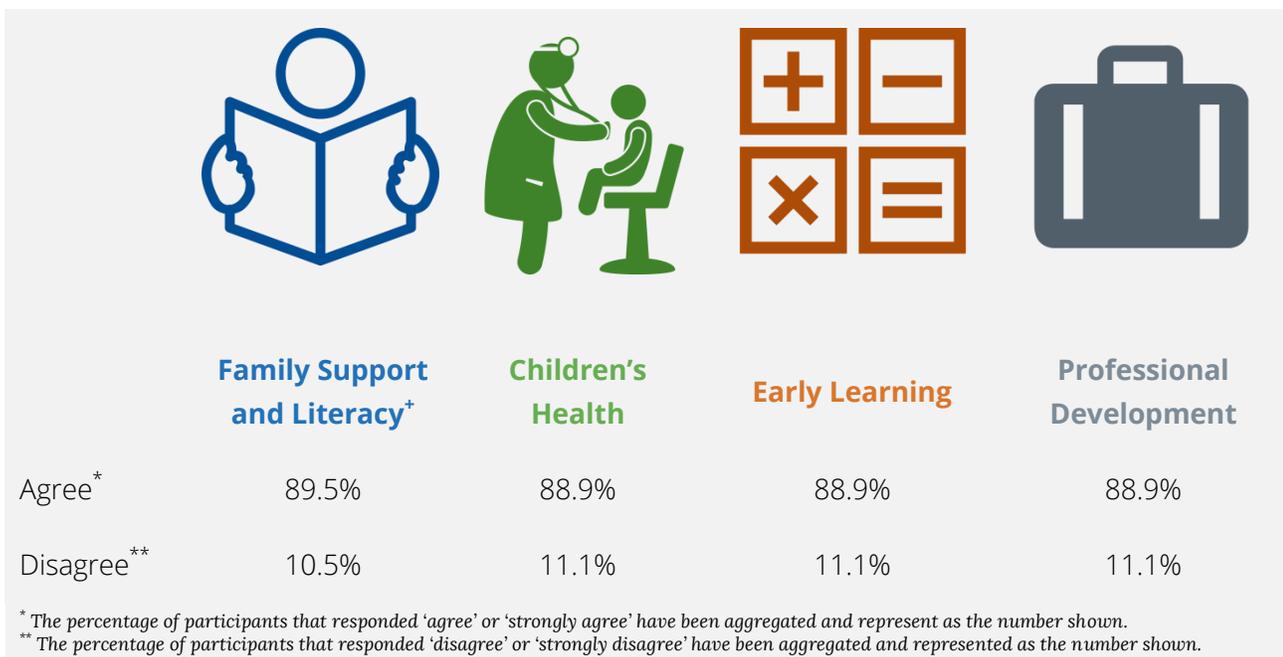
Overall, a majority of survey participants describe the early childhood system in Cochise as a well-coordinated system (61%), with one-third of participants describing the system as a partially coordinated system, and six percent viewing the early childhood system as a group of separate, uncoordinated system partners working in isolation (see Exhibit 8.5).

Exhibit 8.5. Describe the early childhood system in the FTF Cochise Region (n=18)



The majority of respondents across all areas agreed that the early childhood system in Cochise effectively addresses the needs of young children (see Exhibit 8.6). The percentage of agreement was highest for family support and literacy but was equally high for children’s health, early learning, and professional development areas. This may be due to the focus that the Regional Partnership Council has had on building a cross-system continuum of care and investing in filling gaps in the system rather than duplicative services.

Exhibit 8.6. Extent to which the early childhood system in the FTF Cochise Region effectively addresses the needs of young children and their families across early childhood development system (n=18)



Continuum of Collaboration in the Early Childhood System Areas

FTF has adopted a five-level continuum of collaboration model grounded in the work of stage theorists based on the following levels of collaboration: no interaction, networking, cooperation, coordination, and collaboration.¹²¹ These five levels were defined (see Exhibit 8.1) and used to gain a better understanding of system partners' perspectives on the level of collaboration that is occurring among partners in Cochise County within each area of the early childhood system.

Respondents were asked to refer to the Continuum of Collaboration (see Exhibit 8.7), and to indicate the level of collaboration that is occurring among partners in Cochise County for each area of the early childhood system. The results indicate moderately high levels of support for the highest and most intense level of system partners working together along the Continuum of Collaboration. Within the area of early learning, 62% of respondents indicated that collaboration was occurring among partners in Cochise. This was followed by the areas of professional development (42%), family support (39%), and children's health (33%; see Exhibit 8.8).

¹²¹ Frey, B.B., Lohmeier, J.H., Lee, S.W., & Tollefson, N. (2006) *Measuring collaboration among grant partners*. *American Journal of Evaluation*, 27, 383.

Exhibit 8.7. The five levels of the Continuum of Collaboration

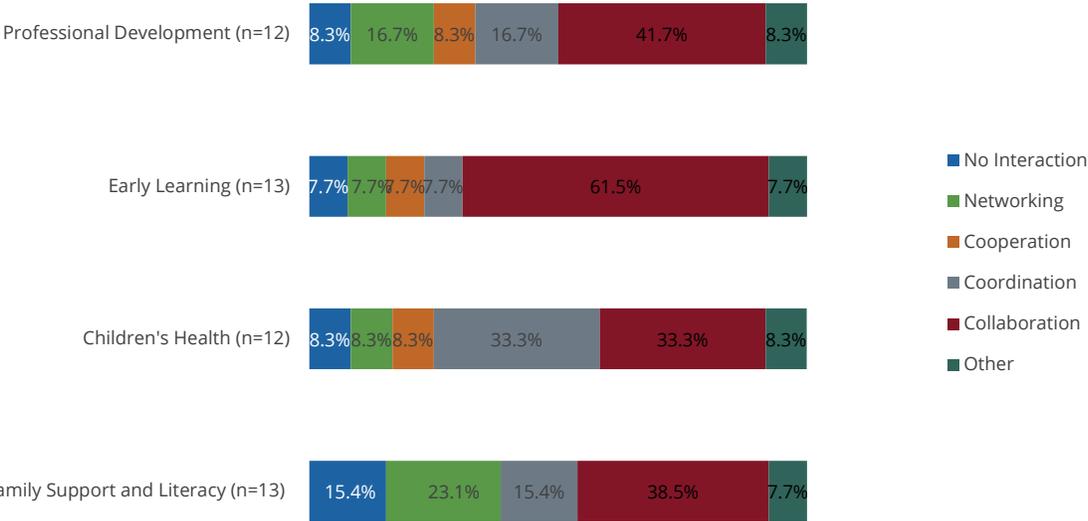


Exhibit 8.8. Collaboration in the early childhood system areas



In the area of early learning, a majority of the respondents (62%) noted that there was collaboration among system partners, a relationship illustrated in Exhibit 8.9. The FTF investments and the Read On Cochise County approach are both contributing factors to the high level of collaboration in the early learning area. In the area of children’s health, one third of participants selected collaboration and one-third selected coordination. The children’s health system in the region is complex and challenging to coordinate. Recent efforts around the County Health Improvement Plan and by the FTF Regional Partnership Council aim to improve the coordination of the health system.

Exhibit 8.9. Continuum of Collaboration in the early childhood system areas



Sectors Involved in the Early Childhood Building

Respondents were also asked to indicate which sectors are involved in systems building within each of the four areas of the early childhood system. Respondents noted that the sectors engaged in the system building work within the family support and literacy area are largely K-12 education (62%) and family support and social service agency (62%). This was followed by the local and public entity (46%) and early care and education (46%; see Exhibit 8.10).

In the area of children’s health, respondents indicated that the early care and education (70%), K-12 education (70%), and family support and social service agency (70%) were the most engaged in systems buildings.

In early learning, K-12 education (77%) played the largest role, followed by family support and social service agency (62%) and early care and education (62%).

Finally, in the area of professional development, participants indicated that state agencies (73%) followed by early care and education (55%) and the K-12 education (55%) and family support and social service agency (46%) were mostly involved.

Exhibit 8.10. The sectors involved in/engaged in system building work in the FTF Cochise Region

	N	State Agency	Early Care & Edu	Family Support / Social Service Agency	Philanthropy	K-12 Edu	Higher Edu	Advocacy	Local/ Public Entity	Business	Health Care/ Medical	Other
Family Support and Literacy	13	30.8%	46.2%	61.5%	38.5%	61.5%	15.4%	30.8%	46.2%	23.1%	23.1%	7.7%
Children's Health	10	60.0%	70.0%	70.0%	40.0%	70.0%	30.0%	40.0%	60.0%	20.0%	50.0%	20.0%
Early Learning	13	46.2%	61.5%	61.5%	23.1%	76.9%	15.4%	30.8%	46.2%	23.1%	38.5%	7.7%
Professional Development	11	72.7%	54.6%	45.5%	18.2%	54.6%	45.5%	18.2%	45.5%	27.3%	27.3%	9.1%

While earlier items asked system partners about the level of collaboration occurring among system partners, when a survey item asking respondents about how frequently key activities were occurring that are known indicators of collaborative work, many respondents indicated they only somewhat know how often activities related to system building work were occurring in Cochise, while several other respondents did not know how often the activities are occurring. Those that did respond noted that system partners within family support and literacy have coordination of outreach and referrals, jointly conduct staff training, share approaches to informing the public of available services, and have some co-location of programs or services (see Exhibit 8.11). Participation in standing inter-agency committees is another key activity that system partners identified doing together. When thinking about activities along the Continuum of Collaboration, the types of activities that respondents indicated are occurring represent networking, cooperation, and coordination-type activities within the continuum. Areas where a high number of respondents indicated that the activity was not happening at all (10% to 30%) was in the use of shared forms (e.g., common referral and intake forms), shared facility space, and shared record keeping and management of data information systems, which are key activities that align to a high level of collaboration between system partners and represent areas of continued growth for system partners.

Exhibit 8.11. Activities: Family support & literacy (n=10)

Activity	Not At All	A little/ Some-what	A Lot	Don't Know
Leveraging resources/funding across partners (n=11)	0.0%	36.4%	18.2%	45.5%
Sharing facility space	10.0%	40.0%	10.0%	40.0%
Shared development of program materials	0.0%	30.0%	30.0%	40.0%
Coordination of outreach and referrals	0.0%	40.0%	50.0%	10.0%
Knowledge of other programs' intake requirements/referral process	0.0%	30.0%	30.0%	40.0%
Shared record keeping and management of data information systems	30.0%	10.0%	0.0%	60.0%
Co-location of programs or services	0.0%	50.0%	10.0%	40.0%
Partner in program evaluation and/or assessment	0.0%	20.0%	10.0%	70.0%
Jointly conducting staff training	0.0%	60.0%	0.0%	40.0%
Shared approach to informing the public of available services	0.0%	70.0%	20.0%	10.0%
Jointly implement policy changes	10.0%	20.0%	0.0%	70.0%
Common forms (e.g., intake and/or referral forms)	10.0%	20.0%	10.0%	60.0%
Child/Family service plan development OR PD plan for ECE professionals	0.0%	20.0%	10.0%	70.0%
Participation in standing inter-agency committees	0.0%	60.0%	20.0%	20.0%
Informal agreements	0.0%	30.0%	10.0%	60.0%
Formal written agreements (e.g., MOUs)	0.0%	10.0%	10.0%	80.0%
Environmental scan of other organizations in the community that provide services to young families	0.0%	40.0%	30.0%	30.0%
Other (please describe below)	0.0%	0.0%	0.0%	100%

Within children’s health, partners noted the most frequent system activities as knowing other programs’ intake requirements and referral processes, leveraging resources and funding across partners, coordinating outreach and referrals, and conducting environmental scans of other organizations in the community serving young children and their families (see Exhibit 8.12).

Exhibit 8.12. Activities: Children’s health (n=10)

Activity	Not At All	A little/ Some-what	A Lot	Don't Know
Leveraging resources/funding across partners (n=11)	0.0%	45.5%	45.5%	9.1%
Sharing facility space	0.0%	30.0%	20.0%	50.0%
Shared development of program materials	0.0%	40.0%	30.0%	30.0%
Coordination of outreach and referrals	0.0%	60.0%	40.0%	0.0%
Knowledge of other programs' intake requirements/referral process	0.0%	20.0%	50.0%	30.0%
Shared record keeping and management of data information systems	20.0%	10.0%	10.0%	60.0%
Co-location of programs or services	0.0%	50.0%	10.0%	40.0%
Partner in program evaluation and/or assessment	0.0%	40.0%	10.0%	50.0%
Jointly conducting staff training	0.0%	50.0%	20.0%	30.0%
Shared approach to informing the public of available services	0.0%	60.0%	30.0%	10.0%
Jointly implement policy changes	10.0%	30.0%	0.0%	60.0%
Common forms (e.g., intake and/or referral forms)	20.0%	30.0%	10.0%	40.0%
Child/Family service plan development OR PD plan for ECE professionals	0.0%	30.0%	10.0%	60.0%
Participation in standing inter-agency committees	0.0%	60.0%	20.0%	20.0%
Informal agreements	0.0%	50.0%	20.0%	30.0%
Formal written agreements (e.g., MOUs)	0.0%	20.0%	20.0%	60.0%
Environmental scan of other organizations in the community that provide services to young families	0.0%	40.0%	40.0%	20.0%
Other (please describe below)	0.0%	0.0%	0.0%	100.0%

Similar to health, in the area of early learning, partners most frequently knew of other programs intake requirements and referral processes and coordinated outreach and referrals. Additionally, they reported frequently sharing development of program materials and approaches to informing the public of available services.

Exhibit 8.13. Activities: Early learning (n=10)

Activity	Not At All	A little/ Some-what	A Lot	Don't Know
Leveraging resources/funding across partners (n=11)	0.0%	54.6%	36.4%	9.1%
Sharing facility space	0.0%	30.0%	30.0%	40.0%
Shared development of program materials	0.0%	30.0%	40.0%	30.0%
Coordination of outreach and referrals	0.0%	50.0%	40.0%	10.0%
Knowledge of other programs' intake requirements/referral process	0.0%	40.0%	40.0%	20.0%
Shared record keeping and management of data information systems	10.0%	20.0%	0.0%	70.0%
Co-location of programs or services	0.0%	50.0%	10.0%	40.0%
Partner in program evaluation and/or assessment	10.0%	30.0%	30.0%	30.0%
Jointly conducting staff training	0.0%	40.0%	20.0%	40.0%
Shared approach to informing the public of available services	0.0%	50.0%	40.0%	10.0%
Jointly implement policy changes	10.0%	20.0%	0.0%	70.0%
Common forms (e.g., intake and/or referral forms)	10.0%	30.0%	10.0%	50.0%
Child/Family service plan development OR PD plan for ECE professionals	0.0%	40.0%	10.0%	50.0%
Participation in standing inter-agency committees	0.0%	60.0%	20.0%	20.0%
Informal agreements	0.0%	40.0%	10.0%	50.0%
Formal written agreements (e.g., MOUs)	0.0%	20.0%	10.0%	70.0%
Environmental scan of other organizations in the community that provide services to young families	0.0%	40.0%	30.0%	30.0%
Other (please describe below)	0.0%	0.0%	0.0%	100%

In the area of Professional Development, partners reported knowing about other programs' intake requirements and referral processes, coordinating outreach and referrals, and sharing approaches to inform the public of available services as the most frequently occurring system activities. Across all four areas, respondents reported that using common forms and shared record keeping and management of data information systems was least likely to occur.

Exhibit 8.14. Activities: Professional development (n=10)

Activity	Not At All	A little / Some-what	A Lot	Don't Know
Leveraging resources/funding across partners (n=11)	9.1%	45.5%	36.4%	9.1%
Sharing facility space	0.0%	30.0%	20.0%	50.0%
Shared development of program materials	0.0%	40.0%	20.0%	40.0%
Coordination of outreach and referrals	0.0%	40.0%	40.0%	20.0%
Knowledge of other programs' intake requirements/referral process	0.0%	20.0%	40.0%	40.0%
Shared record keeping and management of data information systems	10.0%	20.0%	10.0%	60.0%
Co-location of programs or services	0.0%	40.0%	20.0%	40.0%
Partner in program evaluation and/or assessment	0.0%	40.0%	20.0%	40.0%
Jointly conducting staff training	0.0%	30.0%	30.0%	40.0%
Shared approach to informing the public of available services	0.0%	40.0%	40.0%	20.0%
Jointly implement policy changes	10.0%	20.0%	0.0%	70.0%
Common forms (e.g., intake and/or referral forms)	20.0%	20.0%	10.0%	50.0%
Child/Family service plan development OR PD plan for ECE professionals	0.0%	30.0%	10.0%	60.0%
Participation in standing inter-agency committees	0.0%	50.0%	20.0%	30.0%
Informal agreements	0.0%	30.0%	10.0%	60.0%
Formal written agreements (e.g., MOUs)	0.0%	20.0%	10.0%	70.0%
Environmental scan of other organizations in the community that provide services to young families	0.0%	40.0%	30.0%	30.0%
Other (please describe below)	0.0%	0.0%	0.0%	100%

Barriers and Future Directions

Respondents were also asked to reflect on barriers in moving the system forward with other early childhood system partners. Respondents identified a number of barriers in the Cochise Region. Communication and coordination between providers was highlighted by several respondents as a key barrier. As one respondent stated, “There are so many [organizations] that it can be difficult for all of us [and the families we serve] to know what each other is doing all the time so we can work together to leverage each other's resources. This is in spite of the efforts of [the Council] to advance this.” Respondents recommended solutions to aid in communication, such as monthly emails to participating or referring organizations on who has come and gone, what new services are being provided or have gone away, and what needs are identified so that other agencies can possibly help. Additionally, respondents highlighted a lack of familiarity with the FTF early childhood system as a barrier for potential partners coming together. Several respondents felt the size and rural nature of the county served as barriers, noting that the region is a large geographic area with limited services in many outlying areas. Financial barriers were also highlighted by numerous respondents, as well as how effectiveness is evaluated, calling for metrics to assess how well the programs are being administered and managed, and how to develop long-term goals.

Finally, respondents were asked to reflect on the role of the FTF Partnerships Councils in supporting early childhood system building and collaboration efforts in Cochise County. When asked how the FTF Regional Partnership Councils could support early childhood system building and partner collaboration efforts in the region, respondents suggested maintaining and continuing to build upon established community partnerships, while being open to new opportunities that may be presented. Respondents recommended exploring more opportunities with service clubs, businesses, and the faith community to support advocacy, financial sponsorship of events, or projects that are identified by the early childhood community as needing support. Additionally, respondents recommended finding ways to market successful outcomes and challenges, in order to know where the community stands in early childhood system building.

SYSTEM COORDINATION HIGHLIGHTS

In the FTF Cochise Region, 29 system partners responded to the FTF Coordination and Collaboration Survey, providing insight on the system building efforts, level of collaboration, and the FTF Regional Partnership Council’s role in their county. Overall the findings from the survey suggest that partners consider the region to have a well-coordinated early childhood system of care in all four areas (family support and literacy, children’s health, early learning and professional development), and that they are equally effective in addressing the needs of children and their families in the region. Respondents felt that early learning was the most collaborative effort while children’s health was the least.

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

Assets	Considerations
<p>More than half of Coordination and Collaboration Survey respondents feel the region’s early childhood system is well-coordinated and over 80% feel the system is effectively serving children and families.</p>	<p>Continue to bring organizations together to coordinate services and provide a holistic system for families. Identify more system leaders that can guide system partners and participants towards a more coordinated and collective network that will even more efficiently serve children and families.</p>

Needs	Considerations
<p>Coordination and Collaboration Survey respondents considered children’s health to be the least collaborative area (33%).</p>	<p>Identify successes from early learning’s collaboration efforts that can be applied to other areas, especially children’s health. Consider supporting a virtual health collaborative that respects the limited time of healthcare providers yet allows them to connect and leverage each other’s expertise.</p>
<p>Gaps in communication and lack of updated information on resources available in the region were reported by survey respondents to be barriers to coordination and collaboration of the system.</p>	<p>Support the development of an online platform for communication between partners that can be updated with changes in services and eligibility.</p>

Conclusion

As a rural region in the Southeast corner of the state, the FTF Cochise Region has both strengths and opportunities for improvement. The region has a strong collaborative system of providers that are dedicated to the well-being of the region’s youngest children and their families, yet the community faces difficult to overcome barriers, such as high poverty and limited access to food, transportation, and early education and healthcare services. FTF is a great asset in the region as they play a large role in funding and supporting the area’s early childhood system.

The following tables combine the assets, needs, and considerations from the eight domains presented in this report. These key findings are intended to provide information to the FTF Cochise Regional Partnership Council and the community as a whole around the needs and assets of the region’s zero to five population and their families.

Assets Summary Table

Assets	Considerations
Population Characteristics	
According to the Arizona Department of Administration, the population of children under the age of six is projected to grow at a modest and steady rate, allowing the region to foresee and prepare for the growing demands of their youngest residents.	Discuss tactics for planning ahead for the projected slow, but steady, growth of the under six population and the needs that accompany that growth.
Economic Circumstances	
The Cochise Region has several local programs aimed at supporting the availability of nutritious foods for children under six and their families.	Increase community awareness of the nutrition programs available to young children and their families
Education	
According to the American Community Survey, the majority of adults in the region have completed high school, received a GED, or pursued further education (87%).	Increase awareness for parents to support each other and share knowledge and attitudes around the importance of education.
Early Learning	
Quality First has been increasing the quality of child care programs in the region.	Recognize that Quality First efforts in the region increase the opportunities for children to receive quality early care and education experiences.
The percentage of students who are enrolled in special education in preschool and transition out of special education in kindergarten is on the rise.	Support special education services for preschool students to intervene early and address special needs before they are exacerbated.

Child Health	
Almost all children in childcare in the region are receiving immunizations.	Continue to promote and raise awareness regarding immunizations within schools and other convenient locations to reduce barriers to accessing immunizations.
Family Support and Literacy	
The majority of parents understand the importance of play and engage in activities with their child almost every day.	Promote and raise awareness to educate parents on the importance of play and engaging in developmentally stimulating activities with their children daily.
There were less than 50 substantiated cases of abuse or neglect in FY 2014–2015 and the number of arrests for children 8 to 17 has decreased substantially in recent years.	Continue to promote safe environments for families and adolescents in the region.
Communication, Public Information and Awareness	
FTF is investing in public awareness and support efforts across the state.	Continue to support public awareness of the important of early childhood.
More than two-thirds of Family and Community Survey respondents (68%) are satisfied with the quality of services in the region.	Promote and raise awareness to the current infrastructure in the region so children and their families have access to high quality programs and services.
System Coordination	
More than half of Coordination and Collaboration Survey respondents feel the region’s early childhood system is well-coordinated and over 80% feel the system is effectively serving children and families.	Continue to bring organizations together to coordinate services and provide a holistic system for families. Identify more system leaders that can guide system partners and participants towards a more coordinated and collective network that will even more efficiently serve children and families.

Needs Summary Table

Needs	Considerations
Population Characteristics	
According to the Arizona Department of Administration, the population of children under the age of six is projected to grow at a modest and steady rate, allowing the region to foresee and prepare for the growing demands of their youngest residents.	Discuss tactics for planning ahead for the projected slow, but steady, growth of the under six population and the needs that accompany that growth.
According to the Arizona Department of Administration, the population of children under the age of six is projected to grow at a modest and steady rate, allowing the region to foresee and prepare for the growing demands of their youngest residents.	Discuss tactics for planning ahead for the projected slow, but steady, growth of the under six population and the needs that accompany that growth.
Economic Circumstances	
According to the American Community Survey, about one-third of children under six in the county live in single-parent households, which earn substantially less money than do dual-parent households (\$27,792 to \$38,614 vs. \$79,792). Also, over a quarter of children under six live in poverty (27%).	Identify and promote supports or resources that can help subsidize child care and housing costs for single parents with young children.
Education	
According to the American Community Survey, the majority of adults in the region have completed high school, received a GED, or pursued further education (87%).	Increase awareness for parents to support each other and share knowledge and attitudes around the importance of education.
According to the American Community Survey, the majority of adults in the region have completed high school, received a GED, or pursued further education (87%).	Increase awareness for parents to support each other and share knowledge and attitudes around the importance of education.
Early Learning	
According to the FTF Arizona's Unknown Education Issue brief, wages of ECE professionals hardly increased between 2007 and 2012 and almost half of ECE teachers (45%) leave the profession within five years.	Identify professional development and networking opportunities for quality early childhood professionals to retain their skills in the early childhood field and reduce staff turnover.
Based on data from the Arizona Department of Economic Security, of those who received referrals to AzEIP, less than 50% received services.	Identify gaps in follow-up referrals to ensure that developmental needs of child are being met.

Child Health	
The region has a higher ratio of population-to-healthcare providers than the state, indicating limited access to healthcare.	Work with partners in the region to attract and retain healthcare providers to the region and engage in supporting infrastructure for tele-health services.
Almost three fourths (73%) of parents who completed the FTF Family and Community Survey are unaware of the impact they have on their child’s development during the prenatal stage.	Provide more outreach and education regarding prenatal care, especially targeting first-time and teen mothers.
Almost half of children whose parents completed the Healthy Smiles Healthy Bodies survey (46%) have experienced tooth decay, and 31% of children had untreated tooth decay.	Promote oral health services and education, to inform parents of the importance of early oral healthcare.
Family Support and Literacy	
Parent knowledge of child development is lower in the FTF Cochise Region than statewide.	Consider supporting community education campaigns to increase awareness of parents’ impact on their child’s development, especially starting in the prenatal stage.
Communication, Public Information and Awareness	
Nearly three-quarters of respondents (73%) do not agree that services are available at convenient times and locations and more than half (56%) agree that they are asked to fill out paperwork or eligibility forms multiple times.	Consider supporting a care coordination system that helps link families to information and services and reduces redundancies in paperwork.
System Coordination	
Coordination and Collaboration Survey respondents considered children’s health to be the least collaborative area (33%).	Identify successes from early learning’s collaboration efforts that can be applied to other areas, especially children’s health. Consider supporting a virtual health collaborative that respects the limited time of healthcare providers yet allows them to connect and leverage each other’s expertise.
Gaps in communication and lack of updated information on resources available in the region were reported by survey respondents to be barriers to coordination and collaboration of the system.	Support the development of an online platform for communication between partners that can be updated with changes in services and eligibility.

Appendix A

Additional Data Indicators

Chapter 1

Appendix 1.1. Detailed age breakdown for children 0–5

	Arizona	Cochise County	FTF Cochise Region
0 years old	87,557	1,689	1,691
1 year old	89,746	1,653	1,660
2 years old	93,216	1,761	1,771
3 years old	93,880	1,734	1,745
4 years old	91,316	1,669	1,679
5 years old	90,894	1,619	1,631

U.S. Census Bureau; 2010 Census Summary File 1; Tables P11 & P14; generated by AZ FTF; using American FactFinder; <<http://factfinder2.census.gov>>

Appendix 1.2. Number of
refugee arrivals to Arizona

Year	Arizona
1981	744
1982	1,011
1983	1,083
1984	928
1985	1,191
1986	1,149
1987	872
1988	762
1989	1,130
1990	1,715
1991	1,904
1992	1,966
1993	1,318
1994	1,561
1995	1,889
1996	1,927
1997	2,318
1998	2,861
1999	3,144
2000	2,546
2001	2,597
2002	1,134
2003	1,187
2004	2,446
2005	2,169

2006	2,024
2007	2,414
2008	3,408
2009	4,740
2010	3,888
2011	2,552
2012	2,845
2013	3,600
2014	3,882
2015	4,138

Arizona Department of Economic Security (2016). Refugee Arrivals by Nationality and FFY of Resettlement Arizona Refugee Resettlement Program.

<https://des.az.gov/services/aging-and-adult/arizona-refugee-resettlement-program>

Chapter 2

Appendix 2.1. Top 25 schools in the FTF Cochise Region with the highest percentage of students eligible for free and reduced price lunch

School	Percent of students eligible for free and reduced price lunch
Sarah Marley School	98.4%
Center for Academic Success, The #2	95.5%
Center for Academic Success #4	94.4%
Ray Borane Middle School	94.2%
Bowie Elementary School	92.9%
Faras Elementary School	92.3%
Center for Academic Success, The #3	92.3%
Omega Alpha Academy School	91.9%
Joe Carlson Elementary School	90.9%
Naco Elementary School	90.0%
Clawson School	86.6%
Douglas High School	82.2%
Paul H Huber Jr High School	82.2%
PPEP TEC - Raul H. Castro Learning Center	81.0%
Liberty Traditional Charter School – Saddleback	80.7%
Carmichael Elementary School	79.5%
Stevenson Elementary School	78.9%
Willcox Elementary School	78.4%
Elfrida Elementary School	77.0%
Ash Creek Elementary	76.9%
Pearce Elementary School	75.2%
Bowie High School	75.0%

Willcox Middle School	74.6%
Valley Union High School	72.3%
Center for Academic Success #5	71.9%

Arizona Department of Education (2014). Students Eligible for Free and Reduced-price Lunch. Provided by AZ FTF.

Chapter 3

Appendix 3.1. Race or ethnicity of children by school

School	American Indian/ Alaska Native	Asian	Black/African American	Hispanic/ Latino	Native Hawaiian/ Other Pacific	White	Multiracial
Apache Elementary School	0	0	0	1	0	9	0
Ash Creek Elementary	0	0	0	5	0	17	0
Bella Vista Elementary School	5	6	38	148	3	166	35
Benson High School	5	5	9	103	3	306	4
Benson Middle School	5	3	12	102	3	237	8
Benson Primary School	1	3	7	125	3	321	13
Bisbee High School	2	1	0	260	2	62	3
Bowie Elementary School	0	0	0	28	0	5	0
Bowie High School	0	0	0	11	0	4	0
Buena High School	20	55	155	722	29	1030	157
Carmichael Elementary School	7	3	36	209	1	141	25
The Center for Academic Success #1	0	0	0	302	0	2	0
The Center for Academic Success #2	3	9	51	152	0	167	0
The Center for Academic Success #3	0	1	7	31	0	64	4
The Center for Academic Success #4	0	0	0	121	0	1	0
The Center for Academic Success #5	0	0	0	293	0	0	0
Clawson School	0	0	0	295	0	9	0
Cochise Elementary School	0	0	0	34	0	51	0
Colonel Johnston Elementary School	1	4	37	67	13	181	26
Colonel Smith Middle School	6	15	66	67	3	168	3
Coronado Elementary School	5	11	9	118	0	261	22
Double Adobe Elementary School	0	0	0	11	1	29	0
Douglas High School	3	5	2	1286	0	26	1
Early Learning Center	0	0	0	111	0	5	0

Elfrida Elementary School	1	0	0	69	2	44	0
Faras Elementary School	0	0	1	177	0	1	0
General Myer Elementary School	7	3	48	68	9	182	20
Greenway Primary School	0	0	2	176	0	66	2
Huachuca City School	0	2	41	139	3	230	26
Huachuca Mountain Elementary School	5	13	28	174	5	359	46
Joe Carlson Elementary School	0	0	1	355	0	8	3
Joyce Clark Middle School	7	20	50	295	15	344	63
Liberty Traditional Charter School - Saddleback	0	1	0	164	0	11	0
Lowell School	1	1	1	119	0	52	6
Mcneal Elementary School	2	0	2	14	0	38	0
Naco Elementary School	1	0	0	289	0	8	0
Omega Alpha Academy School	2	3	0	403	0	4	0
Palominas Elementary School	5	2	9	124	2	255	11
Paul H Huber Jr High School	1	2	1	481	0	17	1
Pearce Elementary School	0	0	1	29	0	76	1
Pomerene Elementary School	1	0	0	15	0	84	1
PPEP TEC - Colin L. Powell Learning Center	9	3	4	35	0	27	5
PPEP TEC - Raul H. Castro Learning Center	0	0	1	129	0	1	0
Pueblo Del Sol Elementary School	0	10	23	235	13	319	36
Ray Borane Middle School	1	1	1	443	0	7	0
San Pedro Valley High School	0	0	0	5	1	23	1
San Pedro Valley Online Academy	0	0	0	4	0	6	0
San Simon School	3	0	0	68	0	42	0
Sarah Marley School	0	0	0	207	0	3	0
St David Elementary School	2	1	1	21	0	244	3
St David High School	2	3	1	10	0	110	0
Stevenson Elementary School	0	1	0	472	0	7	2

The Berean Schools	1	3	52	135	20	164	22
Tombstone High School	4	2	20	102	2	169	14
Town & Country Elementary School	2	8	32	155	9	169	32
Valley Union High School	5	0	1	21	0	99	0
Valley View Elementary School	3	4	4	56	0	138	5
Village Meadows Elementary School	2	16	21	192	2	247	34
Visions Unlimited Academy	0	0	0	11	0	35	1
Walter J Meyer School	0	0	1	36	0	55	2
Willcox Elementary School	1	1	2	308	0	113	0
Willcox High School	3	2	3	251	1	143	2
Willcox Middle School	2	0	1	230	1	104	2

Arizona Department of Education (2015). Enrollment. Provided by AZ FTF.

Appendix 3.2. 2014 School Report-Card Letter Grade for Districts*

School District	Growth Points	Composite Points	Total Points	Final Letter Grade
Apache Elementary District	73	92	165	A
Visions Unlimited Academy, Inc.	78	76	154	A
Pomerene Elementary District	64	84	148	A
Benson Unified School District	58	87	145	A
Double Adobe Elementary District	62	81	143	A
Valley Union High School District	-	-	141	A
St David Unified District	52	88	140	A
San Simon Unified District	-	-	138	B
Sierra Vista Unified District	52	83	135	B
Palominas Elementary District	49	85	134	B
Tombstone Unified District	52	81	133	B
Center for Academic Success, Inc.	60	72	132	B
Fort Huachuca Accommodation District	50	81	131	B
Cochise Community Development Corporation	-	-	128	B
Willcox Unified District	55	69	124	B
Cochise Elementary District	44	79	123	B
Liberty Traditional Charter School	54	69	123	B
Sierra Vista Charter School, Inc.	53	70	123	B
McNeal Elementary District	51	70	121	B
Elfrida Elementary District	42	70	112	B
Portable Practical Educational Preparation, Inc. (PPEP, Inc.)	-	-	-	B
Douglas Unified District	50	66	116	C
New West School	38	75	113	C
Omega Alpha Academy	-	-	113	C
Bisbee Unified District	53	59	112	C
Pearce Elementary District	49	61	110	C

Naco Elementary District	61	46	107	C
Bowie Unified District	54	51	105	C
Ash Creek Elementary District	44	42	86	D

Arizona Department of Education (2014). Letter Grades for All Schools. Retrieved from <http://www.azed.gov/accountability/state-accountability/>

Appendix 3.3. 2015 Enrollment by district and school

District & School	Sum of Total Enrollment
Apache Elementary District	10
Apache Elementary School	10
Ash Creek Elementary District	22
Ash Creek Elementary	22
Benson Unified School District	1,271
Benson High School	388
Benson Middle School	370
Benson Primary School	473
San Pedro Valley High School	30
San Pedro Valley Online Academy	10
Bisbee Unified District	615
Bisbee High School	189
Greenway Primary School	246
Lowell School	180
Bowie Unified District	48
Bowie Elementary School	33
Bowie High School	15
Center for Academic success, Inc.	1,208
The Center for Academic Success #1	107
The Center for Academic Success #2	122
The Center for Academic Success #3	293
The Center for Academic Success #4	304
The Center for Academic Success #5	382
Cochise Community Development Corporation	397
The Berean Schools	397
Cochise Elementary District	85

Cochise Elementary School	85
Double Adobe Elementary District	58
Bisbee High School	1
Double Adobe Elementary School	41
Valley Union High School	16
Douglas Unified District	3,937
Clawson School	304
Douglas High School	1,323
Early Learning Center	116
Faras Elementary School	179
Joe Carlson Elementary School	367
Paul H Huber Jr High School	503
Ray Borane Middle School	453
Sarah Marley School	210
Stevenson Elementary School	482
Elfrida Elementary District	116
Elfrida Elementary School	116
Fort Huachuca Accommodation District	994
Colonel Johnston Elementary School	329
Colonel Smith Middle School	328
General Myer Elementary School	337
Liberty Traditional Charter School	176
Liberty Traditional Charter School-Saddleback	176
McNeal Elementary District	72
McNeal Elementary School	56
Palominas Elementary School	1
Valley Union High School	15
Naco Elementary District	424
Bisbee High School	126

Naco Elementary School	298
Omega Alpha Academy	412
Omega Alpha Academy School	412
Page Unified District	1
Palominas Elementary School	1
Paloma School District	2
Palominas Elementary School	2
Palominas Elementary District	1,364
Bisbee High School	14
Buena High School	253
Coronado Elementary School	426
Palominas Elementary School	404
Tombstone High School	57
Valley View Elementary School	210
Pearce Elementary District	107
Pearce Elementary School	107
Pomerene Elementary District	148
Benson High School	47
Pomerene Elementary School	101
Portable Practical Educational Preparation, Inc. (PPEP, Inc.)	214
PPEP TEC-Colin L. Powell Learning Center	83
PPEP TEC-Raul H. Castro Learning Center	131
San Simon Unified District	113
San Simon School	113
Sierra Vista Unified District	5,719
Bella Vista Elementary School	401
Buena High School	1,915
Carmichael Elementary School	422
Huachuca Mountain Elementary School	630

Joyce Clark Middle School	794
Pueblo Del Sol Elementary School	636
Town & County Elementary School	407
Village Meadows Elementary School	514
St. David Unified District	398
St. David Elementary School	272
St. David High School	126
Tombstone Unified District	791
Huachuca City School	441
Tombstone High School	256
Walter J. Meyer School	94
Valley Union High School District	95
Valley Union High School	95
Visions Unlimited Academy, Inc.	47
Vision Unlimited Academy	47
Wilcox Unified District	1,170
Willcox Elementary School	425
Willcox High School	405
Willcox Middle School	340
Grand Total	20,014

Arizona Department of Education (2015). Enrollment. Provided by AZ FTF.

Chapter 4

Appendix 4.1. 2012 ECE Professional Development Programs

	Early Care and Education Centers
Reimbursed employees for college tuition	53%
Paid for workshop registration fees	81%
Paid for staff development days	78%

First Things First – Arizona’s Unknown Education Issue (2013). Early Learning Workforce Trends. Provided by AZ FTF.

Appendix 4.2. 2007 and 2012 Compensation of ECE Professionals: Median Salary

Year, Number of Responses, and sample size	For Profit <4 Sites	For Profit 4+ Sites	Head Start	Public Schools	Other Nonprofit	All Types
Assistant Teachers						
2007 Median	\$7.75	\$8.00	\$10.25	\$10.00	\$8.50	\$9.00
Number of Responses	325	212	23	160	355	1,075
Number Assistant Teachers	1,528	1,119	730	2,088	2,041	7,506
2012 Median	\$8.50	\$8.75	\$10.53	\$10.00	\$9.00	\$9.66
Number of Responses	298	160	28	174	318	978
Number Assistant Teachers	1,153	699	864	1,629	1,834	6,179
Teachers						
2007 Median	\$8.50	\$9.00	\$15.00	\$13.50	\$11.00	\$9.75
Number of Responses	409	261	24	183	394	1,271
Number Teachers	3,034	3,305	705	1,654	2,372	11,070
2012 Median	\$9.00	\$9.80	\$16.00	\$14.50	\$11.50	\$10.00
Number of Responses	431	251	29	176	381	1,268
Number Teachers	2,825	2,936	868	1,206	2,410	10,245
Teacher Directors						
2007 Median	\$11.56	\$11.50	\$15.00	\$14.31	\$14.50	\$13.50

Number of Responses	245	137	11	87	227	707
Number Teacher Directors	321	189	70	284	307	1,171
2012 Median	\$11.00	\$12.00	\$20.00	\$14.00	\$14.50	\$13.50
Number of Responses	302	136	15	101	236	790
Number Teacher Directors	428	192	119	337	428	1,504
Administrative Directors						
2007 Median	\$14.50	\$14.00	\$20.00	\$21.47	\$16.75	\$16.82
Number of Responses	225	198	24	121	246	814
Number Administrative Directors	305	321	168	188	311	1,293
2012 Median	\$14.00	\$16.00	\$21.16	\$22.00	\$17.00	\$16.80
Number of Responses	286	218	25	92	253	874
Number Administrative Directors	371	317	119	143	337	1,287

First Things First – Arizona’s Unknown Education Issue (2013). Early Learning Workforce Trends. Provided by AZ FTF.

Appendix 4.3. 2007 and 2012 Compensation of ECE Professionals: Lowest Starting Salary

Year, Number of Responses, and sample size	For Profit <4 Sites	For Profit 4+ Sites	Head Start	Public Schools	Other Nonprofit	All Types
Assistant Teachers						
2007 Median	\$7.00	\$7.25	\$9.22	\$8.75	\$7.50	\$8.00
Number of Responses	328	212	24	162	359	1,085
Number Assistant Teachers	1,548	1,119	743	2,109	2,063	7,582
2012 Median	\$7.98	\$8.00	\$9.71	\$8.77	\$8.25	\$8.50
Number of Responses	298	160	28	174	318	978
Number Assistant Teachers	1,153	699	864	1,629	1,834	6,179
Teachers						
2007 Median	\$7.50	\$8.00	\$11.75	\$11.71	\$9.50	\$8.25
Number of Responses	412	262	25	187	399	1,285
Number Teachers	3,063	3,313	711	1,725	2,436	11,248
2012 Median	\$8.00	\$8.00	\$14.83	\$13.46	\$9.89	\$8.99
Number of Responses	430	251	29	176	380	1,266
Number Teachers	2,822	2,936	868	1,206	2,387	10,219
Teacher Directors						
2007 Median	\$10.00	\$10.00	\$16.38	\$13.00	\$12.19	\$11.90
Number of Responses	242	136	11	86	219	694
Number Teacher Directors	318	189	70	293	298	1,168
2012 Median	\$10.00	\$11.00	\$16.25	\$13.80	\$12.13	\$12.00
Number of Responses	301	136	15	101	236	789
Number Teacher Directors	427	192	119	337	428	1,503
Administrative Directors						
2007 Median	\$12.00	\$12.00	\$15.92	\$18.00	\$14.40	\$13.69
Number of Responses	215	195	24	113	233	780
Number Administrative Directors	293	322	168	179	297	1,259

2012 Median	\$12.00	\$14.40	\$15.32	\$19.00	\$15.86	\$15.00
Number of Responses	286	218	24	92	253	873
Number Administrative Directors	371	317	118	143	337	1,286

First Things First – Arizona’s Unknown Education Issue (2013). Early Learning Workforce Trends. Provided by AZ FTF.

Appendix 4.4. 2007 and 2012 Compensation of ECE Professionals: Highest Starting Salary

Year, Number of Responses, and sample size	For Profit <4 Sites	For Profit 4+ Sites	Head Start	Public Schools	Other Nonprofit	All Types
Assistant Teachers						
2007 Median	\$8.25	\$8.50	\$12.77	\$12.00	\$9.50	\$10.00
Number of Responses	328	212	23	162	359	1,084
Number Assistant Teachers	1,548	1,119	730	2,109	2,063	7,569
2012 Median	\$9.00	\$9.50	\$13.35	\$11.77	\$10.00	\$10.50
Number of Responses	293	160	28	174	318	978
Number Assistant Teachers	1,153	699	864	1,629	1,834	6,179
Teachers						
2007 Median	\$10.00	\$11.00	\$18.33	\$17.00	\$13.39	\$12.00
Number of Responses	412	261	25	191	397	1,286
Number Teachers	3,060	3,305	711	1,730	2,407	11,213
2012 Median	\$10.75	\$11.50	\$21.12	\$16.80	\$13.50	\$12.50
Number of Responses	431	250	29	176	381	1,267
Number Teachers	2,825	2,921	868	1,206	2,410	10,230
Teacher Directors						
2007 Median	\$13.00	\$12.60	\$18.25	\$15.76	\$15.00	\$14.50
Number of Responses	246	138	11	88	227	710
Number Teacher Directors	322	191	70	295	307	1,185
2012 Median	\$11.52	\$13.00	\$23.75	\$15.38	\$15.00	\$14.28
Number of Responses	302	136	15	101	236	790
Number Teacher Directors	428	192	119	337	428	1,504
Administrative Directors						
2007 Median	\$15.00	\$16.00	\$23.44	\$28.93	\$17.30	\$18.00
Number of Responses	225	200	24	121	246	816
Number Administrative Directors	305	325	168	188	311	1,297

2012 Median	\$15.00	\$17.30	\$24.35	\$24.00	\$18.70	\$17.78
Number of Responses	286	218	25	92	253	874
Number Administrative Directors	371	317	119	143	337	1,287

First Things First – Arizona’s Unknown Education Issue (2013). Early Learning Workforce Trends. Provided by AZ FTF.

Appendix 4.5. 2013 Average Length of Employment for ECE Professionals by Provider Type

Average Length of Employment	For Profit <4 Sites	For Profit 4+ Sites	Head Start	Public Schools	Other Nonprofit	All Types
Assistant Teachers						
6 months or less	7%	8%	-	2%	3%	4%
7-11 months	8%	7%	-	1%	2%	3%
One Year	31%	22%	12%	10%	12%	16%
Two Years	19%	14%	2%	18%	18%	15%
Three Years	9%	16%	28%	38%	24%	24%
Four Years	6%	9%	30%	7%	7%	10%
5 years or More	21%	24%	28%	24%	34%	27%
Don't Know/Refused	0%	0%	-	0%	0%	0%
Teachers						
6 months or less	3%	2%	-	2%	2%	2%
7-11 months	4%	1%	-	2%	2%	2%
One Year	13%	9%	11%	13%	5%	10%
Two Years	20%	18%	2%	8%	13%	15%
Three Years	17%	23%	14%	13%	15%	18%
Four Years	9%	10%	1%	6%	7%	8%
5 years or More	33%	37%	71%	56%	55%	45%
Don't Know/Refused	0%	1%	-	-	0%	1%
Teacher Directors						
6 months or less	4%	6%	3%	2%	4%	4%
7-11 months	5%	1%	-	1%	1%	2%
One Year	8%	10%	19%	5%	3%	7%
Two Years	9%	7%	17%	4%	10%	8%
Three Years	11%	13%	29%	10%	17%	14%
Four Years	10%	12%	-	29%	15%	15%

5 years or More	52%	49%	31%	48%	50%	49%
Don't Know/Refused	1%	1%	-	1%	0%	1%
Administrative Directors						
6 months or less	4%	3%	1%	1%	3%	3%
7-11 months	3%	3%	1%	1%	2%	2%
One Year	8%	6%	5%	4%	4%	6%
Two Years	7%	8%	3%	8%	7%	7%
Three Years	10%	11%	-	7%	6%	8%
Four Years	7%	10%	2%	5%	6%	7%
5 years or More	60%	56%	89%	74%	71%	66%
Don't Know/Refused	2%	2%	-	1%	2%	2%

First Things First – Arizona’s Unknown Education Issue (2013). Early Learning Workforce Trends. Provided by AZ FTF.

Appendix 4.6. 2016 Race and ethnicity for children/pregnant women enrolled in Head Start Child Parent Centers*

Race/Ethnicity	# of children/Pregnant women (Hispanic or Latino Origin)	# of children/pregnant women (Non-Hispanic or Non-Latino origin)
American Indian or Alaska Native	25	42
Asian	4	31
Black or African American	31	101
Native Hawaiian or other pacific Islander	2	6
White	2,273	412
Biracial/Multi-racial	36	33
Other	186	28
Unspecified	58	0

Office of Head Start (2016). Head Start Data. Retrieved from: <https://hses.ohs.acf.hhs.gov/pir/>

*Child-Parent Centers is a Head Start grantee for five southern Arizona counties: Cochise, Pima, Graham, Greenlee and Santa Cruz Counties. Data presented is aggregated across all five counties.

Appendix 4.7. 2016 Primary language of family at home for children/pregnant women enrolled in Head Start Child-Parent Centers*

Primary Language of family at home	# of children/Pregnant women
English	1,675
Spanish	1,490
Native Central American, South American, and Mexican Languages	0
Caribbean Languages	0
Middle Eastern & South Asian Languages	63
East Asian Languages	<25
Native North American/Alaska Native Languages	0
Pacific Island languages	0
European & Slavic Languages	<25
African Languages	<25
Other	0
Unspecified	<25

Office of Head Start (2016). Head Start Data. Retrieved from: <https://hses.ohs.acf.hhs.gov/pir/>

*Child-Parent Centers is a Head Start grantee for five southern Arizona counties: Cochise, Pima, Graham, Greenlee and Santa Cruz Counties. Data presented is aggregated across all five counties.

Appendix 4.8. 2016 Funded Enrollment by Program Option for Head Start Child-Parent Centers*

Funded enrollment by program option -children	# of children
Center-based program- 5 days per week	
Full day enrollment	96
Of these, the number available as full-working-day	96
Of these, the number available for full-calendar-year	96
Part-day enrollment	0
Of these, the number in double sessions	0
Center-based program- 4 days per week	
Full-day enrollment	0
Part-day enrollment	2,076
Of these, the number in double sessions	0
Home-based program	578
Combination option program	<25
Family child care program	77
Of these, the number available as full-working-day enrollment	77
Of these, the number available for full-calendar-year	77
Locally designed option	0

Office of Head Start (2016). Head Start Data. Retrieved from: <https://hses.ohs.acf.hhs.gov/pir/>

*Child-Parent Centers is a Head Start grantee for five southern Arizona counties: Cochise, Pima, Graham, Greenlee and Santa Cruz Counties. Data presented is aggregated across all five counties.

Appendix 4.9. Preschool primary disabilities for Head Start Child-Parent Centers and migrant programs

Diagnosed primary disability	# of children determined to have this disability	# of children receiving special services
Health impairment (i.e. meeting IDEA definition of other health impairments ¹)	0	0
Emotional disturbance	0	0
Speech or language	213	213
Intellectual disabilities	<25	<25
Hearing impairment, including deafness	<25	<25
Orthopedic impairment	0	0
Visual impairment, including blindness	0	0
Specific learning disability	<25	<25
Autism	<25	0
Traumatic brain injury	0	0
Non-categorical/developmental delay	58	58
Multiple disabilities (excluding deaf-blind)	<25	<25
Multiple disabilities (including deaf-blind)	0	0

Office of Head Start (2016). Head Start Data. Retrieved from: <https://hses.ohs.acf.hhs.gov/pir/>

¹Child-Parent Centers is a Head Start grantee for five southern Arizona counties: Cochise, Pima, Graham, Greenlee and Santa Cruz Counties. Data presented is aggregated across all five counties.

Appendix 4.10. Quality First Enrollment by Quality First Star Ratings for Centers and Providers^{1*}

Center Data	FTF Cochise Region**
Total Quality First licensed participants	31
Total Licensed Capacity 3-5 Star	792
Number of sites 3-5 Star	<25
Number of Non-Quality First licensed centers	<25
Total Non-Quality First licensed providers	103

Arizona First Things First (July 2015). Quality First.

Appendix 4.11. 2012-2015 Number of children receiving services from the Division of Developmental Disabilities

Year	Arizona	FTF Cochise Region
Total number of children (ages 0-2) receiving services		
2012	2,646	<25
2013	2,693	<25
2014	2,341	<25
2015	2,336	<25
Total number of children (ages 3-5) receiving services		
2012	2,536	<25
2013	2,600	<25
2014	2,533	<25
2015	2,540	<25

Arizona Department of Economic Security (2015). Division of Developmental Disabilities. Provided by AZ FTF.

Appendix 4.12. 2012-2015 Division of Developmental Disabilities Service visits received by children (unduplicated count)

Year	Arizona	FTF Cochise Region
Total number of visits for children ages 0-2		
2012	168,992	913
2013	158,496	589
2014	130,486	572
2015	120,519	403
Total number of visits for children ages 3-5		
2012	363,468	1,537
2013	374,440	1,640
2014	367,590	1,167
2015	363,468	1,537

Arizona Department of Economic Security (2015). Division of Developmental Disabilities. Provided by AZ FTF.

Appendix 4.13. Types of Disabilities of Preschool Children

Year	Type of Disability	Arizona	FTF Cochise Region
2012			
	Deaf-Blind	<25	-
	Developmental Delay	3,672	72
	Hearing impaired	160	-
	PSD	2,164	<25
	Speech/Language Impairment	3,560	62
	Visual Impairment	111	<25
	Total	9,680	155
2013			
	Deaf-Blind	<25	-
	Developmental Delay	3,774	71
	Hearing impaired	157	-
	PSD	2,187	<25
	Speech/Language Impairment	3,437	69
	Visual Impairment	118	-
	Total	9,689	156
2014			
	Deaf-Blind	<25	-
	Developmental Delay	3,747	69
	Hearing impaired	154	-
	Preschool Severe Delay	1,921	<25
	Speech/Language Impairment	3,503	54
	Visual Impairment	105	-
	Total	9,444	141
2015			
	Deaf-Blind	3,571	-
	Developmental Delay	63	69
	Hearing impaired	1,859	-

PSD	3,155	<25
Speech/Language Impairment	54	54
Visual Impairment	-	-
Total	8,702	141

Arizona Department of Education (2015). Special Education. Provided by AZ FTF.

*The data presented are unduplicated (i.e., children diagnosed with multiple disabilities are counted only one time in the Federal Primary Need [FPN] category).

Appendix 4.14. Types of Speech, Language, and Hearing Service Providers

Types of Service Provider	Cochise County
Number of Audiologists	0
Number of Dispensing Audiologists	<25
Number of Hearing Aid Dispensers	<25
Number of Special Licensing Pathologists	0
Number of Speech Language Assistants	<25
Number of Speech Language Pathologists	<25
Number of Speech Language Pathologists (Limited Licensed)	<25
Number of Temporary Hearing Aid Dispensers	0
Number of Temporary Speech Language Pathologists	0

¹Arizona Department of Health Services (2016). *Speech, Language and Hearing Providers*. Retrieved from <http://azdhs.gov/licensing/special/index.php#databases>

Appendix 4.15. Infants and toddlers with an Individual Family Service Plan (IFSP) who received an evaluation assessment and IFSP within 45 days of referral¹

Indicators	Federal Fiscal Year 2012	Federal Fiscal Year 2013
Infants and toddlers with IFSPs who receive timely services	87%	82.19%
Infants and toddlers who had initial IFSP within 45 days	94%	75.85%
Infants and toddlers who primarily receive services in new environment	95%	94.67%

Data were gathered from AzEIP's SPP/APR which are submitted in federal reports can be found on <https://www.azdes.gov/reports>.

Chapter 5

Appendix 5.1. 2009-2014 Number of Births that Were Covered by AHCCCS or Indian Health

Year	Statewide	FTF Region
2009	51,046	891
2010	48,014	794
2011	46,507	729
2012	46,923	747
2013	46,872	802
2014	47,234	803

Vital Statistics Birth (2014). Provided by AZ FTF.

Appendix 5.2. Health Insurance Information from Head Start Child-Parent Center Programs*

	# of children at enrollment	# of children at end of enrollment year
Number of Children with Health Insurance	3,107	3,111
Number of Enrollment Medicaid and/or CHIP	2,771	2,766
Number of enrollment in State-Only Funded Insurance (for example, medically indigent insurance)	41	40
Number with private health insurance (for example, parent's insurance)	214	216
Number with Health Insurance other than listed above, for example, Military Health (Tri-Care or CHAMPUS)	81	89
Number of Children with no health insurance	142	138
Number of Children with an ongoing source of continuous accessible health care	3,124	3,146
Number of children receiving medical services through the Health service	28	27

Office of Head Start (2016). Head Start Data. Retrieved from: <https://hses.ohs.acf.hhs.gov/pir/>

*Child-Parent Centers is a Head Start grantee for five southern Arizona counties: Cochise, Pima, Graham, Greenlee and Santa Cruz Counties. Data presented is aggregated across all five counties.

Appendix 5.3. 2012-2015 Reportable Illnesses for all Ages

Year	Statewide	County
2012	20,690	189
2013	13,913	179
2014	13,211	173
2015	15,966	239

Arizona Department of Health Services (2015). Communicable Disease Summary. Retrieved from <http://www.azdhs.gov/preparedness/epidemiology-disease-control/index.php#data-stats-archive>

Appendix 5.4. 2012-2014 Total Number of Asthma Related Visits to ER

Year	Statewide	County	FTF Region
2012	5,450	78	78
2013	4,890	72	72
2014	4,560	56	56

Asthma ER Visits (2014). Provided by AZ FTF.

Appendix 5.5. 2009-2014 Child Fatality Rates for Children under 18

Year	Statewide	County
2009	947	2%
2010	862	2%
2011	837	2%
2012	854	2%
2013	810	2%
2014	834	1%

Arizona Department of Health Services (2015). Arizona Child Fatality Review. Retrieved from <http://www.azdhs.gov/documents/prevention/women-children-health/reports-fact-sheets/child-fatality-review-annual-reports/cfr-annual-report-2015.pdf>

Appendix 5.6. 2009-2014 Manner of Death for Children Under 18*

Manner of Death	Statewide
2009	
Natural	68%
Accident	17%
Undetermined	7%
Homicide	5%
Suicide	3%
2010	
Natural	66%
Accident	19%
Undetermined	9%

Homicide	4%
Suicide	3%
2011	
Natural	64%
Accident	20%
Undetermined	6%
Homicide	5%
Suicide	5%
2012	
Natural	63%
Accident	22%
Undetermined	5%
Homicide	5%
Suicide	4%
2013	
Natural	63%
Accident	23%
Undetermined	5%
Homicide	6%
Suicide	3%
2014	
Natural	66%
Accident	22%
Undetermined	4%
Homicide	4%
Suicide	5%

Arizona Department of Health Services (2015). Arizona Child Fatality Review. Retrieved from <http://www.azdhs.gov/documents/prevention/women-children-health/reports-fact-sheets/child-fatality-review-annual-reports/cfr-annual-report-2015.pdf>
 *Does not include deaths of pending manner

Appendix 5.7. 2014 Manner of Death for Children 1-5 Years of Age*

Manner of Death	Statewide
2014	
Natural Accident	5%
Accident	4.6%
Undetermined	0.6%
Homicide	1.7%
Suicide	0%

Arizona Department of Health Services (2015). Arizona Child Fatality Review. Retrieved from <http://www.azdhs.gov/documents/prevention/women-children-health/reports-fact-sheets/child-fatality-review-annual-reports/cfr-annual-report-2015.pdf>

*Does not include deaths of pending manner

Appendix 5.8. 2014 Statewide Injury-Related Outcomes for Children Ages 0–5

	Infants less than 1 year		Children Ages 1-5	
	Hospital Discharges	ED visits	Hospital Discharges	Ed Visits
Unintentional Injuries	212	5,082	695	40,961
Assault/Abuse	69	22	39	119
Undetermined/ Other Intent	9	61	9	123
Total Injury-Related Cases	290	5,165	747	41,350

Arizona Special Emphasis Report (2014). Infant and Early Childhood Injury

Appendix 5.9. 2009-2014 Women Who Received Prenatal Care*

Number of Prenatal Care Visits	Year	Statewide	FTF Region
Received fewer than five prenatal care visits			
	2009	3.4%	2.3%
	2010	3.3%	3.6%
	2011	3.4%	3.8%
	2012	3.6%	5.3%
	2013	3.8%	4.9%
	2014	4.4%	7.4%
5-8 prenatal visits			
	2009	15.6%	7.2%
	2010	14.4%	12.9%
	2011	14.0%	11.4%
	2012	13.7%	13.4%
	2013	13.5%	14.2%
	2014	14.7%	16.8%
9-12 prenatal visits			
	2009	49.1%	32.0%
	2010	49.0%	40.6%
	2011	47.0%	35.6%
	2012	46.8%	44.8%
	2013	46.4%	35.0%
	2014	47.6%	39.3%
13 or more prenatal visits			
	2009	30.1%	55.0%

	2010	31.7%	39.9%
	2011	34.0%	46.2%
	2012	34.7%	33.6 %
	2013	34.9%	42.3%
	2014	31.1%	31.9%

Vital Statistics Birth (2014). Provided by AZ FTF.

*Data are not available for this year

Appendix 5.10. Tobacco and Alcohol Use During Pregnancy 2009-2014

Year	Mother's Substance use	Statewide	FTF Region
2009			
	Drinker, Nonsmoker	0.3%	*
	Smoker, Nondrinker	4.6%	8.0%
	Smoker and Drinker	0.2%	0.3%
	Nonsmoker and Nondrinker	94.9%	91.6%
2010			
	Drinker, Nonsmoker	0.3%	*
	Smoker, Nondrinker	4.4%	7.8%
	Smoker and Drinker	0.2%	*
	Nonsmoker and Nondrinker	95.1%	91.9%
2011			
	Drinker, Nonsmoker	0.4%	*
	Smoker, Nondrinker	4.1%	6.3%
	Smoker and Drinker	0.2%	*
	Nonsmoker and Nondrinker	95.4%	93.3%
2012			
	Drinker, Nonsmoker	0.3%	*
	Smoker, Nondrinker	4.0%	5.1%
	Smoker and Drinker	0.2%	*
	Nonsmoker and Nondrinker	95.5%	94.6%
2013			
	Drinker, Nonsmoker	0.2%	*
	Smoker, Nondrinker	4.3%	6.9%
	Smoker and Drinker	0.2%	*
	Nonsmoker and Nondrinker	95.3%	93.1%

2014**			
	Nonsmoker	96.0%	93.9%
	Light Smoker	2.7%	4.5%
	Heavy Smoker	1.3%	1.5%
	Unknown	0.7%	*

Arizona Department of Health Services (2014). Vital Statistics. Provided by AZ FTF.

* Sum rounded to nearest tens unit due to non-zero addend less than 6

**Alcohol consumption was not reported for 2014; as such data on smoking had additional categories

Appendix 5.11. 2010-2014 Drug Withdrawal Syndrome in Infants of Drug Dependent Mothers*

Year	Statewide	County
Total	1,840	40
2010	260	<25
2011	360	<25
2012	360	0
2013	390	<25
2014	470	<25

Arizona Department of Health Services (2014). Drug withdrawal syndrome in infants of dependent mothers by race/ethnicity and county of residence. Retrieved from

<http://azdhs.gov/plan/hip/index.php?pg=drugs>

*Sum rounded to nearest tens unit due to non-zero addend less than 6

Appendix 5.12. 2009-2014 Infant Mortality and At-Risk Births

	Year	Statewide**	FTF Region
Births with complications			
	2009	27.7%	26.1%
	2010	29.0%	32.2%
	2011	30.0%	28.7%
	2012	31.7%	26.4%
	2013	32.0%	30.5%
	2014	21.4%	22.3%
Number Premature births (under 37 weeks)			
	2009	10.0%	8.8%
	2010	9.6%	9.4%
	2011	9.3%	9.8%
	2012	9.2%	7.9%
	2013	9.0%	8.2%
	2014	9.0%	8.2%
Infant Mortality Rate			
	2009	0.6%	0.4%
	2010	0.6%	0.8%
	2011	0.6%	0.5%
	2012	0.6%	0.5%
	2013	0.5%	0.6%
	2014	0.6%	0.4%
Newborns admitted to Intensive Care Unit			
	2009	6.2%	3.5%
	2010	6.1%	4.3%
	2011	5.5%	4.4%

	2012	4.8%	3.9%
	2013	5.3%	2.9%
	2014	6.7%	4.5%
Births with congenital anomalies			
	2009	0.7%	1.9%
	2010	0.6%	1.2%
	2011	0.6%	1.3%
	2012	0.6%	0.8%
	2013	0.7%	1.3%
	2014	0.5%	0.4%

Arizona Department of Health Services (2014). Vital Statistics. Provided by AZ FTF.

*Data not available for this year

Appendix 5.13. 2009-2014 Mothers who were not married

	Year	Statewide	FTF Region
Mother was not married			
	2009	44.9%	39.3%
	2010	44.4%	36.6%
	2011	44.4%	37.8%
	2012	45.5%	38.6%
	2013	45.7%	41.0%
	2014	45.5%	38.5%

Arizona Department of Health Services (2014). Vital Statistics. Provided by AZ FTF.

Appendix 5.14. 2012-2015 Pre-Pregnancy Overweight and Obesity Rates*

Indicators	Statewide	County	FTF Region
2012			
Total	52,600	1,282	1,286
Percent Pre-Pregnancy under weight	4.8%	5.3%	5.3%
Percent Pre-Pregnancy normal weight	41.2%	45.0%	45.1%
Percent Pre-Pregnancy overweight	26.7%	25.7%	25.7%
Percent Pre-Pregnancy obese	27.4%	23.4%	23.8%
2013			
Total	51,894	1,351	1,354
Percent Pre-Pregnancy under weight	4.7%	6.2%	6.2%
Percent Pre-Pregnancy normal weight	40.1%	44.2%	44.3%
Percent Pre-Pregnancy overweight	26.8%	25.2%	25.1%
Percent Pre-Pregnancy obese	28.4%	24.3%	24.3%
2014			
Total	53,717	1,307	1,310
Percent Pre-Pregnancy under weight	4.6%	4.2%	4.2%
Percent Pre-Pregnancy normal weight	40.0%	43.6%	43.6%
Percent Pre-Pregnancy overweight	26.4%	26.0%	26.0%
Percent Pre-Pregnancy obese	29.0%	26.0%	26.1%
2015			

Total	58,495	1,351	1,358
Percent Pre-Pregnancy under weight	4.1%	4.9%	4.8%
Percent Pre-Pregnancy normal weight	38.6%	41.8%	41.6%
Percent Pre-Pregnancy overweight	26.8%	26.6%	26.6%
Percent Pre-Pregnancy obese	30.5%	26.7%	26.8%

Arizona Department of Health Services (2015). Women, Infants & Children (WIC). Provided by AZ FTF.

Appendix 5.15. 2015 Reported Medical Issues in Head Start Child-Parent Center Programs*

Chronic Conditions	# of children
Anemia	11
Asthma	232
Hearing Difficulties	6
Vision Problems	50
High Lead Levels	1
Diabetes	4

Office of Head Start (2016). Head Start Data. Retrieved from: <https://hses.ohs.acf.hhs.gov/pir/>

*Child-Parent Centers is a Head Start grantee for five southern Arizona counties: Cochise, Pima, Graham, Greenlee and Santa Cruz Counties. Data presented is aggregated across all five counties.

Appendix 5.16. Number of all Children Body Mass Index in Head Start Child-Parent Centers*

	# of children at enrollment
Underweight (BMI less than 5th percentile for child's age and sex)	97
Healthy weight (at or above 5th percentile and below 85th percentile for child's age and sex)	1,628
Overweight (BMI at or above 85th percentile and below 95th percentile for child's age and sex)	391
Obese (BMI at or above 95th percentile for child's age and sex)	483

Office of Head Start (2016). Head Start Data. Retrieved from: <https://hses.ohs.acf.hhs.gov/pir/>

*Child-Parent Centers is a Head Start grantee for five southern Arizona counties: Cochise, Pima, Graham, Greenlee and Santa Cruz Counties. Data presented is aggregated across all five counties.

Appendix 5.17. 2015 Immunization Received from Head Start Child-Parent Center Programs*

	# of children at enrollment	# of children at the end of enrollment year
Number of children who have been determined by a health care professional to be up-to-date on all immunizations appropriate for their age	3,099	3,174
Number of children who have been determined by a health care professional to have received all immunizations possible at this time, but who have not received all immunizations appropriate for their age	37	22
Number of children who meet their state's guidelines for an exemption from immunizations	32	30
Number of all children who are up-to-date on a schedule of age-appropriate preventive and primary health care, according to the relevant state's EPSDT schedule for well child care	1,319	2,947

Office of Head Start (2016). Head Start Data. Retrieved from: <https://hses.ohs.acf.hhs.gov/pir/>

*Child-Parent Centers is a Head Start grantee for five southern Arizona counties: Cochise, Pima, Graham, Greenlee and Santa Cruz Counties. Data presented is aggregated across all five counties.

Appendix 5.18. 2015 Oral Health Information from Head Start Child-Parent Center Programs*

	# of children at enrollment
Number of Children with Continuous Accessible Dental Care provided by a dentist	3,059
Number of Children who received preventive care since last year's PIR was reported	2,525
Number of all children, including those enrolled in Medicaid or CHIP, who have completed a professional dental examination since last year's PIR was reported	2,424
Of these, the number of children diagnosed as needing treatment since last year's PIR was reported	722
Of these, the number of children who have received or are receiving treatment	630

Office of Head Start (2016). *Head Start Data*. Retrieved from: <https://hses.ohs.acf.hhs.gov/pir/>
 *Child-Parent Centers is a Head Start grantee for five southern Arizona counties: Cochise, Pima, Graham, Greenlee and Santa Cruz Counties. Data presented are aggregated across all five counties.

Chapter 6

Appendix 6.1 Juvenile arrests of children ages 8-17 for violent crimes

	Arizona	Cochise County
2004	1,569	64
2005	1,576	38
2006	1,647	53
2007	1,604	45
2008	1,630	39
2009	1,355	N/A
2010	1,245	38
2011	1,082	35
2012	1,048	29
2013	961	11
2014	827	18

Kids Count Data Center (2014). Juvenile Arrests. Retrieved from <http://datacenter.kidscount.org/>

Appendix 6.2 Juvenile arrests of children ages 8-17 for drug crimes

	Arizona	Cochise County
2004	5,587	165
2005	5,396	178
2006	5,225	97
2007	5,456	124
2008	5,440	160
2009	5,507	N/A
2010	5,417	148
2011	5,109	137
2012	4,550	103
2013	3,939	29

Kids Count Data Center (2014). Juvenile Arrests. Retrieved from <http://datacenter.kidscount.org/>