



2014 NEEDS AND ASSETS REPORT

GRAHAM / GREENLEE REGIONAL PARTNERSHIP COUNCIL



FIRST THINGS FIRST

Ready for School. Set for Life.

**First Things First
Graham/Greenlee Region
Needs and Assets Report
September 2014**



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Letter from the Chair

April 8, 2014

The past two years have continued to be rewarding for the First Things First Graham/Greenlee Regional Partnership Council as we have delivered on our mission to build better futures for young children and their families. During the past year, we have touched many lives of young children and their families through the implementation of Quality First, Quality First Child Care Scholarships, Parent Outreach and Awareness, Home Visitation, Food Security, Oral Health and Reach Out and Read.

The First Things First Graham/Greenlee Regional Partnership Council will continue to advocate and provide opportunities for family support, health and early learning.

Our strategic direction has been guided by the Needs and Assets Reports, specifically created for the Graham/Greenlee Region in 2008, 2010, 2012 and the new 2014 report. The Needs and Assets reports are vital to our continued work in building a true integrated early childhood system for our young children and our overall future. The Graham/Greenlee Regional Council would like to thank our Needs and Assets Vendor, LeCroy & Milligan Associates, for their knowledge, expertise and analysis of the Graham/Greenlee Region. The new report will help guide our decisions as we move forward for young children and their families with the Graham/Greenlee Region.

Going forward, the First Things First Graham/Greenlee Regional Partnership Council is committed to meeting the needs of young children by providing essential services, advocating for change and helping to build the early childhood system in our region.

Thanks to our dedicated staff, volunteers and community partners, First Things First is making a real difference in the lives of our youngest citizens throughout the state of Arizona.

Thank you for your continued support!

Sincerely,

Laurie Smith, Chair

Graham/Greenlee Regional Partnership Council

[Graham/Greenlee Regional Partnership Council](#)



Regional Partnership Council Members

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Introduction and Acknowledgements

A child's most important developmental years are those leading up to kindergarten. First Things First is committed to helping Arizona children 0-5 years of age receive the quality education, healthcare, and family support they need to arrive at school healthy and ready to succeed. Children's success is fundamental to the wellbeing of our communities, society and the State of Arizona.

This Needs and Assets Report for the Graham/Greenlee Geographic Region provides a comprehensive picture of the early childhood resources available for the region's young children and their families, identifies gaps in these resources, and points to ways in which children and families can be best supported. Families and young children in the Graham/Greenlee Region need a supportive system that helps set children on the trajectory of a healthy and successful life: exposure to rich learning environments from a very young age; access to high

quality, non-parental care from birth to pre-K; parent education, access to health care; health insurance; and access to coordinated family services such as home visitation, parent education, and family literacy. The efforts of the Graham/Greenlee Regional Partnership Council are consistent with a key community value the residents of Graham County expressed in the 2012 Graham County Community Health Assessment:

Our community should be supportive of the efforts of families to love and develop healthy and well-adjusted children, while recognizing their physical, mental, emotional and spiritual needs.

The Graham/Greenlee Regional Partnership Council recognizes the importance of investing in young children and empowering parents, grandparents, and caregivers to advocate for services and programs within the region. Since the 2012 Needs & Assets Report, the Graham/Greenlee Region has focused on education and service delivery systems that improve access to high quality early care and education programs, increase the knowledge and skill sets of family home care providers, expand the availability of preventative screening and referral services, increase public awareness of the importance of early childhood development and health, and foster greater collaboration between service providers. This report provides useful data for guiding the Regional Partnership Council's decision-making and information about the region's contribution to building a comprehensive statewide early childhood development system.



Acknowledgments

The First Things First Graham/Greenlee Partnership Council owes special gratitude to the agencies and key stakeholders who participated in numerous work sessions and community forums throughout the past two years. The Graham/Greenlee Region's successes are due, in large measure, to the contributions of numerous individuals who gave their time, support, and expertise.

To the current and past members of the Graham/Greenlee Regional Partnership Council, your dedication, commitment and extreme passion has guided the work that has made a difference in the lives of young children and families within the region. Our continued work will help move forward building a true comprehensive early childhood system for the betterment of young children within the region and the entire state.

We also want to thank the Arizona Department of Economic Security, Arizona Department of Health Services, Arizona Department of Education, and Arizona State Immunization Information System for their contribution of data for this report.

Table of Contents

- LETTER FROM THE CHAIR..... 1
- REGIONAL PARTNERSHIP COUNCIL MEMBERS 2
- INTRODUCTION AND ACKNOWLEDGEMENTS 3
- TABLE OF CONTENTS 5
- LIST OF EXHIBITS 8
- EXECUTIVE SUMMARY 12
 - METHODOLOGY 12
 - KEY DEMOGRAPHIC FINDINGS 13
 - KEY ECONOMIC FINDINGS 13
 - KEY EDUCATION FINDINGS 14
 - KEY EARLY CHILD CARE FINDINGS 15
 - KEY FAMILY SUPPORT FINDINGS..... 15
 - KEY HEALTH FINDINGS 16
- DEMOGRAPHIC OVERVIEW 17
 - WHO ARE THE FAMILIES AND CHILDREN LIVING IN GRAHAM/GREENLEE? 17
 - Population..... 18
 - Population Growth 18
 - Trends in Population Changes by Community 20
 - Other Information..... 21
- ADDITIONAL POPULATION CHARACTERISTICS 21
 - Race/Ethnic Groups 22
 - Immigrant Status 23
 - Family Composition 24
 - Grandparents as Caregivers 25

| | |
|---|----|
| Teen Parents | 26 |
| Language Usage | 27 |
| ECONOMIC CIRCUMSTANCES | 28 |
| Children and Families Living Below Federal Poverty Level..... | 29 |
| Household Income..... | 33 |
| Employment and Unemployment | 35 |
| Other Relevant Economic Indicators | 37 |
| EDUCATIONAL INDICATORS | 44 |
| Educational Attainment..... | 45 |
| Kindergarten Readiness and Literacy | 46 |
| Standardized Testing..... | 48 |
| Special Needs Populations..... | 50 |
| Other Relevant Data | 52 |
| THE EARLY CHILDHOOD SYSTEM | 53 |
| EARLY CARE EDUCATION | 53 |
| Quality and Access..... | 54 |
| Professional Development..... | 60 |
| SUPPORTING FAMILIES | 63 |
| Family Support | 63 |
| Child Abuse/Neglect | 67 |
| Foster Care..... | 68 |
| Juvenile Justice | 69 |
| HEALTH | 70 |
| Health Insurance Coverage and Utilization | 72 |
| Public Health Clinics..... | 73 |

| | |
|---|-----|
| Healthy Births | 74 |
| Immunizations | 78 |
| Developmental Screening | 81 |
| Injuries | 83 |
| Child Mortality and Morbidity | 83 |
| Behavioral Health | 85 |
| Oral Health | 86 |
| PUBLIC AWARENESS AND COLLABORATION | 86 |
| Public Awareness of Early Childhood Issues | 87 |
| System Coordination | 88 |
| SUMMARY AND CONCLUSIONS | 88 |
| DEMOGRAPHICS | 89 |
| ECONOMIC CIRCUMSTANCES | 89 |
| EDUCATION INDICATORS | 90 |
| EARLY CARE AND EDUCATION | 91 |
| FAMILY SUPPORT | 91 |
| CHILD ABUSE/NEGLECT, FOSTER CARE AND JUVENILE JUSTICE | 92 |
| HEALTH COVERAGE AND UTILIZATION | 93 |
| HEALTHY BIRTHS | 93 |
| OTHER HEALTH INDICATORS | 94 |
| NEXT STEPS | 94 |
| APPENDIX A: REFERENCES | 95 |
| APPENDIX B. AIMS 3RD GRADE SCORE ACHIEVEMENT LEVELS..... | 116 |

List of Exhibits

- Exhibit 1. Map of Graham County and Greenlee County 17
- Exhibit 2. Population, All Ages, 2010-2013 18
- Exhibit 3. Under Age Five Population by Locality, 2008-2012, 5-Year Estimates 18
- Exhibit 4. Change in Population, All Ages, 2000-2013 19
- Exhibit 5. Change in Population by Locality 2000-2012 19
- Exhibit 6. Change in Population, Children Under 5 Years Old, 2000, 2010, 2011, 2012 20
- Exhibit 7. Population Projection by Community, 2014-2024 20
- Exhibit 8. Race/Ethnicity, All Ages, 5-Year Average, 2008-2012 22
- Exhibit 9. Race/Ethnicity of Mothers, 2011 and 2012 22
- Exhibit 10. Population by Citizenship Status, 5-Year Average, 2008-2012 23
- Exhibit 11. Composition of Family Households with Children 0-18 years of Age, 2008-2012 25
- Exhibit 12. Grandparents Fully Responsible for Grandchildren, 2008-2012 25
- Exhibit 13. Number of Teen Births, 2008-2012 26
- Exhibit 14. Number of Teen Births by Age Sub-group, 2010-2012 26
- Exhibit 15. Language Spoken at Home, Population Five Years of Age and Older, 2008-2012 . 27
- Exhibit 16. Family Income below Poverty Level, 5 Year Average, 2008-2012 30
- Exhibit 17. Estimated Number of Individuals Living in Poverty, 2012 30
- Exhibit 18. Estimated Poverty for Children Ages 5-17 by School District, 2011 and 2012 31
- Exhibit 19. Economic Disadvantage by School District and Charter School, 2010-2013 32
- Exhibit 20. Median Family Gross Annual Income, 2000, 2010, 2012 34
- Exhibit 21. 2010 and 2012 Median Income of Families with Children Under 18 by Family Type 34
- Exhibit 22. Unemployment Rates by Locality, 2008-2013 35
- Exhibit 23. Unemployment Rate, January-December 2013 36
- Exhibit 24. Key Employment Indicators for Graham County 36

| | |
|--|----|
| Exhibit 25. Key Employment Indicators for Greenlee County | 37 |
| Exhibit 26. Families with Children Ages 0-5 Enrolled in TANF, 2009-2012 | 38 |
| Exhibit 27. Children Ages 0-5 Enrolled in TANF, 2009-2012 | 38 |
| Exhibit 28. Families with Children Ages 0-5 Enrolled in SNAP | 39 |
| Exhibit 29. Families with Children Ages 0-5 Enrolled in SNAP by Zip Code, 2009-2012..... | 40 |
| Exhibit 30. Children Ages 0-5 Enrolled in SNAP by Zip Code, 2009-2012 | 41 |
| Exhibit 31. Child Eligibility for Free or Reduced Lunch by School District, 2008-2011 & 2013 .. | 41 |
| Exhibit 32. WIC Participation of Children Ages 13-59 Months by Locality, 2010-2012 | 43 |
| Exhibit 33. WIC Participation of Women by Locality, 2010-2012 | 43 |
| Exhibit 34. WIC Participation of Infants (ages 0-12 months) by Locality, 2010-2012..... | 44 |
| Exhibit 35. Percentage of Live Births by Educational Attainment of Mother | 45 |
| Exhibit 36. Educational Attainment, Adults 25 Years and Older, 5-Year Average, 2008-2012 .. | 46 |
| Exhibit 37. Home Literacy Practices – Reading and Telling Stories, Singing Songs | 48 |
| Exhibit 38. Home Literacy Practices – Books in the Home | 48 |
| Exhibit 39. Results of AIMS Mathematics Test, Graham County 3 rd Grade, 2011-2013..... | 49 |
| Exhibit 40. Results of AIMS Reading Test, Graham County 3 rd Grade, 2011-2013..... | 49 |
| Exhibit 41. Results of AIMS Mathematics Test, Greenlee County 3 rd Grade, 2011-2013 | 49 |
| Exhibit 42. Results of AIMS Reading Test, Greenlee County 3 rd Grade, 2011-2013 | 50 |
| Exhibit 43. Special Needs Students by School District and Charter School, 2010-2013 | 51 |
| Exhibit 44. High School Graduation Rates, 2008-2012 | 53 |
| Exhibit 45. Quality First Child Care Provider Enrollment and Public Star Rating, 2014 | 55 |
| Exhibit 46. Graham/Greenlee Quality First Child Care Centers and Child Care Homes..... | 56 |
| Exhibit 47. Number of Accredited Early Care and Education Centers | 56 |
| Exhibit 48. ADHS Licensed Child Care Facilities by Community, 2013 | 57 |
| Exhibit 49. Change in Capacity in ADHS- Licensed Child Care Facilities, 2011 to 2013 | 58 |

| | |
|---|----|
| Exhibit 50. Daily Rates Charged by Home-based Centers for Full-time Child Care, 2012 | 59 |
| Exhibit 51. Families and Children Eligible and Receiving Child Care Assistance, 2011-2012 ... | 60 |
| Exhibit 52. Families and Children on Child Care Assistance Waiting List, 2011 and 2012 | 60 |
| Exhibit 53. Graham/Greenlee DES Child Care Professional Training (CCPT), 2010-2013 | 63 |
| Exhibit 54. Home Visiting Programs in the Graham/Greenlee Region | 64 |
| Exhibit 55. Specific Perceptions of Services in the Graham/Greenlee Region, 2012 | 64 |
| Exhibit 56. Parent Understanding of Early Childhood in Graham/Greenlee Region, 2012 | 65 |
| Exhibit 57. Satisfaction of Services in the Graham/Greenlee Region, 2012 | 66 |
| Exhibit 58. Child Abuse Reports, Substantiations, Removals, and Placements, 2010-2013 | 68 |
| Exhibit 59. Children Entering Out-of-Home Care by Prior Placements, 2013 | 69 |
| Exhibit 60. Juveniles Processed in the Arizona Court System, Fiscal Years 2011 and 2012 | 70 |
| Exhibit 61. KidsCare Enrollment, 2009-2014 | 73 |
| Exhibit 62. Graham/Greenlee Public Health Clinic Locations and Services..... | 74 |
| Exhibit 63. Number of Prenatal Visits by Pregnant Women, 2008-2012 | 74 |
| Exhibit 64. Low Birth Weight Rates, 2008-2012 | 76 |
| Exhibit 65. Newborns Admitted to Intensive Care Units, 2012 | 77 |
| Exhibit 66. Occurrence of Selected Characteristics of Newborns and Expectant Mothers, 2012 | 77 |
| Exhibit 67. Selected Birth Statistics, 2012 | 78 |
| Exhibit 68. Children Ages 12-24 Months Receiving 3:2:2:2 Vaccination Series, 2010-2012 | 79 |
| Exhibit 69. Children Ages 19-35 Months Receiving 4:3:1:3:3:1 Vaccination Series, 2010-2012 | 80 |
| Exhibit 70. Series 3:2:2:2 Vaccine for Children Ages 12-24 Months by Zip Code, 2012 | 80 |
| Exhibit 71. Series 4:3:1:3:3:1 Vaccine for Children Ages 19-35 Months by Zip Code, 2012 | 81 |
| Exhibit 72. AzEIP Performance Outcomes, Arizona, 2007-2012 | 82 |
| Exhibit 73. Developmental Disability Service Process for Ages 0-5.9, 2007-2012 | 82 |

Exhibit 74. Child Inpatient Discharges for Injury and/or Poisoning as First-Listed Diagnosis, 2008-2011 83

Exhibit 75. Fatality Rates for Children 0-18 Years of Age, Arizona Counties, 2012..... 84

Exhibit 76. Usage of Behavioral Health Services in Geographical Service Area (GSA) 3, by Pregnant Women, Women with Dependent Children, and Children 0-5, 2010 and 2013 85

Exhibit 77. Oral Health Promotion Activities, 2014 and 2015 (Proposed)..... 86

Exhibit 78. Community Outreach Efforts, 2013 87

Executive Summary

This report details findings from the fourth Needs and Assets assessment completed in 2014 for the Graham/Greenlee Regional Partnership Council. This assessment will be used to help guide the Council's strategic planning and funding decisions for the next two years. The report includes relevant comparisons with data from previous years to provide a context of trends within the region.

Methodology

First Things First obtained most of the data included in this report from others state agencies, among them the Department of Economic Security, Department of Health Services, and Department of Education. Most demographic and economic data came from various divisions of the U.S. Census Bureau: the Biennial Census, American Community Survey, and Small Area Income and Poverty Estimate Program. The American Community Survey produces 1-year, 3-year, and 5-year estimates. Each of the estimates has certain distinguishing features.

- One-year estimates are based on 12 months of data collected in areas with a population of 65,000 or greater. These estimates are the most current, but are considered less reliable than the 3-year or 5-year estimates.
- Three-year estimates use data collected over 36 months in areas that have a population of 20,000 or greater. They are less current than 1-year estimates but more current than 5-year estimates. Their reliability level is higher than the 1-year estimates but lower than the 5-year estimates.
- Five-year estimates rely on 60 months of data collected in all areas. With the largest sample size they are considered the most reliable, although they are the least current.

For this report, 5-year estimates were most commonly used due to the small population size of Graham County, Greenlee County, and their communities. In some cases, only one type of American Community Survey estimate was available for an indicator. In other instances, data were not available from the American Community Survey source for Greenlee County due to its small population size. Data from different U.S. Census Bureau sources for the same year for the same indicator may slightly differ.

Several general principles guided the choice of data presented and the way the data were shown.

1. Whenever possible and useful, provide data for multiple geographical levels - local level (i.e., zip code or town), county, state, and nation – to better enable comparison.
2. Whenever possible and useful, provide data for multiple time points to enable identification of trends.
3. Percentages are rounded off to the nearest whole percent, except in cases where an additional decimal place will be useful for comparisons.

Key Demographic Findings

- Roughly 8% of the region's population is comprised of children under five years old. Between 2000 and 2012, the population of children under five years of age in Graham County grew faster than the total population.
- Children five years old and younger make 11% or more of the population in several of the region's towns and cities.
- The total population of Graham County is projected to increase by 14% over the next decade; Greenlee County's population is expected to increase by 1% over the same period.
- Thirty-four percent of Graham County grandparents who live with their children and grandchildren have assumed primary caregiving responsibility for their live-in grandchildren; 66% of such grandparents have assumed this responsibility in Greenlee County. This figure is below the statewide and national rates of 42% and 40%, respectively. Seventeen percent of the grandparents in Graham County and who live with their grandchildren and 14% of those who do so in Greenlee County have acted as primary caregiver for the grandchildren for five or more years, indicating they have taken on a long-term caregiving role for their grandchildren.
- The Hispanic proportion of the population, 31% in Graham County and 48% in Greenlee County, exceeds the statewide percentage of 30%.
- A language other than English is spoken in the homes of 20% of the population five years of age and older in Graham County; in Greenlee County this is so for 23% of the population.
- About 14% of the births 2011 and 2012 were to teens, down from 5-year high of 18% in 2010. In Greenlee County, the percentage of teen births decreased from a 5-year high of 22% in 2009 to 9% in 2012.

Key Economic Findings

- Between 2008 and 2012, an average of 26% of Graham County's married couple families with children under five years of age were living below the federal poverty level; in Greenlee County 10% of such families were below the federal poverty line. In contrast, 75% of the female-headed households with no husband present and children under five years of age in Graham County were living in poverty. There were no female-headed households living in poverty in Greenlee County.
- From 2011-2013 the number of economically disadvantaged students has shown a downward trend in a few of the region's school districts (Bonita Elementary, Duncan Unified, and Graham County Special Services). However, in 2013, the percentage of students who were economically disadvantaged surpassed 40% in the majority of the region's school districts and charter schools.

- Between 2009 and 2013, the unemployment rate in the Graham County almost steadily decreased from 11.5% to 6.1%. In Greenlee County the unemployment rate also trended downward from a 6-year high of 18.7% in 2009 to 6.0% in 2012, but slightly increased to 6.7% in 2013. The 2013 unemployment rate varied greatly by locality, from 3.4% in Morenci to 9.7% in Clifton.
- The number of families with children ages 0-5 enrolled in the Supplemental Nutritional Assistance Program (i.e. “Food Stamps”) grew from 670 in January 2009 to 1,002 in January 2010 in Graham County and has remained at roughly the same level since then. In Greenlee County, the number of such families increased from 72 in January 2009 to 132 in January 2010, staying at roughly that level since then.
- In 2011, free or reduced lunch enrollment in school districts in Graham and Greenlee counties ranged from 29% in Morenci to 95% in Fort Thomas Unified School District. Forty percent or more of students were enrolled in free or reduced lunch in that year in eight of the nine districts for which data were available.

Key Education Findings

- In Graham County, the percentage of mothers with no high school diploma has gradually decreased from 2008 onward but rose again in 2012. The percentage of Graham County mothers with one or more years of college followed a general upward trend from 31% in 2008 to 39% in 2012. Over the same period, in Greenlee County the percentage of mothers with no high school diploma showed an almost steady downward trend from 2008 to 2012. The county has also experienced relatively steady growth over the period in the percentage of mothers that have attended college for one or more years.
- A much higher percentage of adults in Graham and Greenlee counties have graduated high school compared to the state and nation as a whole. The percentage of adults 25 years and older in Graham and Greenlee counties that have completed some college also surpasses those for the state and nation. However, both counties lag far behind state and national figures for attainment of higher education such as a Bachelor’s, graduate, or professional degree.
- In 2013, 72% of Graham County 3rd grade students met or exceeded the standard in mathematics and 80% did so in reading. In Greenlee County, 81% 3rd grade students met or exceeded the standards on the Mathematics AIMS test in 2013 and 86% did so on the Reading AIMS test.
- Five of the region’s seven public high schools had a graduation rate of 90% or higher in 2012.

Key Early Child Care Findings

- All six of the region's child care centers and three of the region's child care homes are enrolled in First Things First's Quality First rating program. A recently opened child care center in Greenlee County will soon enroll in the program, keeping the region's participation rate for child care centers in Quality First at 100%.
- The number of available slots in child care facilities licensed by the Arizona Department of Health Services increased from 523 in 2011 to 707 in 2013, a 35% increase.
- The number of families in the Graham/Greenlee region eligible for child care assistance from the Arizona Department of Economic Security decreased steadily from 108 in January 2011 to 73 in July 2012. The number of families receiving such assistance was 85 from January 2011 to January 2012 but dropped to 72 in July 2012.
- The number of children in the Graham/Greenlee region eligible for child care assistance from the Arizona Department of Economic Security decreased from 148 in January 2011 to 120 in July 2012. The number of children receiving such assistance steadily increased from 117 in January 2011 to 125 in January 2012 but decreased to 108 in July 2012.
- The number of families on the child care assistance waiting list increased from 25 in July 2011 to 39 in July 2012. The number of children ages 0-5 on the list increased from 39 to 52 over the same period.
- In 2014, the Graham/Greenlee region provided incentives to 20 early care educators through First Things First's Professional REWARD\$, a program that offers stipends to early childhood educators who advance their education or maintain a designated length of continuous employment. In 2015, the region will provide such incentives to 30 early care educators. In addition, six early care educators in the region received T.E.A.C.H. scholarships in 2014 through FTF statewide Quality First support.

Key Family Support Findings

- The Healthy Families home visitation program, formerly only operating in Graham County, is now serving families in Greenlee County.
- A total of 1,215 service visits were provided in 2012 to 36 children ages 0-5.9 with developmental disabilities through the Division of Developmental Disabilities.
- In 2014, the Graham/Greenlee Partnership Council has funded a range of educational opportunities, materials, and activities for families in the region to promote health, child development and school readiness. The Council has been especially strong in supporting early literacy. In 2012, a Council-funded program distributed over 24,000 books to families with young children. The same programs will be funded in 2015.

Key Health Findings

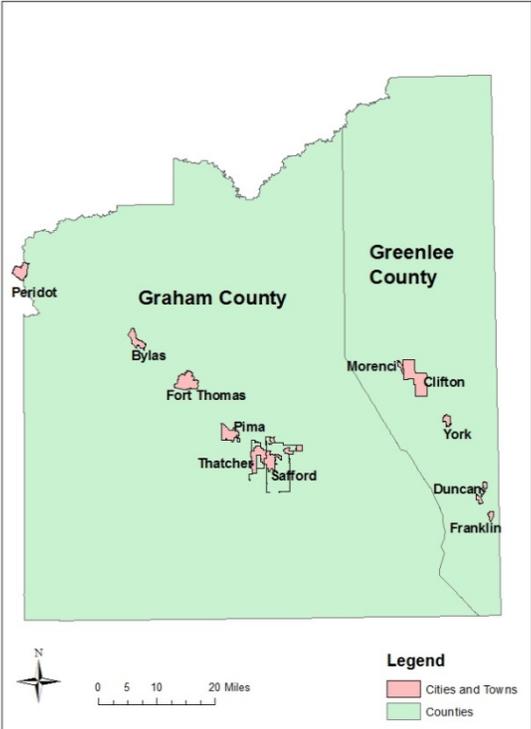
- The percentage of children that completed the 3:2:2:2 vaccination series in Graham County increased steadily from 2010 to 2012. However, the completion rate for all of the years was well below the statewide rate. The percentage of Greenlee County children ages 12-24 months that completed the 3:2:2:2 series was higher than that of the state as a whole in two of the three reported years.
- In 2012, 59% of children ages 12 to 24 months in Graham County and 75% of children in that age group in Greenlee County completed the 3:2:2:2 vaccination series. Over the same period, 43% of children ages 19 to 35 months completed the 4:1:3:3:1 vaccination series in Graham County and 50% in Greenlee County. These rates largely mirrored the state rates for those years.
- Enrollment in KidsCare/KidsCare II increased from 56 in February 2012 to 194 in February 2013. However, the program ended on January 31, 2014. Some children formerly served by KidsCare will enroll in health insurance through the Affordable Care Act (ACA) but some parents that receive health insurance through their employer may not be able to afford the additional cost of adding their children on to their plan.
- In Graham County the percentage of women who had 13 or more prenatal visits increased steadily from 6% in 2008 to 13% in 2012. In Greenlee County, this percentage increased almost steadily from 4% to 17% over the same period.
- In Graham County the percentage of women who had 9-12 prenatal visits increased almost steadily from 32% in 2008 to 43% in 2012; women who had 13 or more such visits increases steadily from 6% to 13% over the same years. In Greenlee County, the percentage of women who had 9-12 prenatal visits increased almost steadily from 30% in 2008 to 53% in 2012; those with 13 or more prenatal visits similarly had almost steady increase over the period, from 4% in 2008 to 17% in 2012.
- In 2012, 12% of the births in Graham County and 11% of the births in Greenlee County were pre-term. This compares to a statewide rate of 9%.
- In four of the five years from 2008 to 2012, the percentage of low birth weight babies born in Graham County has exceeded the statewide rate. In 2012, the Graham County rate was 7.6%, as compared to 6.9% for the state as a whole. In Greenlee County, the percentage of low birth weight babies was lower than the statewide rate in three of the five years. In 2012, 5.3% of the babies in Greenlee County were low birth weight, as compared to the state rate of 6.9%.
- Graham County has 56.5 child fatalities per 100,000 residents, seventh highest among the state's 15 counties. Greenlee County has 41.5 child fatalities per 100,000 residents, making it the thirteenth highest.

Demographic Overview

The Graham/Greenlee Region is composed of Graham County and Greenlee County. The two counties combined cover 6,467 square miles of southeast Arizona. Graham County is located in the Upper Gila River Valley where the San Simon River and Gila River meet. The cities of Graham County include Safford, Thatcher, and Pima, with smaller surrounding communities such as Bryce, Solomon, Ft. Thomas, and Bonita.

Greenlee County is situated directly east of Graham County. Its cities include Clifton, Morenci, and Duncan. Exhibit 1 shows a map of Graham and Greenlee counties.

Exhibit 1. Map of Graham County and Greenlee County



Who are the Families and Children Living in Graham/Greenlee?

Prior to examining the well-being of children and families in Graham/Greenlee County, it is important to consider the demographic makeup of these populations. Demographic data offer descriptive information about a region that can help to inform an analysis of needs, assets, and trends. Important demographics to examine include: number of families and children living in the region; change in population over the last ten years, and since the 2012 Needs and Assets report publication; and notable trends in specific communities. This information is provided in the following sections. Whenever possible, data are presented for children ages 0-5, the target population for the First Things First initiatives.

Population

Exhibit 2 shows that from 2010 to 2013 the population of both Graham County and Greenlee County followed a pattern of almost uninterrupted growth. Over that period, the population of Graham County increased from 36,804 to 37,482, while that of Greenlee County grew from 8,344 to 9,049.

Exhibit 2. Population, All Ages, 2010-2013

| | 2010 | 2011 | 2012 | 2013 |
|------------------------|-------------|-------------|-------------|-------------|
| Graham County | 36,804 | 37,002 | 37,026 | 37,482 |
| Greenlee County | 8,344 | 8,594 | 8,775 | 9,049 |
| Arizona | 6,408,790 | 6,468,796 | 6,551,149 | 6,626,624 |
| United States | 309,326,295 | 311,582,564 | 313,873,685 | 316,128,839 |

Note. From *Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2013* for Graham County, Greenlee County, Arizona and the United States; United States Census Bureau, Population Division.

Exhibit 3 shows how many children ages 0-5 live in the region's localities and the percentage of the total population that they constitute. The percentage of children under five varies across the region, from 0% in Ft. Thomas to 17% in Bryce.

Exhibit 3. Under Age Five Population by Locality, 2008-2012, 5-Year Estimates

| | | Total Population | Under 5 Population | Under 5 as a Percentage of Total Population |
|------------------------|------------|------------------|--------------------|---|
| Graham County | Pima | 2,860 | 437 | 15% |
| | Solomon | 500 | 38 | 8% |
| | Thatcher | 4,800 | 517 | 11% |
| | Safford | 9,549 | 821 | 9% |
| | Bryce | 176 | 30 | 17% |
| | Ft. Thomas | 258 | 0 | 0% |
| Greenlee County | Duncan | 696 | 53 | 8% |
| | Clifton | 3,336 | 295 | 9% |
| | Morenci | 2,061 | 216 | 11% |

Note. From *Demographic and Housing Estimates: 2008-2012, American Community Survey 5-Year Estimates*, United States Census Bureau.

Population Growth

Exhibit 4 shows that between 2000 and 2013 Graham County grew by 12% and Greenlee County by 6%. These growth rates are well below the Arizona growth rate of 29% for the same period. However, from 2012 to 2013, the growth rate in Greenlee exceeded the statewide rate.

Exhibit 4. Change in Population, All Ages, 2000-2013

| | 2000 | 2010 | 2011 | 2012 | 2013 | Percentage Change (2000-2013) | Percentage Change (2012-2013) |
|------------------------|-------------|-------------|-------------|-------------|-------------|-------------------------------|-------------------------------|
| Graham County | 33,489 | 36,804 | 37,002 | 37,026 | 37,482 | +12% | +1% |
| Greenlee County | 8,547 | 8,344 | 8,594 | 8,775 | 9,049 | +6% | +3% |
| Arizona | 5,130,632 | 6,408,790 | 6,468,796 | 6,551,149 | 6,626,624 | +29% | +1% |
| United States | 281,421,906 | 309,326,295 | 311,582,564 | 313,873,685 | 316,128,839 | +12% | +1% |

Note. From *Profile of General Demographic Characteristics: Census 2000 Summary File (SF-1) 100-Percent Data; Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2013*, United States Census Bureau.

U.S. Census population estimates show there was large variation by community in change in population between 2000 and 2013. Change in population ranged from a 9% decrease in Duncan to a 33% increase in Clifton. Duncan also shows the greatest population growth from 2011 to 2012 of all the reported localities (Exhibit 5).

Exhibit 5. Change in Population by Locality 2000-2012

| County | Locality | 2000 | 2009 | 2010 | 2011 | 2012 | Percentage Change 2000-2012 | Percentage Change 2011-2012 |
|------------------------|-----------------|-------|-------|-------|-------|-------|-----------------------------|-----------------------------|
| Graham County | Pima | 1,989 | 2,198 | 2,380 | 2,391 | 2,415 | +21% | +1% |
| | Safford | 9,232 | 9,832 | 9,502 | 9,476 | 9,479 | +3% | 0% |
| | Thatcher | 4,022 | 5,070 | 4,616 | 4,874 | 4,899 | +22% | +1% |
| Greenlee County | Clifton | 2,596 | 2,569 | 3,296 | 3,384 | 3,447 | +33% | +2% |
| | Duncan | 812 | 766 | 686 | 717 | 740 | -9% | +3% |
| | Morenci | NA | NA | NA | NA | NA | NA | NA |

Note. From *Table 1 Annual Estimates of the Resident Population for Counties of Arizona: April 1, 2000 to July 1, 2009 (CO-EST2009-01-04); Table 4 Annual Estimates of the Resident Population for Incorporated Places in Arizona: April 1, 2000 to July 1, 2009 (SUB-EST2009-04-04); Annual Estimates of the Resident Population for Incorporated Places: April 1, 2010 to July 1, 2012*, United States Census Bureau.

As shown in Exhibit 6, from 2000 to 2012 the population of children less than five years of age in Graham County grew by 18%, exceeding the statewide increase of 15%. Over that same period, the number of children under five years of age in Greenlee County decreased by 7%. Comparing data regarding total population to those for children under five years of age shows that while overall population is growing in both counties the number of children ages 0-5 appears to be decreasing in Greenlee County.

Exhibit 6. Change in Population, Children Under 5 Years Old, 2000, 2010, 2011, 2012

| | 2000 | 2010 | 2011 | 2012 | Percentage Change 2000-2012 |
|------------------------|------------|------------|------------|------------|--------------------------------|
| Graham County | 2,604 | 3,190 | 3,073 | 3,081 | +18% |
| Greenlee County | 708 | 642 | 660 | 655 | -7% |
| Arizona | 382,386 | 455,720 | 455,490 | 439,633 | +15% |
| United States | 19,175,798 | 20,189,418 | 20,127,889 | 19,999,344 | +4% |

Note. From *Census 2000 General Demographic Profiles; State Characteristics, County Characteristics, Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties, and Puerto Rico Commonwealth and Municipios*: April 1, 2010 to July 1, 2012, United States Census Bureau.

Trends in Population Changes by Community

Exhibit 7 shows population projections for incorporated localities, census designated places, and the unincorporated area of both Graham County and Greenlee County. By 2024, the population of Graham County is expected to increase in population by 14% to 43,384. The largest growth is expected to be in unincorporated areas of the county. Greenlee County is expected to experience a much lower growth rate of 1% over the same period. The higher growth rate of unincorporated areas of Graham County has implications for delivery of early childhood services.

Exhibit 7. Population Projection by Community, 2014-2024

| County | Locality | 2014 | 2019 | 2024 | Percentage Change 2014-2024 |
|------------------------|--------------------------|-----------------------|---------------|---------------|--------------------------------|
| Graham County | Pima | 2,402 | 2,548 | 2,698 | +12% |
| | Safford | 9,544 | 10,014 | 10,496 | +10% |
| | Thatcher | 4,945 | 5,234 | 5,529 | +12% |
| | Bylas CDP | 2,039 | 2,203 | 2,372 | +16% |
| | Cactus Flats CDP | 1,577 | 1,705 | 1,835 | +16% |
| | Central CDP | 670 | 724 | 780 | +16% |
| | Peridot CDP | 1,011 | 1,093 | 1,176 | +16% |
| | San Jose CDP | 526 | 568 | 612 | +16% |
| | Swift Trail Junction CDP | 3,050 | 3,296 | 3,548 | +16% |
| | Unincorporated | 21,200 | 22,912 | 24,662 | +16% |
| | Graham Total | 38,091 | 40,708 | 43,384 | +14% |
| Greenlee County | Clifton | 3,305 | 3,319 | 3,337 | +1% |
| | Duncan | 709 | 712 | 716 | +1% |
| | Morenci CDP | 1,492 | 1,499 | 1,507 | +1% |
| | York CDP | 558 | 561 | 564 | +1% |
| | Unincorporated | 4,439 | 4,459 | 4,482 | +1% |
| | | Greenlee Total | 8,453 | 8,490 | 8,535 |

Note. From *Population Projections Summary Table data set, 2013-2050 Sub-county Population Projections*, Arizona Department of Administration, Office of Employment and Population Statistics.

Other Information

It is essential that the estimate of population size and growth in the Graham/Greenlee Region be considered within the context of the current economic conditions. The numbers presented in the section above include data through 2012 or 2013. Most of these data are for years during which the United States was in a period recovery from one of the worst economic downturns seen in recent history. Although the U.S. economic recovery officially began in July 2009, the recession more negatively impacted Arizona's economy than that of other states. Some economists predict that 2014 will turn out be the eighth consecutive year of subpar growth for the state, with full recovery still years away (Arizona State University W. P. Carey School of Business, 2013).

Additional Population Characteristics

Significant research has been done on factors of resilience and adversity that contribute to both positive and negative outcomes for youth. Most factors can be classified categorically. Societal factors of resilience include a person's sense of equality and fair treatment. A key community-level resilience factor is the measure of community involvement, while an important familial or parental factor of resilience is household structure. General child well-being falls into the category of child-specific risk while anti-bullying programs are protective factors (Ungar & Liebenberg, 2013; Prince-Embury & Saklofski, 2013). Increasingly, research suggests that it is a complex inter-play of these factors that impacts early childhood outcomes (Braveman, Sadegh-Nobari, & Egerter, 2008; Florida State University Center for Prevention & Early Intervention Policy, 2005). While no single factor has been found to predict poor outcomes or be directly impacted by program efforts, all of these factors are important to consider in assessing the needs and assets of a region.

Many resilience and adversity factors have been correlated with demographic data to identify specific risks or needs that exist in communities. For example, in some studies parent household structure has been correlated with the likelihood of child abuse in the household, with single parent households at an increased risk (Oliver, Kuhns, & Pomeranz, 2006; U.S. Department of Health and Human Services, 2003). This information may also help to inform the need to target programs and services to specific cultural groups or sub-populations. For example, a high percentage of Hispanic families in a region might suggest the importance of offering a parenting program/curriculum to young mothers that uses culturally and linguistically appropriate materials and activities (Espinosa, 1995; Hyslop, 2000; Santos & Reese, 1999; Worthington et al., 2011).

As demographic data provides important contextual information about factors that might impact early childhood outcomes, this section of the report includes additional information on the racial/ethnic makeup, immigrant and tribal status, family composition, language use, and other relevant characteristics of people in the Graham/Greenlee Region. Whenever possible, data is included for children ages 0-5, as this is the target population for First Things First initiatives. The data presented is the most current and reliable information available at the time of this publication.

Race/Ethnic Groups

Residents in Graham and Greenlee counties are diverse in ethnicity and race. Exhibit 8 shows that in Graham County non-Hispanic Whites make up a 52% of the population; in Greenlee County the percentage of Whites is slightly smaller at 48%. However, the Hispanic proportion of the population, 31% in Graham County and 48% in Greenlee County, exceeds the statewide rate of 30%.

Exhibit 8. Race/Ethnicity, All Ages, 5-Year Average, 2008-2012

| | American Indian/ Alaska Native | Asian | Black/ African American | Hispanic/ Latino | Hawaiian or Other Pacific Islander | Some Other Race | Two or More Races | White, Not Hispanic |
|------------------------|--------------------------------|-------|-------------------------|------------------|------------------------------------|-----------------|-------------------|---------------------|
| Graham County | 13% | <1% | 2% | 31% | <1% | <1% | 1% | 52% |
| Greenlee County | 2% | 1% | 1% | 48% | <1% | <1% | 1% | 48% |
| Arizona | 4% | 3% | 4% | 30% | <1% | <1% | 2% | 58% |
| United States | <1% | 5% | 12% | 16% | <1% | <1% | 2% | 64% |

Note. From *Demographic and Housing Estimates, 2008-2012 American Community Survey 5-Year Estimates*, United States Census Bureau. Percentages do not total 100% due to rounding.

Exhibit 9 displays the racial and ethnic breakdown of mothers in Graham and Greenlee Counties. In 2012, 48% of women who gave birth in Graham County and 61% of those who gave birth in Greenlee County self-identified as white, non-Hispanic, as compared to 45% statewide. In that same year, 26% of the births in Graham County were to Hispanic women, well below the statewide figure of 39%. In Greenlee County, 39% of the births in 2012 were to Hispanic women. Although data are provided for only two years, a long-term increase in the percentage of Hispanic mothers living the region may have implications for attention to cultural competency in the provision of maternal health and early childhood services.

Exhibit 9. Race/Ethnicity of Mothers, 2011 and 2012

| | Graham County | | Greenlee County | | Arizona | | United States | |
|---------------------------------------|---------------|------|-----------------|------|---------|------|---------------|------|
| | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 |
| White, Non-Hispanic | 53% | 48% | 54% | 61% | 45% | 45% | 54% | 54% |
| Hispanic/ Latino | 26% | 28% | 42% | 39% | 38% | 39% | 23% | 23% |
| Black/African American | 2% | 2% | 2% | <1% | 5% | 6% | 15% | 15% |
| American Indian/Alaskan Native | 18% | 22% | 1% | <1% | 7% | 6% | 1% | 1% |
| Asian/Pacific Islander | 4% | <1% | 1% | <1% | 4% | 4% | 6% | 7% |
| Other or Unknown | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Note. From *Resident Births by Mother's Age Group, Race/Ethnicity, County of Residence, and Year, Arizona, 2011 and 2012*, Arizona Department of Health Services; *Health Status and Vital Statistics; Births: Preliminary Data for 2012, Volume 62, Number 3, 2013*, Centers for Disease Control and Prevention, National Vital Statistics Report.

Immigrant Status

An immigrant family is defined as having at least one parent who is foreign-born. Even though many of the children in immigrant families are citizens of the United States, these children face unique challenges compared to their peers. Research suggests that children from immigrant families are less likely to be prepared to start kindergarten (Crosnoe, 2007). In addition, mothers of immigrant families may lack access to or feel uncomfortable accessing preventive health care (such as prenatal care), which has been shown to positively impact youth outcomes. Foreign-born people may also not seek services for themselves or their children in fear of having their immigration status questioned, even if they are legal citizens (Duncan & One, 2012; Southwest Institute for Research on Women et al., 2011).

Changes made to Arizona immigration laws in 2010 may have additional implications for service utilization by immigrant families. The act, entitled Support Our Law Enforcement and Safe Neighborhoods (§ 1070), allows law enforcement to question individuals for whom they have reason to believe may be in the country illegally. Some sources suggest that many people in Arizona are seeking services in other states or not accessing services because of this legislation (González, 2011; Reese & Sakal, 2011; Tyler 2010, Toomey et al., 2014). Research suggests that some immigrant parents are hesitant to send their children to school or come to parent-teacher meetings out of fear of being subject to immigration law enforcement activities. The full implications of this law on service access, availability, and utilization is not yet known.

It is estimated that about 556,000 people in Arizona are foreign-born, non-U.S. citizens and that 28% of the state's children under the age of 18 are foreign born or live with at least one foreign-born parent (U.S. Census, 2014; Kidscount.org, n.d.) According to the National Center for Children in Poverty (n.d.), in 2011 78% of ages 0-5 children of immigrant parents live in low-income families, as compared to 49% of children from native-born parents.

The *American Community Survey's* 5-year estimate indicates that 95% of the people in Graham County and 96% in Greenlee County are native-born, U.S. Citizens, as compared to 86% statewide (Exhibit 10). In both counties the percentage of foreign-born naturalized citizens and foreign-born people who are not U.S. citizens are lower than statewide rates. It is possible that the number of immigrant families living in Arizona may be undercounted because families living illegally may avoid participation in the U.S. Census; limit access to services where information would be documented; and minimize involvement in any system that could result in deportation.

Exhibit 10. Population by Citizenship Status, 5-Year Average, 2008-2012

| | Native-born, U.S. Citizen | Foreign-born, Naturalized Citizen | Foreign-born, not U.S. Citizen |
|------------------------|----------------------------------|--|---------------------------------------|
| Graham County | 35,305 (95%) | 499 (1%) | 1,311 (4%) |
| Greenlee County | 8,206 (96%) | 165 (2%) | 221 (3%) |
| Arizona | 5,542,160 (86%) | 312,159 (5%) | 556,660 (9%) |
| United States | 269,354,406 (87%) | 17,639,207 (6%) | 22,145,098 (7%) |

Note. From *Selected Social Characteristics in the United States, 2008-2012 American Community Survey 5-Year Estimates*, United States Census Bureau.

Family Composition

The structure of American families has changed over the past few decades. Many families no longer consist of a traditional mother/father household. Instead, many are teenage mothers caring for their children, single-parent households or grandparents or other relative(s) as primary caregivers (AARP, 2010; Annie E. Casey Foundation KidsCount Data Center, n.d.; Teachman, Tedrow, & Crowder, 2000). The full impact of different family arrangements on youth is not fully known. Research has shown that children of teenage mothers are at increased risk of high BMI and score lower on a variety of cognitive tests as compared to children born to older mothers (Cornelius et al., 2009). Children born to teen mothers face higher rates of abuse than those born to women who delay childbearing (Robertson, Lang and Bachim, 2014; Schuyler Center for Analysis and Advocacy, 2008). A majority of teen mothers never complete high school, making it difficult for them to ever obtain good paying employment; their children are more likely to live in poverty (Schuyler Center for Analysis and Advocacy, 2008). A recent study (Osuchowki-Sanchez et al., 2013) noted disconnection to family and community as a barrier to success for Hispanic teen mothers. The authors claim that the lack of support for such teen mothers is intertwined with poverty and a culture of closed communication.



The number of families for which grandparents are raising their grandchildren is also increasing. Grandparents as caregivers may require unique resources and face certain parenting challenges. One consideration is that youth often enter the care of their grandparent due to negative circumstances related to their biological parents, such as the death of a parent, drug or alcohol abuse, incarceration, and mental health issues. This situation may contribute to increased risk factors like rates of mental health disorders and behavioral problems for children (Dunifon, 2013; Williams, 2011).

The following section details the composition of families in Graham and Greenlee counties. The United State Census defines a household as including “all the people who occupy a housing unit as their usual place of residence.” A “family household” is composed of “a householder [i.e. “head of household”] and one or more people living in the same household who are related to the householder by birth, marriage, or adoption.” Individuals living in a household who are not related to the householder are not counted as part of their family. Some family households have children, while others do not. It is important to consider specific support needs of different family types in order to help ensure positive outcomes for all children.

American Community Survey 5-year estimates for 2008-2012 show that 20% of family households with children in Graham County and 24% in Greenlee County were married couples with children (Exhibit 11). Female-headed family households represented 8% in Graham County and 7% in Greenlee County; male-headed households represented 4% and 6% in the two counties, respectively. The percentage of female-headed households in Graham County and male-headed households in both counties exceeded the statewide rates for such households.

Exhibit 11. Composition of Family Households with Children 0-18 years of Age, 2008-2012

| | Husband-Wife Households | Male-headed Household, No Wife Present | Female-headed Household, No Husband Present |
|-----------------|-------------------------|--|---|
| Graham County | 2,231 (20%) | 471 (4%) | 916 (8%) |
| Greenlee County | 821 (24%) | 206 (6%) | 225 (7%) |
| Arizona | 453,958 (19%) | 65,749 (3%) | 171,681 (7%) |
| United States | 23,426,943 (20%) | 2,595,537 (2%) | 8,462,168 (7%) |

Note. From *Households and Families*, 2008-2012 American Community Survey 5-Year Estimates, United States Census Bureau. Percentages refer to total number of households, including households without children under 18 years of age. Percentages for each of the geographical divisions (i.e. Graham County, Greenlee County, Arizona, and the United States) do not add up to 100% because data are not included for family households without children under 18 years of age present or for non-family households.

Grandparents as Caregivers

Exhibit 12 shows that 34% of Graham County grandparents who live with their children and grandchildren have assumed primary caregiving responsibility for their live-in grandchildren. This figure is below the statewide and national rates of 42% and 40%, respectively. However, in Greenlee County, 66% of such grandparents have assumed primary caregiving responsibility for their live-in grandchildren, exceeding the statewide and national rates.

Seventeen percent of the grandparents in Graham County who live with their grandchildren and 14% of those who do so in Greenlee County have acted as primary caregiver for the grandchildren for five or more years, indicating they have taken on a long-term caregiving role for their grandchildren. Thirty-seven percent of the Greenlee County grandparents living with their grandchildren have acted as the primary caregiver for those grandchildren for 1 year or less; this may indicate a recent surge in grandparents taking on such responsibility in the county.

Exhibit 12. Grandparents Fully Responsible for Grandchildren, 2008-2012

| | Grandparents Living with Own Grandchildren under 18 | Grandparents Living with and Responsible for Grandchildren | Number of Years Responsible for Grandchildren | | | |
|---------------|---|--|---|---------------|--------------|-----------------|
| | | | <1 | 1-2 | 3-4 | 5+ |
| Graham | 1,115 | 393 (34%) | 98 (9%) | 58 (5%) | 36 (3%) | 201 (17%) |
| Greenlee | 233 | 153 (66%) | 85 (37%) | 35 (15%) | 0 (0%) | 33 (14%) |
| Arizona | 154,705 | 64,163 (42%) | 14,806 (10%) | 15,407 (10%) | 10,332 (7%) | 23,618 (15%) |
| United States | 6,850,491 | 2,723,744 (40%) | 600,275 (9%) | 649,621 (10%) | 449,204 (7%) | 1,024,644 (15%) |

Note. From *Selected Social Characteristics in the United States*, 2008-2012 American Community Survey 5-Year Estimates, United States Census Bureau. Percentages are computed using the number of grandparents living with their own grandchildren under 18 as the denominator.

Teen Parents

Exhibit 13 shows that the percentage of births from teenage mothers in Graham County and Greenlee County steadily decreased over the last four reported years from 17% to 11%, mirroring a smaller statewide. However, in 2012 the rate in Graham County far exceeded that of the state as a whole.

Exhibit 13. Number of Teen Births, 2008-2012

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|-----------------|------|------|------|------|------|
| Graham County | 16% | 17% | 18% | 14% | 14% |
| Greenlee County | 18% | 22% | 16% | 13% | 8% |
| Arizona | 12% | 12% | 11% | 10% | 9% |
| United States | 10% | 10% | 9% | 8% | N/A |

Note. From Resident Births by Mother's Age Group, Race/Ethnicity, County of Residence and Year, Arizona, 2000-2009, 2010-2012; Arizona Birth and Maternal Characteristics, 2009-2012, Arizona Department of Health Services, Health Status and Vital Statistics.

Exhibit 14 shows that the majority of teen births in Graham County from 2010 to 2012 was from 18 to 19 year olds (9-13% annually), followed by 15 to 17 year olds (4-5%). In Greenlee County, 18-19 year olds accounted for 5-10% of teen births in the reported years; 15-17 year-olds made up 3-8% of births. The percentage of births to 18-19 year-olds in both counties exceeds that of the state. There was only one reported birth to teens under 15 years of age in either county.

Exhibit 14. Number of Teen Births by Age Sub-group, 2010-2012

| | | Graham County | Greenlee County | Arizona | United States |
|-------------------|------|---------------|-----------------|-------------|---------------|
| <15 Years | 2010 | 0 (0%) | * | 106 (<1%) | 4,500 (<1%) |
| | 2011 | 0 (0%) | 0 (0%) | 101(<1%) | 3,974 (<1%) |
| | 2012 | 0 (0%) | 0 (0%) | 70(<1%) | 3,674 (<1%) |
| 15-17 Years | 2010 | 26 (5%) | * | 2,921 (3%) | 109,193 (3%) |
| | 2011 | * | * | 2,447 (3%) | 95,554 (2%) |
| | 2012 | 25 (5%) | * | 2,430 (3%) | 82,503 (2%) |
| 18-19 Years | 2010 | 68 (13%) | * | 6,401 (7%) | 258,559 (6%) |
| | 2011 | 59 (10%) | * | 5,887 (7%) | 234,242 (6%) |
| | 2012 | 48 (9%) | * | 5,620 (7%) | 188,385 (4%) |
| Total Teen Births | 2010 | 94 (18%) | * | 9,428 (11%) | 372,252 (9%) |
| | 2011 | 82 (14%) | * | 8,435 (10%) | 333,770 (8%) |
| | 2012 | 73 (14%) | * | 8,117 (9%) | 274,528 (7%) |

Note. From Table 2 Selected Characteristics of Newborns and Resident Women Giving Birth by County, 2010, 2011, 2012, Arizona Department of Health Services, Health Status and Vital Statistics; Births: Preliminary Data for 2012, Volume 62, Number 3, 2013, Centers for Disease Control and Prevention, National Vital Statistics Report. Percentages are computed from 2010 births in Graham County (530), Greenlee County (105), Arizona (87,053), and U.S. (4,000,279); 2011 births in Graham County (606), Greenlee County (119), Arizona (85,190), and U.S. (3,953,593); 2012 births in Graham County (525), Greenlee County (114), Arizona (85,725), and U.S. (3,952,937). Percentages are based on total births to women of all ages, not only births to teenage mothers. An asterisk indicates that ADHS suppressed the data point because it was non-zero count less than 25; this is to preserve the confidentiality of a small number of individuals to whom the data refers.

Language Usage

Aside from English, Spanish is the most commonly spoken language in Arizona because of the state’s close proximity to the Mexican border and large Hispanic/Latino population. Other languages spoken in Arizona include several Native American languages such as Navajo and Apache. Studies suggest that Hispanics for whom English is their second language continue to lag behind those for who English is their first language on several educational measures. One study found that Hispanic students who did not have a basic understanding and knowledge of oral English prior to entering kindergarten achieved lower marks in reading and math by the end of fifth grade (Reardon & Galindo, 2009).

Another study stressed the importance of proficiency in English on the development of reading skills by children from households that spoke a language other than English. Children proficient in English at entrance to kindergarten demonstrated greater success in reading skill development throughout elementary school, compared to their counterparts who had limited English proficiency (Kieffer, 2008). A 2011 case study utilized several tools to better support these students, including a thorough language skill assessment aligned with academic content standards, a “menu” of individualized program models, and referring families to support resources (Marietta & Brookover, 2011). The findings of Solari et al. (2014) suggest that providing English language learners intensive instruction in letter knowledge and phonological awareness (i.e., letter sounding) in kindergarten can lead to improved oral reading fluency in early grades of school. These studies cumulatively suggest that English language learners are in need of both high quality and individualized early childhood education to help them achieve to the same extent as native English speakers.

Twenty percent of the population five years of age and older in Graham County and 23% of the same aged population in Greenlee County speaks a language other than English at home (Exhibit 15). These percentages are lower than the statewide rate of 27% and about the same as that of the United States. Fourteen percent of the Graham County residents speak Spanish at home; the percentage of Spanish speakers in Greenlee County is 20%, only slightly below the statewide rate of 21%. Of those who speak a language other than English at home, in both counties 6% self-reported speaking English “less than well,” lower than the Arizona rate of 10%.

Exhibit 15. Language Spoken at Home, Population Five Years of Age and Older, 2008-2012

| | Only English | Languages Other Than English: All | Languages Other Than English: Spanish | Speak English “Less Than Very Well,” Self-Reported |
|------------------------|-------------------|-----------------------------------|---------------------------------------|--|
| Graham County | 27,190 (80%) | 6,832 (20%) | 4,853 (14%) | 2,129 (6%) |
| Greenlee County | 6,128 (77%) | 1,792 (23%) | 1,670 (21%) | 456 (6%) |
| Arizona | 4,352,680 (73%) | 1,602,924 (27%) | 1,224,570 (21%) | 593,745 (10%) |
| United States | 229,616,064 (80%) | 59,384,763 (21%) | 36,836,280 (13%) | 25,081,122 (9%) |

Note. From *Selected Social Characteristics in the United States, 2008-2012*, American Community Survey 5-Year Estimates, United States Census Bureau.

Economic Circumstances

The recovery from the recent recession has been the weakest of all economic recoveries since the end of WWII, only beginning to gain traction in 2014 (Putnam, 2014; Council on Foreign Relations, 2013). However, the recovery continues to be geographically uneven (National Association of Counties, 2014). When the recession began in December 2007 the U.S. unemployment rate had been at 5% or below for 30 months (U.S. Bureau of Labor Statistics, 2012); in January 2014 it was 6.6%. Moreover, in 2013, the percentage of long-term unemployed, those who have been unemployed for 27 weeks or more, still exceeded the pre-recession levels in most states. In Arizona, 31.6% of the unemployed were in this category (Cooper, 2014). This suggests that numerous families remain without the wages needed to maintain a reasonable standard of living.

The effects of economic hardship can extend beyond a reduction in family household income to include complications to health and well-being. Some mental health professionals have reported a growing need for services (Collier, 2009). Likewise, doctors have reported more cases of alcohol abuse, drug overdose, mental health problems, and physical problems such as abdominal and chest pain associated with stress. Families may also avoid accessing services such as dental or eye care if they lack access to health insurance. Non-profit support service providers have also reported an increase in service-users that exhibit signs of anxiety and frustration from economic stress (Reardon, 2009).

A substantial body of research has documented lower academic achievement among low-income children relative to more affluent children (Gershoff, Aber, Raver, & Lennon, 2007). Academic performance of children can also be negatively impacted by parental unemployment or unstable employment (Adrian & Coontz, 2010). Low socioeconomic status does not however necessitate poor school readiness; quality early-childhood education along with increased parental involvement can substantially attenuate risk for academic underachievement (Kingston et al., 2013).

Studies have also shown that household food insecurity rates have increased alongside economic hardship (Houshyar & McHugh, 2010; March, Cook & Ettinger de Cuba, 2009; Szabo, 2010). Houshyar and McHugh of the First Focus Foundation for Child Development reported that in 2008, one year into the recent recession, 21% of households with children were estimated to have been food insecure, the highest percentage observed since 1995 when yearly measurement started. Additionally, the number of children living in food insecure households increased from 17% in 2007 to 23% in 2008, making it the most dramatic spike in food insecurity since the United States Department of Agriculture began measuring in 1995. Approximately 8.3 million children lived in households in which one or more children was food insecure in 2012 (Coleman-Jensen, Nord, & Singh, 2013).

Federal programs, such as Temporary Assistance for Needy Families (TANF) and the Supplemental Nutrition Assistance Program (SNAP) are in place to help families who are experiencing economic hardships. However, recent federal legislative action resulted in a cut in the amount of benefits received by SNAP recipients. It is estimated that approximately 1.1

million Arizona residents will lose a total of \$109 million in SNAP benefits from November 2013 through September 2014 (Rosenbaum & Kieth-Jennings, 2013). In addition, many local service providers who are typically able to step in and meet the needs of families in their areas are struggling to keep up with an increase in demand for services. A study by the Urban Institute (2010) found that as non-profits face a greater demand for services, they have also experienced a decrease in donations and increased difficulty in obtaining government funding, often resulting in staffing cuts.

Both national and local economic climates have major implications for health, child care, and educational needs of families with young children and the availability of support resources. This section of the Regional Needs and Assets report highlights historical and recent economic circumstances in the Graham/Greenlee Region, examining key economic indicators including the percentage of the population living below the federal poverty line, median income, unemployment rates, and net job flows.

Children and Families Living Below Federal Poverty Level

According to the 5-year estimates for all families, from 2008 to 2012 (Exhibit 16) in Graham County, 17% of married couple families with children under 18 years of age live below the FPL, compared to 11% of such families statewide and 8% nationally. For single female-headed households with children under 18 years of age, the poverty rate is significantly higher at 45%, exceeding the statewide rate for the same population by 7%. The percentage of families living in poverty for female-headed households with children under five years of age (75%) is the highest of all family types for which data are available.

In Greenlee County, 36% of female headed households with children under 18 have income below the poverty level, as compared to only 10% of married couple families with children in the same age range. However, no female-headed households with children under five years of age in the county live in poverty.

These data indicate that female-headed households with children are at heightened risk for poverty and potentially have the greatest need for assistance to meet their children's health, education, and other basic needs. In Graham County this needs appears to be even greater for female-headed households with young children.

Exhibit 16. Family Income below Poverty Level, 5 Year Average, 2008-2012

| | Families | Families With Related Children < 5 years only | Married Couple Families with related children under 18 years | Married Couple Families With Related Children < 5 years old | Female- Headed Household, No Husband Present with related children under 18 years | Female- Headed Household, No Husband Present With Related Children < 5 years old |
|------------------------|----------|---|--|---|---|--|
| Graham County | 18% | 38% | 17% | 26% | 45% | 75% |
| Greenlee County | 13% | 6% | 10% | 10% | 36% | 0.0% |
| Arizona | 12% | 19% | 11% | 9% | 38% | 44% |
| United States | 11% | 18% | 8% | 7% | 39% | 47% |

Note. From *Selected Economic Characteristics in the United States, 2008-2012*, American Community Survey 5-Year Estimates, United States Census Bureau.

Additional data regarding children living in poverty in the Graham/Greenlee Region is provided by the United States Census Small Area Income and Poverty Estimates (SAIPE). Exhibit 17 shows that SAIPE estimates 28% of the children under 18 years of age that reside in Graham County and 15% of those that reside in Greenlee County were living in poverty in 2012. In both counties, the poverty estimates for children exceed those for the population as a whole.

Exhibit 17. Estimated Number of Individuals Living in Poverty, 2012

| | All Ages | Under 18 Years Old | Under 5 Years Old |
|------------------------|------------------|--------------------|-------------------|
| Graham County | 8,549 (25%) | 2,898 (28%) | NA |
| Greenlee County | 1,049 (14%) | 376 (15%) | NA |
| Arizona | 1,195,931 (19%) | 430,378 (27%) | 130,571 (31%) |
| United States | 48,760,123 (16%) | 16,396,863 (23%) | 5,014,970 (26%) |

Note. From *Small Area Income and Poverty Estimate (SAIPE) Program*, December 2013, United States Census Bureau. NA indicates data not available.

SAIPE estimates for school districts show the varying levels of poverty in the Graham/Greenlee Region (Exhibit 18). In 2012, Clifton Unified District had the lowest percentage (8%) of children ages five to 17 living in poverty. During the same year, Fort Thomas Elementary District had the highest percentage (35%) of children living in poverty. Moreover, of the eight school districts for which SAIPE has data for 2012, five had child poverty rates of 20% or higher. However, from 2011 to 2012 the poverty rate for children ages 5-17 decreased in seven of the eight districts.

Exhibit 18. Estimated Poverty for Children Ages 5-17 by School District, 2011 and 2012

| | Total Population of District | | Children Age 5-17 | | Children Age 5-17 in Families in Poverty | |
|-------------------------------------|------------------------------|--------|-------------------|-------|--|-----------|
| | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 |
| Clifton Unified District | 2,889 | 2,955 | 567 | 578 | 62 (11%) | 47 (8%) |
| Duncan Unified District | 2,706 | 2,768 | 540 | 550 | 110 (20%) | 117 (22%) |
| Fort Thomas Unified District | 5,226 | 5,264 | 1,349 | 1,346 | 566 (42%) | 467 (35%) |
| Morenci Unified District | 2,935 | 3,001 | 726 | 738 | 114 (16%) | 84 (12%) |
| Pima Unified District | 3,738 | 3,765 | 883 | 881 | 226 (26%) | 163 (19%) |
| Safford Unified District | 16,644 | 16,765 | 3,204 | 3,197 | 857 (27%) | 833 (26%) |
| Solomon Elementary District | 2,877 | 2,898 | 374 | 373 | 157 (42%) | 122 (33%) |
| Thatcher Unified District | 7,401 | 7,455 | 1,463 | 1,460 | 318 (22%) | 310 (21%) |

Note From *Table 1: 2011; Table 1: 2012 School District Estimates*, United States Census Small Area Income and Poverty Estimates (SAIPE). Estimates are available only for school districts identified in the U.S. Census Bureau's school district mapping project. The U.S. Census states that these estimates have a confidence interval of 90%, which means the actual number may be 5% higher or lower.

School district-level data on economically disadvantaged students from the Arizona Department of Education provides another picture of the economic situation for children in the Graham/Greenlee Region (Exhibit 19). These data show that from 2010 to 2013 in most districts the number of economically disadvantaged students has fluctuated. However, over the last 3 reported years the number of such students has shown a downward trend in a few districts (Bonita Elementary, Duncan Unified, and Graham County Special Services). In 2013, in the majority of the region's school districts and charter schools the percentage of students who were economically disadvantaged surpassed 40%. Large fluctuations within districts in the number of students with economic disadvantage across years are worthy of further examination.

Exhibit 19. Economic Disadvantage by School District and Charter School, 2010-2013

| School District | Year | Student Count | Number of Students with Economic Disadvantage | Percentage of Students with Economic Disadvantage |
|--|------|---------------|---|---|
| Blue Elementary District (85922) | 2010 | * | 0 | 0 |
| | 2011 | * | 0 | 0 |
| | 2012 | * | 0 | 0 |
| | 2013 | * | 0 | 0 |
| Bonita Elementary District (85643) | 2010 | 70 | 36 | 51% |
| | 2011 | 79 | 41 | 52% |
| | 2012 | 89 | 37 | 42% |
| | 2013 | 85 | 34 | 40% |
| Clifton Unified School District (85533) | 2010 | 63 | 43 | 68% |
| | 2011 | N/D | N/D | N/D |
| | 2012 | 42 | 0 | 0 |
| | 2013 | 44 | * | 16% |
| Discovery Plus Academy (85543) | 2010 | 91 | 0 | 0 |
| | 2011 | 85 | 43 | 51% |
| | 2012 | 116 | 63 | 54% |
| | 2013 | 115 | 63 | 55% |
| Duncan Unified District (85534) | 2010 | 206 | 119 | 58% |
| | 2011 | 196 | 116 | 59% |
| | 2012 | 199 | 105 | 53% |
| | 2013 | 176 | 80 | 45% |
| Fort Thomas Unified District (85536) | 2010 | 294 | 294 | 100% |
| | 2011 | 295 | 295 | 100% |
| | 2012 | 295 | 295 | 100% |
| | 2013 | 318 | * | 63% |
| Graham County Special Services (85543) | 2010 | 55 | 14 | 25% |
| | 2011 | 56 | 12 | 21% |
| | 2012 | 72 | 14 | 19% |
| | 2013 | 88 | 13 | 15% |
| Morenci Unified District (85540) | 2010 | 620 | 280 | 45% |
| | 2011 | 641 | 236 | 37% |
| | 2012 | 686 | 223 | 33% |
| | 2013 | 741 | 268 | 36% |
| Pima Unified District (85543) | 2010 | 413 | 71 | 17% |
| | 2011 | 430 | 273 | 64% |
| | 2012 | 383 | 250 | 65% |
| | 2013 | 402 | 241 | 60% |
| Safford Unified District (85546) | 2010 | 1820 | 737 | 41% |
| | 2011 | 1855 | 1223 | 66% |

| School District | Year | Student Count | Number of Students with Economic Disadvantage | Percentage of Students with Economic Disadvantage |
|-------------------------------------|------|---------------|---|---|
| | 2012 | 1837 | 726 | 40% |
| | 2013 | 1805 | 1120 | 62% |
| Solomon Elementary District (85551) | 2010 | 161 | 99 | 62% |
| | 2011 | 164 | 99 | 60% |
| | 2012 | 145 | 90 | 62% |
| | 2013 | 160 | 106 | 66% |
| Thatcher Unified District (85552) | 2010 | 751 | 409 | 55% |
| | 2011 | 787 | 398 | 51% |
| | 2012 | 849 | 380 | 45% |
| | 2013 | 931 | 415 | 45% |
| Triumphant Learning Center (85546) | 2010 | 76 | 0 | 0% |
| | 2011 | 79 | 0 | 0% |
| | 2012 | 78 | 22 | 28% |
| | 2013 | 77 | 21 | 27% |
| Graham County Total | 2010 | 3731 | 1660 | 45% |
| | 2011 | 3830 | 2384 | 62% |
| | 2012 | 3864 | 1877 | 49% |
| | 2013 | 3981 | 2013 | 51% |
| Greenlee County Total | 2010 | 889 | 442 | 50% |
| | 2011 | 837 | 352 | 42% |
| | 2012 | 927 | 328 | 35% |
| | 2013 | 961 | 348 | 36% |

Note. From Arizona Department of Education, 2014. [ADE data Revised Pull 01-31-14]. Unpublished raw data supplied by First Things First. The Arizona Department of Education uses eligibility for free and reduced lunches as its criterion for economic disadvantage. Large fluctuations in some school districts from year to year indicate the possibility of incomplete data collection. FTF has submitted a request for data verification to ADE but no further information is available at this time. An asterisk indicates data was suppressed due to small count size to ensure confidentiality. N/D indicates that no data was available.

Household Income

Household income serves as another useful indicator for examining the economic status of families in Graham/Greenlee County. According to the American Community Survey estimates, the average median household gross annual income for 2012 in Graham County and Greenlee County were \$50,189 and \$51,333, respectively (Exhibit 20). The data show that median family income in Graham County increased by 46% between 2000 and 2012; median income in Greenlee County increased by 18% over the same period. However, Graham County's median family income in 2012 was 16% lower than that of the state as a whole; the median family income in Greenlee County trailed that of the state by 14%. The median family income in both counties trailed that of the United States by even larger percentages.

Exhibit 20. Median Family Gross Annual Income, 2000, 2010, 2012

| | 2000 | 2010 | 2012 | Percentage Change 2000-2012 |
|------------------------|----------|----------|----------|--------------------------------|
| Graham County | \$34,417 | \$48,005 | \$50,189 | +46% |
| Greenlee County | \$43,523 | \$51,729 | \$51,333 | +18% |
| Arizona | \$46,723 | \$59,840 | \$59,563 | +27% |
| United States | \$50,046 | \$62,982 | \$64,585 | +29% |

Note. From *Census 2000 Demographic Profile Highlights; Selected Economic Characteristics 2006-2010, 2008-2012*, American Community Survey, 5-Year Estimates, United States Census Bureau. 2000 Census data are in 1999 dollars.

Further examination of median family income reveals that there are major differences in median income for families based on family type. American Community Survey data shown in Exhibit 21 indicates that in 2012, the median income of married couple families with children under 18 in Graham County was \$63,189 for married couples, \$46,593 for male-headed families, and \$27,523 for female-headed families.



This means that the median income of male-headed families and female-headed families was 72% and 44%, respectively, of the median income of married couple families. In Greenlee County, the median income of male-headed households and female-headed households with children were 95% and 44%, respectively of the median income of married couple families. These data suggest that female-headed households with children in the Graham/Greenlee Region constitute a significant group in need of assistance and that children living in such households would benefit from supplemental programs. Furthermore, the data suggest that attention also be paid to male-headed families in the part of the region that falls within Graham County since their median household income is also significantly below that of married couple families.

Exhibit 21. 2010 and 2012 Median Income of Families with Children Under 18 by Family Type

| | Female-Headed Families | | Male-Headed Families | | Married Couples | |
|------------------------|------------------------|----------|----------------------|----------|-----------------|----------|
| | 2010 | 2012 | 2010 | 2012 | 2010 | 2012 |
| Graham County | \$20,841 | \$27,523 | \$50,804 | \$46,593 | \$56,957 | \$63,189 |
| Greenlee County | \$34,102 | \$25,393 | \$51,439 | \$54,737 | \$59,702 | \$57,883 |
| Arizona | \$31,698 | \$31,766 | \$42,558 | \$41,702 | \$70,143 | \$70,663 |
| United States | \$30,924 | \$31,422 | \$43,762 | \$43,981 | \$74,848 | \$77,464 |

Note. From *Median Income in the Past 12 Months (In 2010, 2012 Inflation-adjusted Dollars) 2006-2010, 2008-2012* American Community Survey 5-Year Estimates, United States Census Bureau.

Employment and Unemployment

A region's unemployment rate may provide the most complete and up to date picture of its economic condition because it is an indicator that has been calculated monthly for many years and the latest data is no more than 1-2 months old. Moreover, it is calculated at the community level, allowing analysis of variation in economic conditions by locality.

Examination of the 2008-2013 unemployment rates for localities in Graham and Greenlee counties reveals the geographic variability of the recent economic recession and recovery from it in the region (Exhibit 22). The table below shows that in 2008, Graham County communities had unemployment rates ranging from 4.4% to 6.8%; in the next year those rates had more than doubled. From 2010 to 2013 the unemployment rates have gradually decreased, although in all the communities reported on they remain above the 2008 rate. In Greenlee County communities, the 2009 increases in unemployment rates were even greater, in two communities (Duncan and Morenci) almost quadrupling from the previous year. The unemployment rate in Greenlee communities has steadily decreased over the last four reported years but is still exceeds that of 2008.

Exhibit 22. Unemployment Rates by Locality, 2008-2013

| | | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|------------------------|--|------|-------|-------|-------|------|------|
| Graham County | Pima | 5.4% | 11.9% | 11.3% | 8.2% | 7.0% | 6.3% |
| | Safford | 4.5% | 10.1% | 9.6% | 6.9% | 5.9% | 5.4% |
| | Swift Trail Junction | 6.6% | 14.3% | 13.7% | 10.0% | 8.6% | 7.7% |
| | Thatcher | 4.5% | 10.0% | 9.7% | 7.0% | 6.0% | 5.4% |
| | Graham County Less American Indian Reservations | 5.2% | 11.5% | 10.9% | 7.9% | 6.8% | 6.1% |
| | Graham County Total | 6.9% | 14.9% | 14.2% | 10.4% | 8.9% | 8.1% |
| Greenlee County | Clifton | 7.6% | 25.8% | 16.2% | 11.9% | 8.8% | 9.7% |
| | Duncan | 5.8% | 20.6% | 12.6% | 8.9% | 6.7% | 7.3% |
| | Morenci | 2.7% | 10.3% | 6.0% | 4.4% | 3.1% | 3.4% |
| | Greenlee County Total | 5.2% | 18.7% | 11.4% | 8.2% | 6.0% | 6.7% |
| Arizona | | 6.0% | 9.8% | 10.4% | 9.4% | 8.3% | 7.9% |
| United States | | 5.8% | 9.3% | 9.6% | 8.9% | 8.1% | 7.4% |

Note. From *Arizona Employment Statistics Program Special Unemployment Reports 2000-2009, 2010-2013*, Arizona Department of Commerce, Office of Employment and Population Statistics; Labor Force Statistics from the *Current Population Survey* (age 16 and over), United States Department of Labor, Bureau of Labor Statistics. Rates are not seasonally adjusted.

Monthly unemployment data for 2013 provide an even more detailed “snapshot” of the unemployment rate in Graham and Greenlee counties (Exhibit 23). These data show that the unemployment rate in both counties steadily declined from the beginning of the year, spiked in the summer months, and showed gradual but erratic declines through the end of the year. The December 2013 unemployment rate in both counties was lower than the January 2013 rate, although Graham County showed the greater decline.

Exhibit 23. Unemployment Rate, January-December 2013

| | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Graham County | 8.7% | 8.1% | 8.0% | 8.1% | 7.4% | 8.8% | 8.4% | 8.6% | 8.4% | 8.2% | 7.1% | 7.4% |
| Greenlee County | 7.0% | 6.3% | 6.3% | 6.0% | 5.5% | 6.8% | 6.9% | 7.9% | 7.1% | 6.7% | 6.9% | 6.8% |
| Arizona | 8.3% | 7.7% | 7.8% | 7.8% | 7.4% | 8.5% | 8.3% | 8.7% | 8.3% | 8.0% | 7.1% | 7.3% |
| United States | 7.9% | 7.7% | 7.5% | 7.5% | 7.5% | 7.5% | 7.3% | 7.2% | 7.2% | 7.2% | 7.0% | 6.7% |

Note. From *Arizona Employment Statistics Program Special Unemployment Report, 2013*, Arizona Department of Commerce, Office of Employment and Population Statistics; Labor Force Statistics from *Current Population Survey*, United States Department of Labor, Bureau of Labor Statistics.

Additional employment indicators may create a more detailed image of the impact of the economic recession on families in the Graham/Greenlee Region. Exhibit 24 shows that in Graham County average monthly earnings fluctuated within a \$286 range (\$2,831-\$3,117) from the fourth quarter of 2010 through the first quarter of 2013. Average new hire wages also fluctuated several times during the period. Graham County’s net job flow was negative in the fourth quarter of 2010, as well as the third and fourth quarters of 2011. Total employment fluctuated, peaking at 9,737 in the fourth quarter of 2011 and reached a low of 9,118 in the first quarter of 2013.

Exhibit 24. Key Employment Indicators for Graham County

| | 2010 Q4 | 2011 Q1 | 2011 Q2 | 2011 Q3 | 2011 Q4 | 2012 Q1 | 2012 Q2 | 2012 Q3 | 2012 Q4 | 2013 Q1 |
|----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Average monthly Earnings | \$2,999 | \$2,831 | \$2,989 | \$2,876 | \$3,022 | \$3,117 | \$3,078 | \$2,940 | \$3,012 | \$3,063 |
| Average new hire earnings | \$1,932 | \$1,785 | \$1,964 | \$2,049 | \$1,976 | \$1,869 | \$1,986 | \$2,065 | \$1,861 | \$1,904 |
| Job Creation | 426 | 454 | 737 | 468 | 420 | 744 | 526 | 470 | 341 | 421 |
| Net Job Flows | -51 | 203 | 281 | -273 | -21 | 473 | 138 | 171 | 81 | 52 |
| New Hires | 1,144 | 1,119 | 1,675 | 1,447 | 1,302 | 1,154 | 1,413 | 1,490 | 1,267 | 1,172 |
| Separations | 1,495 | 1,096 | 1,761 | 1,803 | 1,616 | 1,186 | 1,632 | 1,503 | 1,423 | 1,306 |
| Total Employment | 9,505 | 9,131 | 9,641 | 9,138 | 9,737 | 9,072 | 9,732 | 9,518 | 9,280 | 9,118 |
| Turnover | 8.4% | 9.1% | 9.4% | 9.6% | 8.9% | 9.3% | 9.5% | 10% | 9.3% | N/A |

Note. From *Local Employment Dynamics, Quarterly Workforce Indicators Online (NAICS)*, LEHD State of Arizona County Reports – *Quarterly Workforce Indicators*, United States Census Bureau. LEHD is the acronym for Longitudinal Employer-Household Dynamics. NAICS is the acronym for the North American Industry Classification System. The data presented are for all sectors included in the system. N/A indicates no data is available for an indicator. The third quarter of 2012 is the last period for which a full set of data is available.

In Greenlee County average monthly earnings fluctuated within a very wide range (\$4,057-\$6,067) from the fourth quarter of 2010 through the first quarter of 2013 (Exhibit 25). It is not clear why average monthly earnings surge by as much as 41% in a single month, but such surges may result from increased hiring in high paying sectors like mining. Average new hire wages similarly fluctuated several times during the period. Greenlee County's net job flow was negative in two periods, the third quarter of 2011 and the second quarter of 2012. Total employment hit its highest level in the last reported period, the first quarter of 2013.

Exhibit 25. Key Employment Indicators for Greenlee County

| | 2010 Q4 | 2011 Q1 | 2011 Q2 | 2011 Q3 | 2011 Q4 | 2012 Q1 | 2012 Q2 | 2012 Q3 | 2012 Q4 | 2013 Q1 |
|----------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Average monthly Earnings | \$4,057 | \$5,724 | \$4,178 | \$4,649 | \$4,034 | \$5,997 | \$4,244 | \$4,691 | \$4,451 | \$6,067 |
| Average new hire earnings | \$3,234 | \$3,938 | \$3,370 | \$3,517 | \$2,691 | \$3,023 | \$2,991 | \$3,075 | \$3,103 | \$4,880 |
| Job Creation | 132 | 148 | 228 | 113 | 129 | 120 | 106 | 90 | 244 | 170 |
| Net Job Flows | 48 | 30 | 193 | -1 | 89 | 96 | -140 | 29 | 184 | 111 |
| New Hires | 315 | 342 | 368 | 322 | 315 | 292 | 303 | 402 | 326 | 345 |
| Separations | 327 | 333 | 260 | 395 | 271 | 224 | 546 | 400 | 321 | 274 |
| Total Employment | 3,296 | 3,277 | 3,172 | 3,100 | 3,509 | 3,460 | 3,625 | 3,441 | 3,432 | 3,633 |
| Turnover | 8.8% | 6.8% | 7.3% | 6.9% | 6.7% | 9.6% | 7.2% | 6.1% | 6.7% | NA |

Note. From *Local Employment Dynamics, Quarterly Workforce Indicators Online (NAICS), LEHD State of Arizona County Reports – Quarterly Workforce Indicators*, United States Census Bureau. LEHD is the acronym for Longitudinal Employer-Household Dynamics. NAICS is the acronym for the North American Industry Classification System. The data presented are for all sectors included in the system. NA indicates no data is available for an indicator. The third quarter of 2012 is the last period for which a full set of data is available.

Other Relevant Economic Indicators

Poverty, median income, unemployment, and key employment data presented in this section provide a picture of recent economic conditions in Graham/Greenlee County. Information about participation in state and federal benefit programs further enhances understanding of the economic environment of a community. The federal and state governments offer a variety of assistance programs utilized by Graham/Greenlee County residents including Temporary Assistance to Needy Families (TANF), the Supplemental Nutrition Assistance Program (SNAP), free or reduced school lunches, the Women, Infants, and Children program (WIC), unemployment benefits, and special services for children with developmental disabilities.

TANF is a program of the Office of Family Assistance of the United State Department of Health and Human Services that funds state efforts to provide financial assistance and work opportunities to needy families. TANF enrollments are low and have declined in recent years because of state legislative actions to restrict program benefits. In July 2010, the lifetime benefit limit for TANF was reduced from 60 months to 36 months, resulting in an immediate end in benefits to participating families that had been receiving benefits for more than 36 months. In August 2011, the lifetime benefit was further reduced from 36 months to 24 months; families that had received benefits for more than 24 months were removed at that time.

Exhibits 26 and 27 provide information about TANF participation by families with children under five years of age in Graham and Greenlee Counties. Between January 2009 and January 2012, the number of families with children ages 0-5 enrolled in TANF in Graham County fluctuated up and down (Exhibit 26). The number of such families with children ages 0-5 in Greenlee County has similarly fluctuated throughout the whole period. In contrast, enrollments statewide have almost steadily decreased from January 2009 to January 2012. Changes in the number of families enrolled in TANF in both counties from July 2011 onward should be considered within the context of the state actions to restrict program benefits noted above.

Exhibit 26. Families with Children Ages 0-5 Enrolled in TANF, 2009-2012

| | Jan. 2009 | June 2009 | Jan. 2010 | July 2010 | Jan. 2011 | July 2011 | Jan. 2012 |
|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Graham County | 139 | 143 | 123 | 96 | 121 | 125 | 109 |
| Greenlee County | 14 | 18 | 15 | 16 | 12 | * | 10 |
| Arizona | 18,477 | 18,045 | 18,129 | 13,651 | 10,289 | 9,776 | 9,427 |

Note. From Arizona Department of Economic Security (DES), 2014. [SNAP-TANF 2010, SNAP-TANF 2014]. Unpublished raw data received from First Things First State Agency Data Request. The months for which DES provided data vary by year. No data was provided for 2008. An asterisk indicates data was suppressed due to small count size to ensure confidentiality.

Exhibit 27. Children Ages 0-5 Enrolled in TANF, 2009-2012

| | Jan. 2009 | June 2009 | Jan. 2010 | July 2010 | Jan. 2011 | July 2011 | Jan. 2012 |
|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Graham County | 169 | 165 | 142 | 111 | 145 | 164 | 148 |
| Greenlee County | 18 | 23 | 21 | 21 | 13 | * | 11 |
| Arizona | 24,273 | 23,746 | 23,866 | 17,978 | 13,450 | 12,837 | 12,358 |

Note. From Arizona Department of Economic Security (DES), 2014. [SNAP-TANF2010, SNAP-TANF 2014]. Unpublished raw data received from First Things First State Agency Data Request. The months for which DES provided data vary by year. No data was provided for 2008. An asterisk indicates data was suppressed due to small count size to ensure confidentiality.

The Supplemental Nutrition Assistance Program (SNAP) is another federal program utilized by families in the Graham/Greenlee Region. In Arizona the program is known as Nutrition Assistance. According to a study by the Children’s Hospital of Philadelphia’s Research Institute’s PolicyLab, “poor nutrition resulting from food insecurity has been linked to behavioral problems in preschoolers; lower educational performance among Kindergarteners; generally poorer cognitive and psychosocial development among children of various ages; and adverse health outcomes such as more frequent hospitalizations, particularly among young children” (Sell, Zlotnik, Noonan, & Rubin, 2010).



The results of studies by the United States Department of Agriculture (Children’s HealthWatch, 2011a; Nord & Prell, 2011) have both concluded that the 2009 across-the-board increase in SNAP benefits contributed to the health, well-being, and food security of young children during the recent recession. However, a collaborative study by Children’s HealthWatch, Drexel

University School of Public Health, and the Center for Hunger-free Communities (Children’s HealthWatch, 2011b), conducted in urban low-income neighborhoods in Philadelphia, found that even the increased level of SNAP benefits achieved in 2009 left poor families with children far short of being able to afford a minimal healthy diet; in some locations, many of the foods needed for such a diet were not readily available.

Children who received SNAP benefits are less likely to be at risk of anemia, obesity, poor health, developmental delays, and even child abuse or neglect than are children eligible for but not receiving such benefit (Children’s HealthWatch, 2012, Frank, et al., 2013). Families awarded SNAP benefits are better able to afford essential nonfood expenses like housing, utilities and medical treatment (Shaefer & Gutierrez, 2013). Thus, the 5% cut in SNAP benefits that took effect in November 2013, resulting in a cut in benefits of about \$36 per month for a family of four, may have further impacted the ability of some Graham/Greenlee families to meet their basic needs (Public News Service, 2014).

Data regarding the number of children 0-5 years old in families who are SNAP recipients provide additional insight into the economic status of Graham/Greenlee County. Exhibit 28 shows that SNAP enrollment by Graham County families with children ages 0-5 almost steadily increased from 670 in January 2009 to 1,037 in January 2012, a 55% rise in enrollment over the period. In Greenlee County, SNAP enrollment by families with children ages 0-5 rose from 72 in January 2009 to 143 in January 2012, a 97% increase in SNAP enrollment.

Exhibit 28. Families with Children Ages 0-5 Enrolled in SNAP

| | Jan. 2009 | June 2009 | Jan. 2010 | July 2010 | Jan. 2011 | July 2011 | Jan. 2012 |
|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Graham | 670 | 864 | 1,002 | 1,026 | 1,051 | 1,051 | 1,037 |
| Greenlee | 72 | 84 | 132 | 132 | 135 | 135 | 143 |
| Arizona | 91,054 | 119,380 | 133,148 | 143,665 | 138,687 | 147,871 | 150,952 |

Note. From Arizona Department of Economic Security (DES). (2014). [SNAP-TANF2010, SNAP-TANF 2014]. Unpublished raw data received from First Things First State Agency Data Request. The months for which DES provided data vary by year. No data was provided for 2008. *In Arizona, SNAP is called Nutrition Assistance. An asterisk indicates data was suppressed due to small count size to ensure confidentiality.

A zip code level breakdown of SNAP participation by families with children ages 0-5 sheds further light on geographic variation in participation across the region. Exhibit 29 shows a SNAP enrollment by families with children ages 0-5 fluctuated in most localities from January 2009 to January 2012. However, in communities with the largest enrollment (Safford, Thatcher, and Pima) enrollment has remained relatively stable since January 2011 at near the highest of level reported in during the 3-year period. Since SNAP benefits are income-based, this suggests that families in these communities have not fully reaped the benefits of the early stages of the economic recovery.

Exhibit 29. Families with Children Ages 0-5 Enrolled in SNAP by Zip Code, 2009-2012

| Locality | Zip Code | Jan. 2009 | June 2009 | Jan. 2010 | July 2010 | Jan. 2011 | July 2011 | Jan. 2012 |
|------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Central | 85531 | 15 | 11 | 19 | 16 | 15 | 10 | 15 |
| Clifton | 85533 | 28 | 47 | 53 | 48 | 41 | 47 | 50 |
| Duncan | 85534 | 35 | 45 | 57 | 53 | 55 | 56 | 57 |
| Eden | 85535 | * | * | * | * | * | * | * |
| Ft. Thomas | 85536 | * | 10 | * | * | * | * | * |
| Morenci | 85540 | 21 | 39 | 32 | 31 | 39 | 32 | 36 |
| Pima | 85543 | 104 | 120 | 119 | 115 | 120 | 124 | 116 |
| Safford | 85546 | 457 | 549 | 579 | 545 | 552 | 552 | 552 |
| Solomon | 85551 | 18 | 22 | 20 | 20 | 24 | 20 | 16 |
| Thatcher | 85552 | 121 | 146 | 136 | 149 | 156 | 154 | 149 |
| Blue | 85922 | 0 | * | 0 | No Data | No Data | No Data | No Data |

Note. From Arizona Department of Economic Security (DES), 2014. [SNAP-TANF2010, SNAP-TANF 2014]. Unpublished raw data received from First Things First State Agency Data Request. The months for which DES provided data vary by year. No data was provided for 2008. *In Arizona, SNAP is called Nutrition Assistance. An asterisk indicates data was suppressed due to small count size to ensure confidentiality.

Exhibit 30 shows the zip code level distribution of children ages 0-5 receiving SNAP benefits in the Graham/Greenlee Region between January 2009 and January 2012. The largest concentrations of young children receiving SNAP benefits in the region over this period were in zip codes 85546 (Safford), 85552 (Thatcher), and 85543 (Pima). There were no consistent patterns across all of the region's zip codes in the number of children ages 0-5 receiving SNAP benefits. However, between January 2010 and January 2012 the number of young children enrolled in SNAP in Graham County stayed virtually the same. The number of children 0-5 in Greenlee County fluctuated over the three reported years.

As SNAP benefits are based on income eligibility, large increases in the number of recipients suggests that many families in the Graham/Greenlee Region experienced economic difficulties during the recent economic recession and continued to do so in 2012. However, beyond being a sign of economic stress in the region and consistent with study findings presented above, the increase in SNAP participation among families with 0-5 year olds over the last five years suggests that many young children in the region may be dependent on government programs to fulfill their basic nutritional needs.

Exhibit 30. Children Ages 0-5 Enrolled in SNAP by Zip Code, 2009-2012

| Locality | Zip Code | Jan. 2009 | June 2009 | Jan. 2010 | July 2010 | Jan. 2011 | Jan. 2011 | Jan. 2012 |
|----------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Central | 85531 | 25 | 18 | 30 | 25 | 22 | 15 | 21 |
| Clifton | 85533 | 48 | 76 | 85 | 80 | 63 | 63 | 66 |
| Duncan | 85534 | 54 | 65 | 83 | 79 | 77 | 82 | 93 |
| Eden | 85535 | * | * | 0 | * | * | 0 | 0 |
| Ft. Thomas | 85536 | 10 | 16 | 13 | 16 | * | * | * |
| Morenci | 85540 | 34 | 62 | 47 | 38 | 54 | 47 | 55 |
| Pima | 85543 | 163 | 188 | 183 | 172 | 186 | 189 | 173 |
| Safford | 85546 | 686 | 833 | 892 | 843 | 831 | 842 | 859 |
| Solomon | 85551 | 29 | 36 | 28 | 34 | 33 | 29 | 25 |
| Thatcher | 85552 | 176 | 215 | 209 | 236 | 235 | 225 | 222 |
| Blue | 85922 | 0 | * | 0 | No Data | No Data | No Data | No Data |
| Graham Total | - | 1,304 | 1,518 | 1,596 | 1,586 | 1,591 | 1,585 | 1,580 |
| Greenlee Total | - | 136 | 204 | 215 | 197 | 194 | 192 | 214 |
| Arizona Total | - | 179,831 | 199,367 | 215,837 | 212,465 | 204,058 | 216,398 | 219,926 |

Note. From Arizona Department of Economic Security (DES), 2014. [SNAP-TANF2010, SNAP-TANF 2014]. Unpublished raw data received from First Things First State Agency Data Request. The months for which DES provided data vary by year. No data was provided for 2008. In Arizona, SNAP is called Nutrition Assistance. An asterisk indicates data was suppressed due to small count size to ensure confidentiality.

Free or reduced school lunch programs have traditionally been another means by which low-income children have received nutritional supplementation (Exhibit 31). Families qualify for this program based on their income and family size, as determined by the U.S. Department of Health and Human Services. In 2011, free or reduced lunch enrollment in Graham/Greenlee County ranged from 29% in Morenci to 95% in Fort Thomas Unified School District. However, 40% or more of students were enrolled in free or reduced lunch in that year in 7 of the 9 districts for which data were available. Rate ranges gathered from school districts in 2013 show that participation in the free or reduced lunch program continued without much variation from 2011.

Exhibit 31. Child Eligibility for Free or Reduced Lunch by School District, 2008-2011 & 2013

| | 2008 | 2009 | 2010 | 2011 | 2013† |
|-------------------------------------|------|------|------|------|--------|
| Bonita Elementary District | 45% | 55% | 46% | 50% | 50-54% |
| Clifton Unified School District | 27% | 64% | 51% | N/D | 75-90% |
| Duncan Unified School District | 40% | 47% | 50% | 46% | 40-60% |
| Fort Thomas Unified School District | 99% | 59% | 90% | 95% | 84-90% |
| Morenci Unified School District | 21% | 22% | 37% | 29% | 21-37% |
| Pima Unified School District | N/D | 35% | 9% | 57% | 54-74% |

| | 2008 | 2009 | 2010 | 2011 | 2013† |
|---|------|------|------|------|--------|
| Safford Unified School District | 45% | 48% | 24% | 40% | 39-63% |
| Solomon Unified School District | 62% | 37% | 45% | 45% | N/D |
| Thatcher Unified School District | 42% | 40% | 46% | 41% | 25-40% |
| Arizona | 38% | 47% | 47% | 45% | N/D |
| United States | 41% | 44% | 46% | 48% | N/D |

Note. From *Federal Education Budget Project*, New America Foundation. The percentages reported reflect the number of students in the districts who are certified to receive free or reduced price lunches based on their family incomes or participation in SNAP or TANF. The New America Foundation obtained the data for analysis from the Common Core of Data at the National Center for Education Statistics. N/D indicates no data was provided for the year. No 2012 data are available. †For 2013, data is from Arizona Department of Education, *Free and Reduced Lunch Percentage Report*. (Excel databases provided by FTF). The Arizona Department of Education collected this data from claim data for the month of October, 2013 as reported by School Food Authority. This data is based on actual student enrollments at schools in the each district. Because enrollment rates for each school varied, percentages are presented in ranges.

Women, Infants and Children (WIC) is a program of the Food and Nutrition Service of the United State Department of Agriculture that provides grants to states primarily for providing supplemental foods to low-income pregnant and postpartum women and their children up to age five who are at nutritional risk.

To qualify for WIC benefits a family’s income must fall at or below 185% of the federal poverty line. Some studies of WIC programs suggest that it has positive impacts on family well-being. For example, some researchers have found that prenatal participation in WIC improves birth weight and fetal growth (Gueorguieva, Morse, & Jeffrey, 2008; Bitler & Currie, 2004; Kowaleski-Jones & Duncan, 2000). Given the program’s focus on low-income mothers and their young children, WIC participation numbers serve as another useful indicator of regional economic conditions as well as how well the nutritional needs of the region’s young children are being met.

Exhibit 32 shows that in four of the region’s largest localities (Safford, Thatcher, Pima, and Clifton) both the number of children (ages 13-59 months) certified for WIC and the number that participated decreased steadily from January 2010 to January 2012. WIC participation rates vary by community and across time in most localities and at the county level, although at the state level the rate remained almost the same for the three reported periods. Whether additional follow-up efforts would increase the participation rate of children that have been certified is worthy of further investigation.

Exhibit 32. WIC Participation of Children Ages 13-59 Months by Locality , 2010-2012

| Locality | Zip Code | January 2010 | | January 2011 | | January 2012 | |
|----------------|----------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | Certified | Participated | Certified | Participated | Certified | Participated |
| Central | 85531 | * | * | * | * | * | * |
| Clifton | 85533 | 75 | 67 (89%) | 56 | 43 (77%) | 51 | 42 (82%) |
| Duncan | 85534 | 54 | 49 (91%) | 51 | 37 (73%) | 50 | 40 (80%) |
| Eden | 85535 | 31 | * | 30 | * | * | * |
| Ft. Thomas | 85536 | * | * | * | * | * | * |
| Morenci | 85540 | 52 | 42 (81%) | 60 | 48 (80%) | 67 | 43 (64%) |
| Pima | 85543 | 97 | 68 (70%) | 86 | 72 (84%) | 69 | 58 (84%) |
| Safford | 85546 | 564 | 444 (79%) | 519 | 413 (80%) | 432 | 356 (82%) |
| Solomon | 85551 | * | * | * | * | * | * |
| Thatcher | 85552 | 180 | 145 (81%) | 160 | 121 (75%) | 149 | 117 (79%) |
| Blue | 85922 | NA | NA | NA | NA | NA | NA |
| Graham Total | - | 936 | 739 (79%) | 848 | 664 (78%) | 729 | 602 (83%) |
| Greenlee Total | - | 181 | 158 (87%) | 167 | 128 (77%) | 168 | 125 (74%) |
| Arizona Total | - | 113,946 | 94,236 (83%) | 109,104 | 91,919 (84%) | 108,559 | 90,389 (83%) |

Note. From Arizona Department of Health Services, 2014. [WIC data set]. Unpublished raw data received from First Things First State Agency Data Request. An asterisk indicates data was suppressed due to small count size to ensure confidentiality. An asterisk indicates that, in accordance with First Things First guidelines, data was suppressed due to small count size to ensure confidentiality.

Exhibit 33 shows that in Safford 80% or more of the women certified for WIC benefits participated in each of the reported months. In Thatcher, 80% or more of such women participated in the two of the three reported months. In both Graham County and Greenlee County, 80% or more of women certified for the WIC program participated in it. As noted above for children certified for WIC, whether additional follow-up efforts would increase the participation rate of women that have been certified is worthy of further investigation.

Exhibit 33. WIC Participation of Women by Locality, 2010-2012

| Locality | Zip Code | January 2010 | | January 2011 | | January 2012 | |
|------------|----------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | Certified | Participated | Certified | Participated | Certified | Participated |
| Central | 85531 | * | * | * | * | * | * |
| Clifton | 85533 | * | * | * | * | 31 | * |
| Duncan | 85534 | * | * | * | 18 | * | * |
| Eden | 85535 | * | * | * | * | * | * |
| Ft. Thomas | 85536 | * | * | * | * | * | * |
| Morenci | 85540 | 32 | * | 41 | 33 (80%) | 30 | * |
| Pima | 85543 | 31 | * | * | * | 30 | * |
| Safford | 85546 | 240 | 200 (83%) | 223 | 187 (84%) | 172 | 159 (92%) |
| Solomon | 85551 | * | * | * | * | * | * |
| Thatcher | 85552 | 81 | 66 (81%) | 64 | 51 (80%) | 57 | 44 (77%) |

| Locality | Zip Code | January 2010 | | January 2011 | | January 2012 | |
|----------------|----------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | Certified | Participated | Certified | Participated | Certified | Participated |
| Blue | 85922 | NA | NA | NA | NA | NA | NA |
| Graham Total | | 384 | 314 (82%) | 342 | 285 (83%) | 284 | 250 (88%) |
| Greenlee Total | | 83 | 67 (81%) | 83 | 68 (82%) | 85 | 68 (80%) |
| Arizona Total | | 48,218 | 40,922 (85%) | 47,571 | 40,819 (86%) | 47,546 | 40,780 (86%) |

Note. From Arizona Department of Health Services, 2014. [WIC data set]. Unpublished raw data received from First Things First State Agency Data Request. An asterisk indicates that data was suppressed due to small count size to ensure confidentiality.

The WIC participation rate of infants (ages 0-12 months) in the region appears to be somewhat higher than those for women or children (Exhibit 34). However, that rate varies by community and time point. Given that some communities and the counties as a whole generally have participation rates of 90% or higher, lower rates may serve as a sign of a need for greater follow-up with families.

Exhibit 34. WIC Participation of Infants (ages 0-12 months) by Locality, 2010-2012

| Locality | Zip Code | January 2010 | | January 2011 | | January 2012 | |
|----------------|----------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | Certified | Participated | Certified | Participated | Certified | Participated |
| Central | 85531 | * | * | * | * | * | * |
| Clifton | 85533 | * | * | * | * | * | * |
| Duncan | 85534 | * | * | * | 17 | * | * |
| Eden | 85535 | * | * | * | * | * | * |
| Ft. Thomas | 85536 | * | * | * | * | * | * |
| Morenci | 85540 | 35 | 32 (91%) | 35 | 30 (86%) | * | * |
| Pima | 85543 | * | * | * | * | 26 | * |
| Safford | 85546 | 240 | 221 (92%) | 204 | 173 (85%) | 194 | 183 (94%) |
| Solomon | 85551 | * | * | * | * | * | * |
| Thatcher | 85552 | 68 | 61 (90%) | 62 | 49 (79%) | 61 | 49 (80%) |
| Blue | 85922 | NA | NA | NA | NA | NA | NA |
| Graham Total | | 387 | 351 (91%) | 320 | 271 (85%) | 316 | 287 (91%) |
| Greenlee Total | | 88 | 79 (90%) | 77 | 70 (91%) | 70 | 59 (84%) |
| State Total | | 49,945 | 44,468 (89%) | 47,940 | 42,952 (90%) | 46,898 | 42,268 (90%) |

Note. From Arizona Department of Health Services, 2014. [WIC data set]. Unpublished raw data received from First Things First State Agency Data Request. An asterisk indicates that data was suppressed due to small count size to ensure confidentiality.

Educational Indicators

Research suggests that the educational attainment of mothers has implications for the educational progress of their youth. Some studies suggest that women with more education are more likely to place their children in child care that promotes school readiness, compared to their less-educated peers. Better educated mothers are also likely to read to their children more often, which improves a child's communication skills, school readiness, vocabulary, and IQ (Carneiro, Meghir, & Parey, 2007; Liu, 2010; Magnuson & McGroder, 2002). While it is not clear how critically related maternal education is to overall youth academic attainment, these findings suggest that it is important to consider when assessing the needs and assets of a region.

Educational Attainment

From 2008 to 2012, the educational level of mothers in Graham and Greenlee counties mostly followed a positive trend (Exhibit 35). The percentage of Graham County mothers with one or more years of college followed an upward trend from 31% in 2008 to 39% in 2012. However, the percentage of Graham County mothers with no high school diploma gradually decreased from 2008-2011, and rose in 2012. Over the same period, Greenlee County experienced relatively steady growth in the percentage of mothers that have attended college for one or more years; while the percentage of mothers with no high school diploma showed an almost steady decline from 2008 to 2012. In both counties, the percentage of mothers with some college experience lagged far behind that of the state as a whole.

Exhibit 35. Percentage of Live Births by Educational Attainment of Mother

| | | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------|------------------------|------|------|------|------|------|
| Graham County | No High School Diploma | 22% | 21% | 21% | 17% | 19% |
| | High School Diploma | 47% | 46% | 44% | 40% | 41% |
| | 1-4+ Years of College | 31% | 32% | 35% | 42% | 39% |
| | Unknown | 0% | 0% | 0% | 1% | <1% |
| Greenlee County | No High School Diploma | 24% | 24% | 21% | 15% | 13% |
| | High School Diploma | 51% | 53% | 47% | 47% | 46% |
| | 1-4+ Years of College | 24% | 23% | 32% | 35% | 39% |
| | Unknown | 1% | 0% | 0% | 3% | <1% |
| Arizona | No High School Diploma | 26% | 24% | 22% | 20% | 15% |
| | High School Diploma | 30% | 31% | 31% | 31% | 31% |
| | 1-4+ Years of College | 43% | 45% | 47% | 48% | 49% |
| | Unknown | <1% | 1% | 1% | 1% | 1% |
| United States | No High School Diploma | 18% | 17% | 17% | 16% | 15% |
| | High School Diploma | 24% | 24% | 24% | 23% | 23% |
| | 1-4 Years of College | 49% | 48% | 48% | 50% | 51% |

Note. From *Table 5B-13 Births by Mother's Education and County of Residence, Arizona 2008-2012; Arizona Birth and Maternal Characteristics 2009-2012*, Arizona Department of Health Services, Health Status and Vital Statistics; *Women 15 to 50 Years Who Had a Birth in the Past 12 Months by Marital Status and Educational Attainment, 2008-2012 American Community Survey, 1-Year Estimates*, U.S. Census Bureau. Percentages may not total 100% due to rounding. "No high school diploma" is defined as 0-11 years of education; "High school diploma" is defined as completion of 12 years; and "1-4+ yrs. of college" is defined 13-15 years. N/A indicates data is not available. Percentages for United States do not total 100% due to exemption of individuals who received graduate or professional degrees.

American Community Survey 5-year averages for 2008 to 2012 shown in Exhibit 36 indicate that the educational attainment of adults 25 years and older in Graham and Greenlee Counties compare favorably to statewide and national rates. A much higher percentage of adults in both counties have graduated high school compared to the state and nation as a whole. The percentage of adults 25 years and older in Graham and Greenlee counties that have completed some college also surpasses those for the state and nation. However, similar to some of the data presented about mothers in the previous exhibit, both Graham County and Greenlee County lag far behind state and national figures for attainment of higher education such as a Bachelor's, graduate, or professional degree.

Exhibit 36. Educational Attainment, Adults 25 Years and Older, 5-Year Average, 2008-2012

| | Not a High School Graduate | High School Graduate | Some College | Associate's Degree | Bachelor's Degree | Graduate or Professional Degree |
|------------------------|----------------------------|----------------------|--------------|--------------------|-------------------|---------------------------------|
| Graham County | 16% | 34% | 30% | 8% | 8% | 5% |
| Greenlee County | 14% | 36% | 29% | 8% | 9% | 3% |
| Arizona | 15% | 24% | 26% | 8% | 17% | 10% |
| United States | 14% | 28% | 21% | 8% | 18% | 11% |

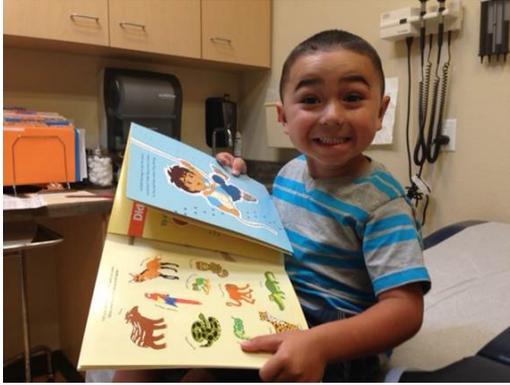
Note. From *Selected Social Characteristics in the United States, American Community Survey 2008-2012 5-Year Estimates*, United States Census Bureau. Percentages are based on the following population estimates of people over 25 years of age: United States – 204,336,017; Arizona – 4,149,955; Graham County – 22,181; Greenlee County – 5,347. High school graduation rate included graduation equivalents. Percentages do not total to 100% due to rounding off.

Kindergarten Readiness and Literacy

While there is a national focus on assessing students' academic progress and quality of education provided, more attention has been placed on measuring children's readiness for school. School readiness is defined as "a child's attainment of a certain set of emotional, behavioral, and cognitive skills needed to learn, work, and function successfully in school" (Rafoth, Buchenauer, Crissman, & Halko, 2004). Ongoing research confirms that children's readiness for school is multifaceted, encompassing a range of physical, social, emotional, language, and cognitive skills that children need to thrive (Center for Family Policy & Research, 2008). However, professionals struggle with ways to identify and measure school readiness. A recent study by Belfield and Garcia (2014) found that between 1993 and 2007 there was a large increase in parental belief in the importance of children having skills such as knowing the letters of the alphabet and the ability to count to 20 to be ready for entering school.



Kindergarten readiness is important to consider as research studies have found that participation by low-income children in early intervention programs prior to kindergarten is related to improved school performance in the early years of education, particularly for disadvantaged children (Lee, Brooks-Gunn, Shnur, & Liaw, 1990; Ludwig & Phillips, 2007; Magnuson, Ruhm, & Waldfogel, 2007; Temple & Reynolds, 2007). Long-term studies suggest that early childhood programs have positive impacts evident in the adolescent and adult years (Campbell, Pungello, Miller-Johnson, Burchinal, & Ramey, 2001; Ludwig & Phillips, 2007; Temple & Reynolds, 2007). Scholars have also suggested that early childhood education enhances young children's social developmental outcomes such as peer relationships (Peisner-Feinberg et al., 2000). Nevertheless, barriers of trust, language and childrearing beliefs in some populations lead families to forego early care and education services in favor of keeping young children home (Duncan & One, 2012).



A number of factors influence a child's school readiness level in the United States, including health, parental engagement, and language proficiency, which is a key predictor of school success. Early literacy skills (i.e. size of vocabulary, letter recognition, and comprehension of letter and sound relationships) at entry to kindergarten are good predictors of a child's reading ability throughout their educational career and that children from low-income families may be falling behind. Low-income children are more likely to start school with limited language

skills, health problems, and social and emotional problems that interfere with learning. To improve school readiness and academic success, in 2005 the State Board of Education adopted the Early Learning Standards, which are aligned with academic standards for kindergarten and Head Start. The Early Learning Standards were reviewed and updated in 2012 (Arizona Department of Education, 2013).

Many assessments have been developed to look at children's growth across developmental domains such as language, social-emotional and physical development, and behavior. Currently, such assessments only serve as proxy measures of school readiness. In school settings throughout Arizona, these assessments are often used to screen children for additional educational support needs, such as English Language Learners. Current research has confirmed the efficacy of using certain assessment methods in linguistically diverse settings, such as in Arizona (Berhenke, Miller, Brown, Seifer, & Dickstein, 2011; Downer et al., 2011). Some school districts also use assessments at entry to preschool to determine a baseline of children's development and better tailor programming and instruction. However, other research found that assessment of children's social and executive domain functioning at 54 months was only partially predictive of socio-emotional and achievement outcomes in the fifth grade (Sabol & Pianta, 2012).

The Graham/Greenlee Region strongly promotes early literacy and school readiness efforts. In SFY 2014, the region's Council allotted \$10,675 to the Arizona Chapter of the American Academy of Pediatrics for Reach Out and Read, a program that teaches pediatricians and their staff how to engage parents and young children in early literacy activities. In the same year, the Council allotted \$120,000 to the Safford City-Graham County Library for parent outreach and awareness activities, some of which involved connecting parent to resources that promote school readiness.

Altogether, over 24,000 books were distributed to families with young children in SFY 2014. The region's proposed SFY 2015 budget maintains funding for Reach Out and Read and includes funding to again distribute 24,000 books to families with young children through parent outreach and awareness activities.



Exhibits 37 and 38 show responses from the 2012 Family Community Survey regarding home literacy practices. Most Graham/Greenlee respondents reported reading stories, telling stories, or singing songs to their children at least one day per week. Almost half (49%) of the respondents reporting having 100 or more children’s books in their home.

Exhibit 37. Home Literacy Practices – Reading and Telling Stories, Singing Songs

| During the past week, how many days did... | | 1 to 5 days | 6 or 7 days |
|--|---------|-------------|-------------|
| You or other family members read stories to your child/children? | Region | 44% | 48% |
| | Arizona | 45% | 51% |
| You or other family members tell stories or sing songs to your child/children? | Region | 47% | 42% |
| | Arizona | 45% | 51% |

Note. From 2012 FCS (Data for vendors) FINAL, First Things First. Percentages do not total to 100% because at the regional/ statewide levels a small percentage of respondents did not answer the questions.

Exhibit 38. Home Literacy Practices – Books in the Home

| | | 10 or fewer | 11 to 100 | 100 or more |
|---|---------|-------------|-----------|-------------|
| How many books – including library and e-books – do you have right now in your home? | Region | 16% | 29% | 54% |
| | Arizona | 9% | 43% | 48% |
| How many children’s books – including library and e-books – do you have right now in your home? | Region | 11% | 40% | 49% |
| | Arizona | 9% | 61% | 30% |

Note. From 2012 FCS (Data for vendors) FINAL, First Things First.

Standardized Testing

Two instruments that are used frequently across Arizona schools for formative (ongoing and used to guide instruction) assessment are the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and Arizona’s Instrument to Measure Standards (AIMS). These assessments are often used to identify children’s early literacy skills upon entry to school and need for interventions in reading throughout the year. Arizona is in the process of implementing new Common Core Standards for K-12 education and in 2014-2015 will replace AIMS with another assessment.

At the Kindergarten level, DIBELS tests only a small set of skills around letter knowledge without assessing other areas of children’s language and literacy development such as vocabulary and print awareness. Additionally, DIBELS does not measure other important skill sets around social emotional development, math, or science. While the results of the DIBELS and AIMS assessments do not reflect children’s full range of skills and understanding in the area of language and literacy, they do provide a snapshot of children’s learning as they enter and exit Kindergarten.

The AIMS tests use a four-level scale to measure student performance: the lowest level of performance is termed *Falls Far Below (FFB)*, followed by *Approached (A)*, *Met (M)*, and *Exceeded (E)*. The categories of FFB and A represent failing scores, while M and E represent passing scores. AIMS results presented in Exhibits 39 and 40 show that in 2013, 72% of Graham County 3rd grade students met or exceeded the standard in mathematics and 80% did so in reading.

Exhibit 39. Results of AIMS Mathematics Test, Graham County 3rd Grade, 2011-2013

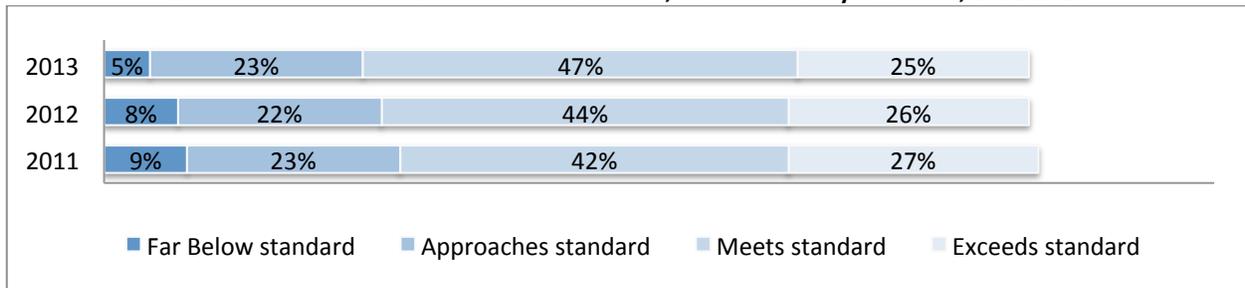
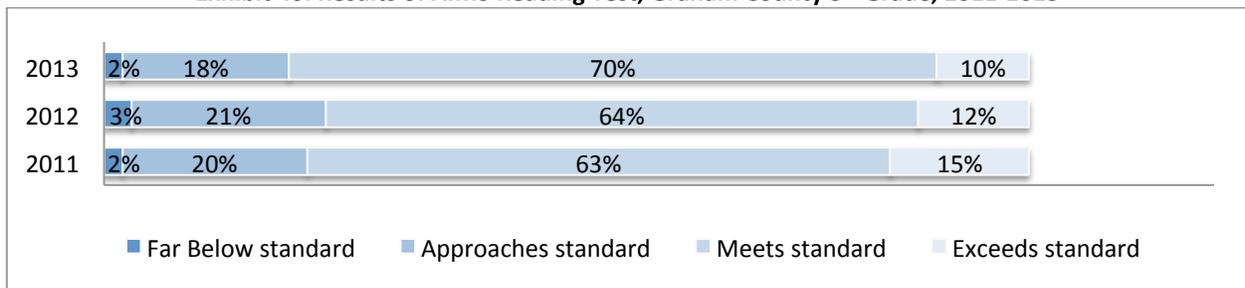


Exhibit 40. Results of AIMS Reading Test, Graham County 3rd Grade, 2011-2013



In Greenlee County, 81% of 3rd grade students met or exceeded the standards on the Mathematics AIMS test in 2013 and 86% did so on the Reading AIMS test (Exhibits 41 and 42).

Exhibit 41. Results of AIMS Mathematics Test, Greenlee County 3rd Grade, 2011-2013

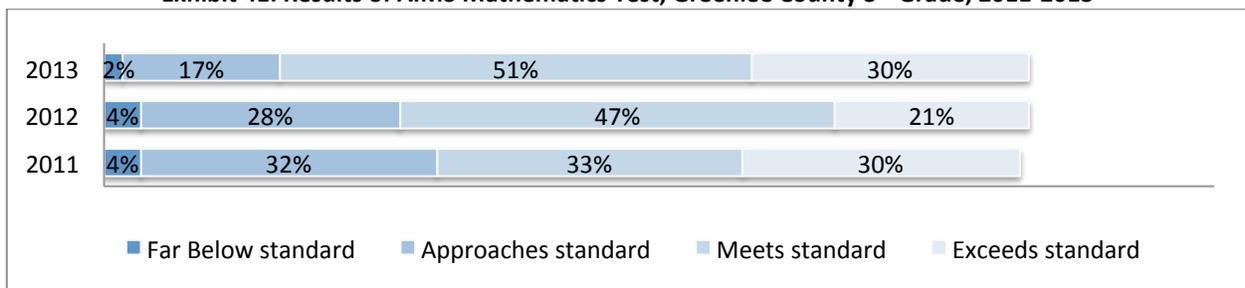
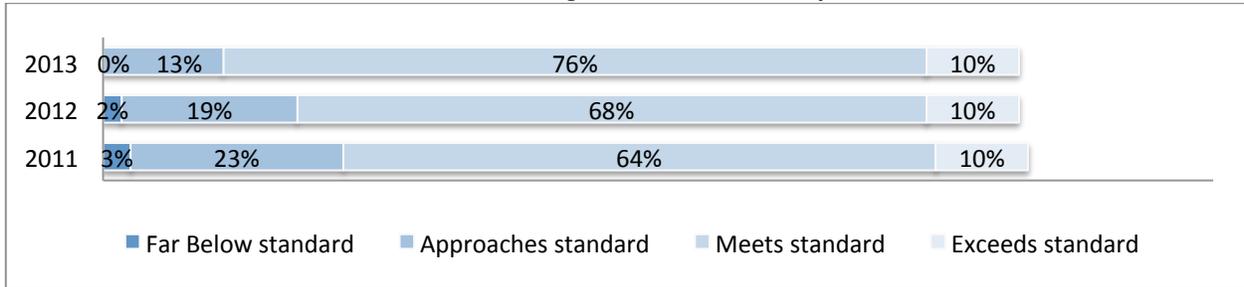


Exhibit 42. Results of AIMS Reading Test, Greenlee County 3rd Grade, 2011-2013



Note. For Exhibits 39-42, data from *Aims Assessment Results, 2011-2013*. Arizona Department of Education, Accountability Division, Research and Evaluation.

While the percentages of 3rd graders that met or exceeded the standards are relatively high for both counties, the data shows that 21%-31% of 3rd grade students in each county did not achieve at an acceptable level on mathematics or reading. The varied level of student achievement is more apparent when AIMS results for school districts and charter schools are examined. The complete results are dense with numbers and cover multiple pages and, therefore, are presented in an appendix (see Appendix B). In four of the eight school districts and one of the two charter schools in the region for which AIMS data are available at least 60% of students achieved passing scores on the AIMS mathematics test for the three reported years. Only Solomon Elementary District, Thatcher Unified District, and the Discovery Plus Academy had a 70% or higher passing rate for all of the years. For the AIMS reading test, in six of the eight districts at least 70% of the students achieved a passing score in each of the three reported years; in three of those districts (Duncan Unified, Solomon Elementary District, and Thatcher Unified) 90% of the students passed in two of the three years. Students at both of the charter schools whose data are reported also had passing rates of 70% or greater in all of the years.

Looking at changes in scores over time, four school districts in the Graham/Greenlee Region (Duncan Unified, Ft. Thomas Unified, Morenci Unified, and Pima Unified) showed a steady increase in the percentage of students that passed the AIMS math test over the 3-year period, although final year scores were not always high. Only one district (Morenci Unified) showed a steady increase from 2011 to 2013 in the percentage of students passing the AIMS reading test.

Special Needs Populations

Two of the largest groups of students with special educational needs are English Language Learners (ELL) and those with an Individualized Education Program (IEP). Schools are required to develop an IEP for students with disabilities who meet government requirements under the Individuals with Disabilities Education Act. Exhibit 43 shows a school district-level breakdown of special needs populations (special education, English Language Learners, and students from homeless and migrant families) for the years 2010 to 2013. Data are also included for two charter schools. Between 2010 and 2013 no districts or charter schools had any migrant students and only Ft. Thomas Unified District reported having students that are homeless.

In most districts there was no discernible relationship between total student enrollment and the number of Special Education students. That is, the number of Special Education students neither went up or down every time the student population increased or decreased. Overall, in most districts the number of Special Education students varied only slightly over the four years. However, there was a steady increase of Special Needs students for the county as a whole over the period. Most data about ELL students in the region are suppressed due to the small number counts. Only Safford Unified School District and Thatcher Unified School District had reportable numbers of ELL students for the period. Given that the number of ELL students in Safford Unified District is the largest of all districts in the last two years suggests that the district may have a need for ELL services for the foreseeable future.

Exhibit 43. Special Needs Students by School District and Charter School, 2010-2013

| School District | Year | Student Count | Homeless Count | Migrant Count | Special Education Count | English Language Learners (ELL) count |
|---------------------------------------|------|---------------|----------------|---------------|-------------------------|---------------------------------------|
| Blue Elementary District (85922) | 2010 | * | 0 | 0 | 0 | 0 |
| | 2011 | * | 0 | 0 | 0 | 0 |
| | 2012 | * | 0 | 0 | 0 | 0 |
| | 2013 | * | 0 | 0 | 0 | 0 |
| Bonita Elementary District (85643) | 2010 | 70 | 0 | 0 | * | * |
| | 2011 | 79 | 0 | 0 | * | * |
| | 2012 | 89 | 0 | 0 | * | * |
| | 2013 | 85 | 0 | 0 | * | * |
| Clifton Unified District(85533) | 2010 | 63 | 0 | 0 | 0 | 0 |
| | 2012 | 42 | 0 | 0 | * | 0 |
| | 2013 | 44 | 0 | 0 | * | 0 |
| Discovery Plus Academy(85543) | 2010 | 91 | 0 | 0 | * | 0 |
| | 2011 | 85 | 0 | 0 | * | 0 |
| | 2012 | 116 | 0 | 0 | * | 0 |
| | 2013 | 115 | 0 | 0 | * | 0 |
| Duncan Unified District (85534) | 2010 | 206 | 0 | 0 | 33 | 0 |
| | 2011 | 196 | 0 | 0 | 29 | * |
| | 2012 | 199 | 0 | 0 | * | 0 |
| | 2013 | 176 | 0 | 0 | * | 0 |
| Fort Thomas Unified District(85536) | 2010 | 294 | 0 | 0 | 31 | 0 |
| | 2011 | 295 | 0 | 0 | 36 | 0 |
| | 2012 | 295 | 0 | 0 | 38 | * |
| | 2013 | 318 | * | 0 | 41 | * |
| Graham County Special Services(85543) | 2010 | 55 | 0 | 0 | 50 | 0 |
| | 2011 | 56 | 0 | 0 | 52 | 0 |
| | 2012 | 72 | 0 | 0 | 58 | 0 |
| | 2013 | 88 | 0 | 0 | 75 | 0 |
| Morenci Unified District(85540) | 2010 | 620 | 0 | 0 | 61 | 0 |
| | 2011 | 641 | 0 | 0 | 63 | 0 |
| | 2012 | 686 | 0 | 0 | 66 | 0 |
| | 2013 | 741 | 0 | 0 | 64 | 0 |
| Pima Unified | 2010 | 413 | 0 | 0 | 46 | 0 |

| School District | Year | Student Count | Homeless Count | Migrant Count | Special Education Count | English Language Learners (ELL) count |
|------------------------------------|------|---------------|----------------|---------------|-------------------------|---------------------------------------|
| District(85543) | 2011 | 430 | 0 | 0 | 51 | * |
| | 2012 | 383 | 0 | 0 | 45 | 0 |
| | 2013 | 402 | 0 | 0 | 47 | * |
| Safford Unified District(85546) | 2010 | 1820 | 0 | 0 | 225 | 0 |
| | 2011 | 1855 | 0 | 0 | 217 | 0 |
| | 2012 | 1837 | 0 | 0 | 216 | 38 |
| | 2013 | 1805 | 0 | 0 | 210 | 24 |
| Solomon Elementary District(85551) | 2010 | 161 | 0 | 0 | * | 0 |
| | 2011 | 164 | 0 | 0 | * | 0 |
| | 2012 | 145 | 0 | 0 | * | 0 |
| | 2013 | 160 | 0 | 0 | * | 0 |
| Thatcher Unified District(85552) | 2010 | 751 | 0 | 0 | 76 | 0 |
| | 2011 | 787 | 0 | 0 | 71 | 0 |
| | 2012 | 849 | 0 | 0 | 88 | 0 |
| | 2013 | 816 | 0 | 0 | 86 | * |
| Triumphant Learning Center(85546) | 2010 | 76 | 0 | 0 | 0 | 0 |
| | 2011 | 79 | 0 | 0 | * | 0 |
| | 2012 | 78 | 0 | 0 | * | 0 |
| | 2013 | 77 | 0 | 0 | * | 0 |
| Graham/Greenlee Total | 2010 | 4626 | 0 | 0 | 560 | * |
| | 2011 | 4675 | 0 | 0 | 560 | * |
| | 2012 | 4793 | 0 | 0 | 588 | 51 |
| | 2011 | 4949 | * | 0 | 595 | 39 |

Note. From Arizona Department of Education, 2014. [ADE data Revised Pull 01-31-14]. Unpublished raw data received from First Things First Agency Data Request. * An asterisk indicates that, in accordance with First Things First guidelines, data was suppressed due to small count size (less than 25, except for 0 and for ELL less than 10, except for 0) to ensure confidentiality.

Other Relevant Data

The completion of high school is a very important accomplishment in a young person's life. Students who stay in school and challenge themselves academically tend to continue their education, stay out of jail, and earn significantly higher wages later in life (Messacar & Oreopoulos, 2012). Other research suggests that students who do not graduate have higher rates of unemployment and underemployment (United States Department of Labor, 2013). U.S. Census Bureau (2012) data show that the average income for people 18 years of age and older that have not graduated high school is approximately 34% lower than those that have graduated high school and 64% lower than those with Bachelor's degree. The Alliance for Excellent Education (2011) has looked at the issue of youth dropping out by examining the benefits to society if half of Arizona's 24,700 dropouts in 2010 had stayed in school. The Alliance estimated there would be an increase of \$91 million in earnings, \$212 million in home sales, and \$7 million in tax revenue. However, the Alliance proposes that a high school education is insufficient for ensuring good career opportunities in today's highly competitive job market; if 60% of youth that completed high school instead of dropping out went on to complete a vocational certification, 2-year degree, or 4-year degree, the benefits accruing to individuals and society would increase even more.

Given the reality about the importance of graduation, the high school graduation rate in an area should be considered when looking at local needs and assets. High school completion rates allow for a retrospective look at all aspects of early childhood development, ranging from child care and health care services to the education system overall. Students who have the support, resources and care they need to be able to develop and eventually complete high school are then more likely to go on to have long-term positive life outcomes.

The high school graduation rates for the Graham/Greenlee Region vary widely over time for both within and between school districts (Exhibit 44). However, it is worth noting that 5 of the region’s 7 public high schools had a graduation rate of 90% or higher in 2012. Thatcher High School has maintained a graduation rate at that level for all 5 reported years, while Clifton High School reported low graduation rates throughout the same period.

Exhibit 44. High School Graduation Rates, 2008-2012

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------------------------------------|------|------|------|------|------|
| Clifton High School | 0% | 8% | 38% | 0% | 0% |
| Duncan High School | 86% | 84% | 77% | 82% | 89% |
| Ft. Thomas High School [¥] | 74% | 80% | 74% | 86% | 95% |
| Mt. Graham High School [†] | 45% | 47% | 43% | 53% | 28% |
| Morenci Jr./Sr. High School | 82% | 97% | 95% | 86% | 90% |
| Pima High School | 76% | 88% | 82% | 95% | 93% |
| Safford High School | 89% | 89% | 88% | 92% | 92% |
| Thatcher High School | 90% | 90% | 90% | 93% | 90% |

Note. From 2012 Four Year Graduation Rate by School and Subgroup; 2011 Four Year Graduation Rate by School and Subgroup; 2010 Four Year Grad Rate by School, Subgroup and Ethnicity; 2009 Four Year Grad Rate by District, School and Subgroup; 2008 Four Year Grad Rate by District, School and Subgroup, Arizona Department of Education, Accountability Division, Research & Evaluation. [¥] It should be noted that the majority (80% in the 2011-12 school year) of students who attend Ft. Thomas H.S. are from Bylas, which is not within the Graham/Greenlee Region. [†]Mt. Graham High School is an alternative high school serving students who have previously dropped out, are struggling academically, are parents or parenting, or who have been adjudicated. No additional information is available about why Clifton high school had a 0% graduation rate in 3 of the reported years.

The Early Childhood System

Early Care Education

There is a need for child care across the United States as a majority of children ages birth to six years of age participate in regular, non-parent child care. In 2007, more than half of children age’s three to six who had not entered Kindergarten attended a child care center. For families with mothers who are employed, the need for child care is even higher. According to the Federal Interagency Forum on Child and Family Statistics (2011), in 2010 during the time mothers were at work 48% of children ages 0-4 were primarily cared for by a relative, 24% attended a child care center (day care, Head Start, etc.), and 14% received home-based care by a non-relative. It also found that families use many criteria to make decisions about care for their children. Some of the factors that are often important to parents include: cost; proximity to home or work;

and recommendations from friends, family or acquaintances. Parents may also personally assess the center or home's environment, interaction between children and staff, and perceived quality of learning environment. Researchers have also suggested that mothers' assessment of quality are highly personalized, and that choosing high quality care may have a positive effect on a mother's level of depressive symptoms (Gordon et al., 2011).

A nationwide study by the National Association of Child Care Resources and Referral Agencies (NACCRRRA) found that the cost of child care was one of parents' highest concerns and noted that parents frequently had to compromise on quality to be able to pay for care (Mohan, Reef & Sarkar, 2006). A 2011 NACCRRRA report "revisiting" the cost of child care found that the 2010 average cost for center-based care for a four-year old in the State of Arizona was 40% of the income of a family living at the federal poverty level and 20% of the income of a family living at 200% of the federal poverty level. For families headed by single mothers in Arizona, the cost for infant child care was 35% of median income, 28% of median income for a four year old, and 62% of median income for two children in care (NACCRRRA, 2011). It is clear that choosing child care is not a simple decision for many families and may or may not result in the placement of a child in the most ideal child care setting.

Quality and Access

Early care and education programs are crucial to a thriving economy, not only because they allow parents to work, but because the child care sector is large and purchases numerous goods and services. New economic development strategies toward enhancing child care access can improve child care financing and the business infrastructure associated with the child care sector. Additionally, a significant investment in children's well-being in the early years has enormous long-term payoffs.

According to the Institute for Women's Policy Research (2010), students that are parents make up 27% of community college students and many have young children; 16% of community college students are single parents. The institute noted, however, that available child care only meets a tiny fraction of the need – many campus child care centers have long waiting lists, less than half provide care for infants, and only a small percentage offer evening or weekend services. Improving child care access is not only about improving access to sources of care and education outside the home, but also increasing a parent's capacity to care for their own children.

Research into parents' perceptions of quality in child care has identified a number of factors that parents view as indicating high quality. These indicators of high quality include: staff that is nurturing and knowledgeable and speaks a child's language, daily communication, presence of many books, and use of a curriculum knowledgeable in child development as being central attributes of quality child care (Forry et al., 2011; National Association of Child Care Resource and Referral Agencies, 2006). A recent study observed differences in quality ratings between mothers and independent observers (Gordon, Usdansky, Wang, & Gluzman, 2011).



In Arizona, increased efforts have been undertaken to improve child care quality. The Board of First Things First approved funding in March 2008 for the development and implementation of a statewide quality improvement and rating system called Quality First. Effective in 2010, Quality First set the standards of quality child care in Arizona. This program identifies measures of quality child care and classifies a list of child care providers that provide this level of service.

First Things First provides child care providers enrolled in Quality First with an initial program assessment, training and mentoring, and financial incentives that may be used for purchasing educational materials or equipment. This system has become a statewide asset that a region can utilize when addressing child care program quality.

Child care providers that choose to participate in the program are given a rating of between one and five stars, with a rating of three to five stars indicating quality standards are met or exceeded. Exhibit 45 shows that a total of 284 children are enrolled with Quality First providers, 313 with providers that have a star rating. That the Quality First system is just taking root in the region is evidenced by the fact that most children are enrolled with providers that have 1-2 star ratings, which indicates the providers have not yet met all required quality standards (a 3-star rating). Moreover, 232 (82%) of the 284 children enrolled with providers with a star rating are in the 3-5 years age range. Further information is required to determine if this is due to lack of demand for or availability of slots for children ages 0-2.

Exhibit 45. Quality First Child Care Provider Enrollment and Public Star Rating, 2014

| Regional Partnership Council | 1-2 Star Rating | | | 3-5 Star Rating | | | Total Enrollment† |
|------------------------------|-----------------|----------|---------------|-----------------|----------|---------------|-------------------|
| | 0-2 Yrs. | 3-5 Yrs. | Special Needs | 0-2 Yrs. | 3-5 Yrs. | Special Needs | |
| Region | 15 | 190 | 25* | 16 | 42 | 25 | 284 |

*Note. From QF Enrollment Data – FTF Publicly Rated 3-5 and 1-2 Star Rated Programs and Total Enrollment Information provided by FTF. Data collected on June 20, 2014. *In accordance with FTF guidelines, data <25 and > 0 are suppressed to ensure confidentiality. †Total Enrollment numbers include children enrolled in child care centers that are participating in Quality First but do not yet have a star rating. However, the total enrollment numbers do not include children with special needs.*

The Graham/Greenlee Region has fully embraced the goal of improving quality in and access to early care and education programs through support of Quality First. The region’s SFY 2014 budget included a number of allotments related to supporting Quality First, among which was \$102,835 for Quality First coaching and incentives for providers. Six of the region’s child care centers and three of its child care homes are currently participating in Quality First. The region’s proposed SFY 2015 budget includes funding to include a newly opened child care center in Greenlee County to also participate. Exhibit 46 shows a list of Quality First providers in the Graham/Greenlee Region.

Exhibit 46. Graham/Greenlee Quality First Child Care Centers and Child Care Homes

| Locality | Zip Code | Quality First Child Care Centers |
|----------|----------|--|
| Clifton | 85533 | Laugharn Preschool (center) |
| Morenci | 85540 | Fairbanks Learning Connections Preschool (center) |
| Safford | 85546 | Mt. Graham Child Care and Guidance Center (center) First United Methodist Preschool/Daycare Center (center) Bulldog Boulevard Child Care Center (center) Palomita Children’s Center (center) Mrs. Daniel Sanchez Daycare (home) Martha Orneles (home) Ann Tovar (home) |

Note. From Quality First. Online provider search. First Things First.

In SFY2014, the region provided \$349,000 in funding for 70 Quality First Scholarship slots for use in high quality early care and education programs for children ages 0-5 from low-income families. Proposed funding for such scholarships in SFY 2015 is \$623,000, which will fund 79 scholarship slots for low-income families. The region is using Quality First Scholarships as one of its strategies for addressing two of the First Things First School Readiness Indicators it has chosen to focus on:

- Number/percentage of children demonstrating school readiness at kindergarten entry in the development domains of social-emotional, language and literacy, cognitive, and motor and physical.
- Number/percentage of children enrolled in an early care and education program with a Quality First rating of 3-5 stars.

In addition to participating in Quality First, child care centers may seek accreditation from one or more national organizations. Exhibit 47 shows that there was one nationally accredited early care and education center in the Graham/Greenlee Region as of April 2014. The Easter Seals Blake Foundation Palomita Children’s Center is accredited by the National Association for the Education of Young Children (NAEYC).

Exhibit 47. Number of Accredited Early Care and Education Centers

| | AMI/AMS | ASCI | NAC | NAEYC | NECPA | NAFCC | NLSA |
|------|---------|------|-----|-------|-------|-------|------|
| 2014 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |

Note: From accreditation lists on the websites of the Association of Christian Schools International [ASCI], Association Montessori Internationale [AMI], American Montessori Society (AMS), National Accreditation Commission for Early Care and Education Programs (NAC), National Association for the Education of Young Children (NAEYC), National Early Childhood Program Accreditation (NECPA), National Association for Family Child Care (NAFCC), and National Lutheran School Accreditation (NLSA).

Licensing by Arizona Department of Health Services' (ADHS) Division of Licensing indicates a child care provider is in conformance with state regulations for such facilities. By mid-2013 there were a total of 23 licensed child care providers in the Graham/Greenlee Region (Exhibit 48). Of the 23 licensed child care providers, seven were child care centers with a combined service capacity of 319 children. No capacity data was available for a child care center in Morenci. Four of the licensed facilities were located in public schools, with a total capacity of 263 children. Twelve additional licensed facilities were small group homes. Although no data were available to determine the exact capacity of these group homes, such providers are permitted to care for up to 10 children (DES, 2014). The region's 11 licensed centers had a combined capacity to serve 582 children. The community with the highest percentage of child care center capacity (46%) was Safford, followed by Morenci (24%). Clifton, Duncan and Pima each had 10% of the region's child care capacity.

Exhibit 48. ADHS Licensed Child Care Facilities by Community, 2013

| Locality | Child Care Centers | | Child Care in Public Schools | | Small Group Homes | |
|---------------------|--------------------|------------------|------------------------------|------------|-------------------|-----------------|
| | No. of centers | Capacity | No. of centers | Capacity | No. of homes | Capacity |
| Central | 0 | 0 | 0 | 0 | 0 | 0 |
| Clifton | 0 | 0 | 1 | 59 | 2 | 20 [†] |
| Duncan | 1 | 59 | 0 | 0 | 0 | 0 |
| Eden | 0 | 0 | 0 | 0 | 0 | 0 |
| Ft. Thomas | 0 | 0 | 0 | 0 | 0 | No data |
| Morenci | 1 | † | 1 | 138 | 0 | 0 |
| Pima | 1 | 59 | 0 | 0 | 0 | 0 |
| Safford | 4 | 201 [†] | 2 | 66 | 8 | 80 [†] |
| Solomon | 0 | 0 | 0 | 0 | 0 | 0 |
| Thatcher | 0 | 0 | 0 | 0 | 2 | 20 [†] |
| Blue | 0 | 0 | 0 | 0 | 0 | 0 |
| Region Total | 7 | 319 | 4 | 263 | 12 | 120 |

Note. From Child Care Centers by Zip Code, 2013. Arizona Department of Health Services, Division of Licensing Services. Information on small group homes is derived from a December 2013 Child Care Administration Child Care Providers handout provided by the Graham/Greenlee Regional Director. †Capacity data is missing for one child care center in Morenci, one child care center in Safford, 8 small group homes in Safford, two small group homes in Clifton and two small group homes in Thatcher. According to the Arizona Department of Economic Services, the maximum capacity for a child care center depends on physical facility size (2014) which was not provided. A count of zero is used where child care center capacity is missing. The maximum capacity for a small group home is 10 children (DES, 2014). A count of 10 is used where small group home capacity is missing. Regional capacity totals include these estimations.

A comparison of 2011 and 2013 capacity data for ADHS-licensed child care facilities shows that most communities that had no child care capacity in 2011 still did not have any in 2013 (Exhibit 49). However, two communities, Morenci and Clifton, experienced a large increase in capacity over the period. Capacity in Duncan went slightly down between 2011 and 2013.



Exhibit 49. Change in Capacity in ADHS- Licensed Child Care Facilities, 2011 to 2013

| Community | Child Care Centers | | Child Care in Public Schools | | Small Group Homes | | Change in Total Capacity 2011-2013 |
|---------------------|--------------------|---------------|------------------------------|---------------|-------------------|---------------|------------------------------------|
| | 2011 Capacity | 2013 Capacity | 2011 Capacity | 2013 Capacity | 2011 Capacity | 2013 Capacity | |
| Central | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Clifton | 0 | 0 | 34 | 59 | 0 | 0 | +74% |
| Duncan | 64 | 59 | 0 | 0 | 0 | 0 | -8% |
| Eden | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Ft. Thomas | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Morenci | 45 | 134 | 54 | 188 | 0 | 0 | +225% |
| Pima | 59 | 59 | 0 | 0 | 0 | 0 | 0% |
| Safford | 201 | 142 | 66 | 66 | 0 | 0 | -22% |
| Solomon | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Thatcher | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Blue | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Region Total | 369 | 394 | 154 | 313 | 0 | 0 | +35% |

Note. From Child Care Providers, 2014. Arizona Department of Health Services, Provider and Faculty Databases, Division of Licensing Services.

The State of Arizona has designated six districts for the purpose of conducting a child care market rate survey that is required by the United States Department of Health and Human Services. Graham County and Greenlee County are grouped together with Cochise and Santa Cruz counties in District VI. Data from the market rate survey published by the Arizona DES in 2012 shows 75% of full-time DES-approved child care centers charged \$32 per day for children under one year of age and about \$31 for children one to five years old (Exhibit 50). For all age groups, and especially for infants and toddlers, the District VI median rates were well below those of the state as a whole.

Exhibit 50. Daily Rates Charged by Home-based Centers for Full-time Child Care, 2012

| | Under 1 Year Old | | 1 and 2 Year Olds | | 3, 4 and 5 Year Olds | | School Age | |
|------------------------|------------------|---------|-------------------|---------|----------------------|---------|------------|---------|
| | Dist. VI | State | Dist. VI | State | Dist. VI | State | Dist. VI | State |
| Median | \$32.00 | \$41.00 | \$30.80 | \$36.98 | \$28.00 | \$32.00 | \$22.00 | \$29.07 |
| 75%[†] | \$32.00 | \$48.80 | \$30.90 | \$46.95 | \$30.90 | \$40.00 | \$30.00 | \$35.00 |

Note. From *Child Care Market Rate Survey 2012*, Arizona Department of Economic Security, Child Care Administration, Division of Employment and Rehabilitation Services. Full time care is considered six or more hours. Rates for children under 1 were based on data from 9 centers. Rates for 1 and 2 year olds were based on data from 19 centers. Rates for 3, 4, and 5 year olds were based on data from 29 centers. Rates for school age children were based on data from 15 centers. Rates were computed based on the average number of children receiving child care. Weekly rates were computed by the number of days care was provided; hourly rates were multiplied by 8. "State" indicates the statewide average. †75% indicates the rate at which 75% of the market is at or below.

The Child Care Administration Office of the Arizona DES assists eligible families with child care costs. While eligibility for assistance varies by program, there are seven activities that qualify a family. These include: parent participation in the Arizona DES Jobs Program; parent employment; at least 20 hours per week of education or training activities related to employment; GED or high school classes for teen parents; parental physical, mental or emotional conditions that keep parents from caring for their children; residence in a shelter for homelessness or domestic violence; and where needs are assessed by Child Protective Services (CPS) or a foster care case plan. Families may receive immediate services or be placed on a waiting list (Arizona DES, n.d.).

Exhibit 51 compares the number of families and children receiving child care assistance to the number of each certified by DES as being eligible for such assistance at 4 time points in 2011 and 2012. Data from Graham County and Greenlee County have been combined to facilitate presentation of the comparison. The number of families in the two counties eligible for child care assistance steadily decreased between January 2011 and July 2012 while the number of families receiving assistance remained the same until it dropped in July 2012. The number of children in the two counties eligible for child care assistance decreased between January 2011 and January 2012 but showed a slight increase in July 2012. The number of children receiving such assistance fluctuated over the period.

Statewide, the number of both families and children eligible for child care assistance steadily decreased from January 2011 to July 2012. After an increase in July 2011 in the number of families and children receiving such assistance, the numbers for both went down in January 2012 and stayed the same in July 2012.

Exhibit 51. Families and Children Eligible and Receiving Child Care Assistance, 2011-2012

| | Type | Status | Jan. 2011 | July 2011 | Jan. 2012 | July 2012 |
|------------------------------|----------|-----------|-----------|-----------|-----------|-----------|
| Graham and Greenlee Counties | Families | Eligible | 108 | 91 | 89 | 73 |
| | | Receiving | 85 | 85 | 86 | 72 |
| | Children | Eligible | 148 | 131 | 137 | 120 |
| | | Receiving | 117 | 123 | 125 | 108 |
| Arizona Total | Families | Eligible | 14,708 | 13,998 | 13,363 | 13,187 |
| | | Receiving | 11,924 | 12,656 | 12,820 | 11,854 |
| | Children | Eligible | 21,510 | 20,664 | 19,665 | 19,567 |
| | | Receiving | 17,596 | 18,669 | 19,036 | 17,466 |

Note. From Arizona Department of Economic Security, 2014. [RNA DES DATA FILE 2014]. Unpublished raw data received from First Things First State Agency Data Request

Zip code level data about families and children eligible for and receiving child care assistance are unavailable for most zip codes in the region. For the zip codes for which data are available, almost all have small counts, requiring suppression to guarantee confidentiality. Therefore, no such data are presented.

Exhibit 52 shows the number of families and children on the waiting list for child care assistance in Graham and Greenlee counties and Arizona. The number of families on the waiting list increased from 25 in July 2011 to 39 in July 2012, a 56% increase. The number of children on the waiting list increased from 39 to 52 over the same year, a 33% increase. The number of families on the waiting list statewide also increased by 56% from July 2011 to July 2012 but the number of children on the waiting list statewide increased by an even large percentage (51%) than in the two counties combined.

Exhibit 52. Families and Children on Child Care Assistance Waiting List, 2011 and 2012

| | July 2011 | | July 2012 | |
|------------------------------|-----------|-------------------|-----------|-------------------|
| | Families | Children 0-5 Yrs. | Families | Children 0-5 Yrs. |
| Graham and Greenlee Counties | 25 | 39 | 39 | 52 |
| Arizona | 2,245 | 3,091 | 3,513 | 4,653 |

Note. From Arizona Department of Economic Security. (2014). [RNA DES DATA FILE 2014]. Unpublished raw data received from First Things First State Agency Data Request

Professional Development

Professional development and education levels of staff are important elements of child care quality. According to the National Association of Early Childhood Teacher Educators (2008), the most effective teachers are those who have a strong foundation in early childhood education, most often acquired through higher education. Once in the classroom, teachers who have completed higher education courses in child development are more likely than teachers without higher education to be prepared to: apply knowledge of child development; use appropriate

teaching strategies; meet the social/emotional demands of young children; understand children's thinking; know how to build student learning over time; and understand language and literacy development.

In recent years, Arizona has seen an increase in the educational attainment of its early education professionals. In Arizona's Unknown Education Issue: Early Learning Workforce Trends, First Things First explains that the percentage of assistant teachers with a credential (e.g., Child Development Associate) or college degree (Associate's Bachelor's, or Master's) rose from 21% in 2007 to 29% in 2012 (2012). Over the same period, the percentage of early education teachers with a college degree increased from 47% to 50%. The educational level of administrative directors slightly decreased from 74% in 2007 to 73% in 2012, although the percentage of administrators with a Bachelor's Degree slightly rose over the period.

A study of prekindergarten teachers across 40 states (Gilliam & Marchesseault, 2005) reported somewhat higher levels of educational attainment for early education professionals. Seventy-three percent of the teachers had a bachelor's degree; of the 27% that lacked such a degree, approximately half had no more than a high school diploma. Only 24% had a master's degree. Assistant teachers had even less education, with 59% having no more than a high school diploma.

A 2010 report by the Pew Center on the States recommended that all Pre-K teachers have both a bachelor's degree and special training in early childhood education (Bueno, Darling-Hammond, & Gonzales, 2010). Additionally, a report from the Brookings-Rockefeller Project suggested that states should create innovative charter colleges to produce a well-trained professional early childhood workforce (Mead & Carey, 2011). The Pew Center on the States report further suggested that instituting such education requirements would support professionalization of the early childhood workforce, and lead to higher compensation, and thereby, easier recruitment and greater retention. Lacking such professionalization, salaries for early childhood teachers remain low. Bureau of Labor Statistics (2010) data shows that preschool teachers earned an average of \$27,130 (\$13.04 per hour) and child care workers earned an average of \$19,510 (\$9.38 per hour). A director of a preschool or childcare center had a median pay of \$43,950 (\$21.13 per hour). Some studies have found that wage incentives for early childhood teachers based on reaching a higher level of education attainment were in one case found to be effective only for retaining mid-wage teachers; a second found that teachers who received such incentives were actually less likely to remain in early childhood (Bridges, Fuller, Huang, & Hamre 2011; Gable, Rothrauff, Thornburg, & Mauzy, 2007).



A 2011 study that ranked 200 occupations based on income potential, work environment, stress, physical demands, and hiring outlook put child care work at number 186 (CareerCast, 2011). Recent research has highlighted the importance of providing professional development

opportunities to early childhood educators. One study found that children who kept the same early childhood teacher scored higher in a number of areas than children who changed teachers during a year. These areas included fine motor, cognitive, and language skills, and teacher and parent-reported initiative. The same study also found that boys were more negatively affected by a change in their teachers than girls (Tran & Winsler, 2011). The findings of other recent research suggest that professional development delivered via the internet may enhance the abilities of early childhood educators (Pianta, Mashburn, Downer, Hamre, & Justice, 2008). Worthington et al. (2011) have suggested that it is important to offer incentives for early childhood educators to gain bilingual skills. The researchers identified current coping strategies used by the teachers in the study, such as having children translate to communicate with other children and parents, as having questionable effectiveness. Serving as a translator in such situations may also be overwhelming for young children. Worthington et al. also suggest that to optimally provide services to young children with limited English language ability will require language skills professional development for all types of early education staff and that such training must involve community collaboration to be effective.

First Things First statewide utilizes funded and unfunded approaches to improving the professional development of Arizona early childhood education providers. Several funded strategies that impact professional development are described below:

- Professional REWARD\$: This FTF-funded program offers stipends to early childhood educators who advance their education or maintain a designated length of continuous employment.
- T.E.A.C.H. Early Childhood® Arizona Scholarships: T.E.A.C.H. is a program administered by the Association for Supportive Child Care that offers scholarships to child care teachers, directors, and family care providers who want to pursue Early Care and Education studies at a community college.
- The Professional Career Pathways Project (PCPP): The program provides funding for tuition and textbooks to individuals employed as child caregivers in center-based programs, family child care providers, or family group homes who want to further their career path through studies in Early Care and Education course work at community colleges.

In addition to the funded approaches above, First Things First's strategic plan includes advocacy for increased wages for the early childhood workforce, and increased systems coordination between community colleges and universities. In SFY 2014, the Graham/Greenlee Region provided \$27,000 in incentives to 20 early childhood workers through the Professional REWARD\$ program. The region's proposed SFY 2015 budget increases the allotment for the program to \$40,500, funding 30 incentives. Additionally, 6 individuals in the region received T.E.A.C.H. scholarships through FTF statewide Quality First support.

The Child Care Professional Training program, funded by the Arizona DES, is another child care worker professional development program. It provides a 60-hour comprehensive training program to individuals with minimal or no child care experience who seek entry level

employment in the child care field. In Graham/Greenlee Region, the trainings were delivered by instructors from Yavapai College. Exhibit 53 shows the dates, number of participants, and total training hours for such trainings for the last four years. No trainings were held in the region in 2012. No trainings were held in the region in 2012 and none are scheduled for 2014.

Exhibit 53. Graham/Greenlee DES Child Care Professional Training (CCPT), 2010-2013

| Training Dates | Number of Participants | Total Number of Training Hours |
|---|-------------------------------|---------------------------------------|
| July 12-23, 2010 | 11 | 477 |
| October 7, 2011-November 17,2011 | 6 | 205 |
| June 10-21, 2013 | 6 | 246 |

Note. From personal communications from Ivonne Zuniga, DES/CCA, August 22, 2013. Although the program provides 60 hours of training, some participants do not complete all 60 hours.

Supporting Families

Family Support

In the early years of life, children’s development rapidly progresses at a pace exceeding that of any subsequent stage of life. However, at this critical developmental stage many infants and toddlers live in vulnerable circumstances. One of the most consistent associations in developmental science is the association between economic hardship and compromised child development. Infants and toddlers in low-income families are at greater risk for developing learning disabilities, behavior problems, developmental delays, and health impairments.

Child health and developmental outcomes depend to a large extent on the capabilities of families to provide a nurturing, safe environment for their infants and young children. Unfortunately, many families have insufficient knowledge about parenting skills and an inadequate support system of friends, extended family, or professionals to help or advise them on child rearing. Home-visiting programs offer a mechanism for ensuring that at-risk families have social support, linkage with public and private community services, and ongoing education on their child’s health, development and safety. When home visitation services are integrated with pediatric medical care, this resource has the potential to mitigate health and developmental outcome disparities.

Home visitation programs offer a variety of family-focused services to pregnant women and families with infants and young children. Research demonstrates that well-designed and well-run programs are effective in improving parenting skills and the intellectual development of at-risk young children (American Academy of Pediatrics, 2009), as well as reducing child abuse and maternal behavior problems that stem from drug and alcohol use (Zero to Three, 2007). Using home visiting programs as one strategy in the prenatal to pre-Kindergarten continuum can help prevent more long-term costs and promote healthy social and emotional development in later years. These programs offer information, guidance, and support directly to families in their home environments, eliminating many of the scheduling, employment, and transportation barriers that might otherwise prevent families from taking advantage of necessary services.

While home visiting programs vary in their goals and content of services, in general, they combine health care, parenting education, child abuse prevention, and early intervention services for infants and toddlers and, in some cases, older preschool-aged children.

The Graham/Greenlee Regional Partnership Council allotted \$120,000 for home visitation in SFY 2014 and has included the same amount for funding in the proposed SFY 2015 budget. Child & Family Resources received most of the home visitation funding to deliver Healthy Families programming. The program formerly served only Graham County but is now serving Greenlee County as well. Exhibit 54 provides a list of home visiting programs and areas served within the Graham/Greenlee Region.

Exhibit 54. Home Visiting Programs in the Graham/Greenlee Region

| Program/Agency | Area(s) served |
|--|-----------------------------------|
| Arizona Early Intervention Program (AzEIP) | Graham County and Greenlee County |
| Healthy Families | Graham County and Greenlee County |
| Early Head Start | Graham County and Greenlee County |

Note. From personal communications from Shari Elkins, FTF Graham/Greenlee Regional Director, July 11, 2014.

In addition to utilizing home visitation services, families in the Graham/Greenlee Regional Partnership Council access other resources and services for their young children through private and government agencies. Exhibit 55 shows that a majority (79% or more) of parents surveyed as a part of First Things First’s 2012 Family and Community Survey agreed or strongly agreed that it was easy to locate services they needed or wanted and 75% agreed or strongly agreed that services were very good. Thirty-seven percent of parents agreed or strongly agreed that they did not know if they were eligible to receive services and 39% reported that they were asked to fill out paperwork or eligibility forms multiple times. Fifty-five percent of respondents agreed or strongly agreed that services reflected their cultural values and 64% said services and materials were offered in their language. However, 52% reported that services were not available at convenient times or locations. Thirty-eight percent of parents felt that services did not meet all their family’s needs, with 23% reporting they only received services after qualifying as having a severe need.

Exhibit 55. Specific Perceptions of Services in the Graham/Greenlee Region, 2012

| | | Strongly Disagree | Somewhat Disagree | Somewhat Agree | Strongly Agree |
|--|---------|-------------------|-------------------|----------------|----------------|
| It is easy to locate services that I need or want. | Region | 15% | 5% | 51% | 28% |
| | Arizona | 7% | 14% | 35% | 39% |
| I do not know if I am eligible to receive services. | Region | 14% | 28% | 14% | 23% |
| | Arizona | 31% | 12% | 15% | 27% |
| I am asked to fill out paperwork or eligibility forms multiple times. | Region | 24% | 24% | 5% | 34% |
| | Arizona | 16% | 13% | 20% | 33% |
| Available services are very good. | Region | 3% | 1% | 48% | 27% |
| | Arizona | 6% | 6% | 30% | 32% |
| Available services reflect my cultural values. | Region | 30% | 7% | 35% | 20% |

| | | Strongly Disagree | Somewhat Disagree | Somewhat Agree | Strongly Agree |
|--|---------|-------------------|-------------------|----------------|----------------|
| | Arizona | 14% | 12% | 32% | 23% |
| Service providers do not speak my language or materials are not in my language. | Region | 56% | 8% | 2% | 19% |
| | Arizona | 62% | 9% | 7% | 9% |
| Services are not available at times or locations that are convenient. | Region | 11% | 32% | 6% | 46% |
| | Arizona | 18% | 22% | 24% | 18% |
| Available services fill some of my needs, but do not meet the needs of my whole family. | Region | 14% | 26% | 18% | 20% |
| | Arizona | 24% | 14% | 20% | 19% |
| I cannot find services to prevent problems; I only qualify after problems are severe. | Region | 47% | 20% | 4% | 19% |
| | Arizona | 27% | 15% | 15% | 20% |

Note. From First Things First 2012 Family and Community Survey. Row percentages will not total 100% as respondents answering "Not sure" were not included in the table.

An important factor that influences parents' access to services for children less than five years of age is their level of knowledge regarding child development. Exhibit 56 shows that a higher percentage of the region's parents who completed the First Things First 2012 Family and Community Survey have a greater level of knowledge regarding child development than did parents completing the survey statewide.

Exhibit 56. Parent Understanding of Early Childhood in Graham/Greenlee Region, 2012

| | Optimal Response Choice | |
|---|-------------------------|---------|
| | Region | Arizona |
| When do you think a parent can begin to significantly impact a child's brain development? (rated prenatal) | 37% | 32% |
| At what age do you think an infant or young child begins to really take in and react to the world around them? (rated right from birth) | 35% | 35% |
| In regard to a child's experience in their first year of life, which do you agree with more? (rated first year has a major impact on school performance) | 98% | 83% |
| At what age do you think a baby or young child can begin to sense whether or not his parent is depressed or angry, and can be affected by his parent's mood? (rated from birth to one month) | 53% | 51% |
| Children's capacity for learning is pretty much set from birth and cannot be greatly increased or decreased by how the parents interact with them. (rated definitely false) | 73% | 63% |
| In terms of learning about language, children get an equal benefit from hearing someone talk on TV versus hearing a person in the same room talking to them. (rated definitely false) | 35% | 44% |
| Parents' emotional closeness with their baby can strongly influence that child's intellectual development. (rated definitely true) | 89% | 84% |
| For a five-year-old, how important do you think playing is for that child's healthy development? (rated 9 or 10 out of 10) | 85% | 82% |
| For a three-year-old, how important do you think playing is for that child's healthy development? (rated 9 or 10 out of 10) | 93% | 78% |
| For a 10-month-old, how important do you think playing is for that child's healthy development? (rated 9 or 10 out of 10) | 88% | 64% |
| If a child walks up to the TV and begins to turn the TV on and off repeatedly, how likely is it that the child wants to get her parents' attention? (rated somewhat likely or very likely) | 74% | 84% |

| | Optimal Response Choice | |
|---|-------------------------|---------|
| | Region | Arizona |
| If a child walks up to the TV and begins to turn the TV on and off repeatedly how likely is it that the child enjoys learning about what happens when buttons are pressed? (rated somewhat likely or very likely) | 100% | 95% |
| If a child walks up to the TV and begins to turn the TV on and off repeatedly how likely is it that the child is angry at her parents for some reason or she is trying to get back at them? (rated not at all likely) | 80% | 71% |
| In this case of a child turning the TV on and off, would you say that the child is misbehaving, or not? (rated not misbehaving) | 98% | 82% |
| Should a 15-month-old baby be expected to share her toys with other children? (rated No, too young to share) | 75% | 52% |
| Should a 3-year-old child be expected to sit quietly for an hour or so? (rated no) | 81% | 72% |
| Can a six-month-old be spoiled? (rated no) | 33% | 39% |
| Picking up a three-month-old every time she cries? (rated appropriate) | 59% | 55% |
| Letting a two-year-old get down from the dinner table to play before the rest of the family? (rated appropriate) | 70% | 51% |
| Letting a five-year-old choose what to wear to school every day? (rated appropriate) | 74% | 72% |

Note. From First Things First 2012 Family and Community Survey.

Findings from the 2012 First Things First Family and Community Survey also provide insight into parents' satisfaction with the early childhood resources and services currently available to them (Exhibit 57). Most (89%) of the Graham/Greenlee parents surveyed were somewhat or very satisfied with the information available to them about children's development and health, as compared to 78% of parents statewide. About a third (35%) of the parents reported they were somewhat or very satisfied with how agencies that service young children and their families work together and communicate with other, as compared to 43% of the parents surveyed statewide. As some of the region's collaboration building initiatives only recently began, it will be interesting to observe whether parents' level of satisfaction with how agencies communicate and work with each other increases by the time the survey is next conducted.

Exhibit 57. Satisfaction of Services in the Graham/Greenlee Region, 2012

| | | Very Dissatisfied | Somewhat Dissatisfied | Somewhat Satisfied | Very Satisfied |
|--|---------|-------------------|-----------------------|--------------------|----------------|
| How satisfied are you with the community information and resources available to you about children's development and health? | Region | 0% | 6% | 54% | 35% |
| | Arizona | 4% | 10% | 39% | 39% |
| How satisfied are you with how care providers and government agencies work together and communicate with each other? | Region | 14% | 23% | 23% | 12% |
| | Arizona | 11% | 18% | 29% | 14% |

Note. From 2012 FCS (Data for vendors) FINAL, First Things First. Percentages do not total to 100% because at the regional statewide levels a small percentage of respondents did not answer the questions.

Child Abuse/Neglect

Significant research has been done on child abuse and neglect in efforts to understand what factors may contribute to positive and negative outcomes for youth. For example, the literature shows that child abuse in the years prior to kindergarten has also been found to negatively impact early school success (Fantuzzo, Perlman, & Dobbins, 2011). Identified factors can be categorized according to such descriptors as societal, community, family/parental, and child specific risk and protective factors. Increasingly, research suggests that it is a complex interplay of these factors that impacts the likelihood of abuse and neglect (Peirson, Laurendeau, & Chamberland, 2001). Recent analysis of data from three longitudinal studies of low-income families with young children by Slack et al. (2011) shows an association between various indicators of economic hardship and subsequent neglect. While acknowledging that many low-income parents provide good care to their children, Slack et al. suggest that understanding this association may be useful to social service agencies in the design of risk assessment tools effective for preventative services.

The number of child abuse reports in Graham County ranged from a low of 98 for the 6-month period from October 2010 through March 2011 to a high of 124 for the period from October 2012 through March 2013. In Greenlee County, the number of child abuse reports ranged from 13 for April 2011 through September 2011 to 26 for the period from October 2012 through March 2013. In both counties the highest number of child abuse reports occurred in the most recent 6-month period (Exhibit 58). During the five most recent reported periods, the substantiation rate in Graham County ranged from 0.1% to 0.4%; in Greenlee County the range was from 0.0% to 0.2%. The number of new removals from the home in Graham County ranged from seven to 19 for the five most recent periods; in Greenlee County, the number of new removals ranged from 0 to 2.

It is worth noting that a child abuse report is neither an indicator of risk nor does it lead to a child's removal from their home. Moreover, lack of substantiation is often due to a lack of resources in the child welfare system. The state's fiscal crisis led to a statewide decrease in the number of CPS staff, resulting in average caseloads that were approximately 67% above state and national standards. During the period of the financial crisis, CPS had a turnover rate as high as 26% for case managers and 10% for supervisors (Reinhart, 2012). In September 2012, state child welfare officials reported that CPS caseworker staffing was again at full capacity, including the people in training (Arizona Public Media, 2012). However, in late 2013 it was reported that more than 6,000 cases of child abuse had gone uninvestigated in the previous four years. In response, Governor Brewer created an independent team to investigate those cases (Arizona Public Media, 2013a). At the end of January 2013 the state passed emergency legislation to hire 50 additional CPS workers (Arizona Public Media, 2013b). Given such a backlog of investigations, it is likely that constraints within CPS impacted Graham County and Greenlee County during some of the reported periods.

Exhibit 58. Child Abuse Reports, Substantiations, Removals, and Placements, 2010-2013

| Area | County | Oct. 2010 through Mar. 2011 | Apr. 2011 through Sept. 2011 | Oct. 2011 through Mar. 2012 | Apr. 2012 through Sept. 2012 | Oct. 2012 Through Mar. 2013 | Apr. 2013 through Sept. 2013 |
|---------------------------------|----------|-----------------------------|------------------------------|-----------------------------|------------------------------|-----------------------------|------------------------------|
| Number of Reports Received† | Graham | 98 | 106 | 113 | 105 | 124 | 144 |
| | Greenlee | 17 | 13 | 21 | 22 | 26 | 26 |
| Number of Reports Substantiated | Graham | * | * | 12 | * | 12 | * |
| | Greenlee | * | 0 | * | * | * | * |
| Substantiation Rate‡ | Graham | 0.1% | 0.2% | 0.4% | 0.3% | 0.5% | 0.2% |
| | Greenlee | 0.1% | 0.0% | <0.1% | <0.1% | 0.1% | 1% |
| Number of New Removals | Graham | * | * | 12 | 10 | 19 | 16 |
| | Greenlee | * | * | * | 0 | * | * |

Note. From *Child Welfare Reports*: Oct. 2010 – Mar. 2011; Apr. 2011 – Sept. 2011; Oct. 1, 2011-Mar. 31, 2012; Apr. 1, 2012 – Sept. 30, 2012; Oct. 1 2012-Mar. 31, 2013; Apr. 2013 through Sept. 2013 - Tables 2,3,15, 16, 21, and 22, Arizona Department of Economic Security. The latest available data are reported for each period. Each Child Welfare Report includes data for that period and data for the period preceding it. In some cases, data from the earlier period have been revised. In those cases, revised data are provided in this table. †“Reports received” includes data for reports characterized by the risk level high, moderate, low, and potential. ‡ Substantiation rates are computed based on the total number child abuse cases assigned for investigation whose risks levels were assessed as low, medium, or high risk. It excluded reports reported labeled in the Child Welfare Reports as “potential.” Asterisk indicates that data <10 and > 0 is suppressed, according to FTF guidelines.

Foster Care

The number of children in foster care in the United States has been steadily decreasing over the last seven years from 510,699 in 2005 to 408,425 in 2010. Over that same time period, the number of foster care children in Arizona has varied from a low of 9,099 in 2007 to a high of 9,930 in 2010 (U.S. Department of Health and Human Services, 2011). Children are placed in foster care settings for a variety of reasons and few are reunified with their parents. One study found that on average, the duration of care was 48.6 months, suggesting that many youth in foster care (approximately seven out of ten) will age out of the welfare system before they find permanency (Cheng, 2010). Youth who age out of foster care are at an increased risk for poor outcomes related to employment, education, housing, criminal activity, physical and mental health, substance abuse, and child bearing (Stott & Gustavsson, 2010). Many of these risk factors hold true even for youth who are adopted or for whom permanent environments are established.

The stated policy of the Arizona DES is to avoid children’s repeat entry into foster care, while ensuring the best interests of children and their families. Child Welfare Reports show that 78 children in Graham County and 6 children in Greenlee County (about 5.4% of total removals in the state) were removed from their homes in the most recently reported year, October 2012 to September 2013 (Exhibit 59). In the second half of the year, the percentage of Graham County children with a prior removal in the prior 12 months (3.2%) was half of what it was in the first half of the reporting year. However, the percentage of such children in Greenlee County spiked to 50%, reflective of the fact that a shift of only a few children can dramatically change a percentage when the population is small. In both counties, the percentage of children with a prior removal in the last 12-24 months dropped to 0% in the April 2013-September 2013 period.

Exhibit 59. Children Entering Out-of-Home Care by Prior Placements, 2013

| | Removed | | Prior Removal (12 Mos.) | | Percent Prior Removal (12 Mos.) | | Prior Removal (12-24 Mos.) | | Percent Prior Removal (12-24 Mos.) | |
|------------------------|-------------------------------|--------------------------------|-------------------------------|--------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------------------------|--|--------------------------------|
| | Oct. 2012- Mar. 2013 | Apr. 2013- Sept. 2013 | Oct. 2012- Mar. 2013 | Apr. 2013- Sept. 2013 | Oct. 2012- Mar. 2013 | Apr. 2013- Sept. 2013 | Oct. 2012- Mar. 2013 | Apr. 2013- Sept. 2013 | Oct. 2012- Mar. 2013 | Apr. 2013- Sept. 2013 |
| Graham County | 47 | 31 | * | * | 6.4% | 3.2% | * | 0 | 4.3% | 0.0% |
| Greenlee County | 0 | * | 0 | * | 0.0% | 50% | 0 | 0 | 0.0% | 0.0% |
| Arizona | 5,101 | 5,702 | 446 | 523 | 8.7% | 9.2% | 147 | 130 | 2.9% | 2.3% |

Note. From *Child Welfare Report 1st Oct 2012 to 31st Mar 2013 (Table 31)* and 1st Apr. 2013 to 30 September 2013, Arizona State Department of Economic Security. Counts of removal from home are suppressed according to FTF data suppression guidelines. Asterisk indicates that data <10 and > 0 is suppressed, according to FTF guidelines.

Juvenile Justice

When children enter the juvenile justice system it is often the culmination of a history of psychological and academic problems. A youth’s entry, exit, and continued involvement in the juvenile justice system are influenced by a range of individual, social, and environmental factors. For example, race/ethnicity, gender, history of mental health, substance abuse, trauma, delinquency, family conflict, poverty, prior social service involvement, and geographic location may impact a youth’s likelihood involvement in juvenile justice. (Maschi, Hatcher, Schwalbe, & Rosato, 2008). Thus, the number of a region’s children who are in the juvenile justice system may be taken as a measure of the efficacy of early child development programs and services in a region. Nationwide, the number of children age’s seven to 12 referred to juvenile courts increased by 33% in the 1990s. Research has shown that children who become delinquents at an early age are “two to three times more likely to become serious, violent, and chronic offenders than adolescents whose delinquent behavior begins in their teens” (Loeber, Farrington & Petechuk, 2003). Involvement in the juvenile justice system is of ongoing concern as, on average, over half of juvenile delinquents go on to become adult offenders. (Eggleston & Laub, 2002).

The number of juvenile cases filed in Graham County Superior Court and Greenlee County Superior Court in 2011 and 2012 is reported in Exhibit 60. According to the Administrative Office of the Courts, 231 juveniles in Graham County were referred to the Arizona Court System in 2012, a 32% decrease from the previous year. Referrals to the court system decreased by 10% over the same period in Greenlee County. Of the 231 youths referred in Graham County in 2012: 103 (45%) were detained, 65 (28%) were diverted to community service or other non-judicial alternatives; 153 (66%) had petitions filed regarding their case requesting the court assume jurisdiction; and 105 (45%) received standard probation. Further investigation is warranted to determine why the number of referrals showed such a large decrease from 2011 to 2012.

In Greenlee County, there were 79 referrals to the court in 2012, down 10% from the 88 referrals reported in the previous year. Of the 79 youths referred in Greenlee County in 2012: 23 (29%) were detained, 22 (28%) were diverted to community service or other non-judicial alternatives; 45 (57%) had petitions filed regarding their case requesting the court assume jurisdiction; 36 (46%) received standard probation.

Exhibit 60. Juveniles Processed in the Arizona Court System, Fiscal Years 2011 and 2012

| Outcome | Graham County | | Greenlee County | | Total | |
|--------------------|---------------|------|-----------------|------|-------|------|
| | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 |
| Referred | 338 | 231 | 88 | 79 | 426 | 310 |
| Detained | 124 | 103 | 28 | 23 | 152 | 126 |
| Diverted | 109 | 65 | 22 | 22 | 131 | 87 |
| Petition Filed | 193 | 153 | 59 | 45 | 252 | 198 |
| Dismissed | 71 | 33 | * | 16 | 79 | 49 |
| Standard Probation | 133 | 105 | 42 | 36 | 175 | 141 |
| JIPS | 22 | 17 | * | * | 30 | 23 |

Note. From Arizona’s Juvenile Court Counts, Statewide Statistical Information: FY2011; FY 2012, Administrative Office of the Courts, Juvenile Justice Services Division, Research and Information Unit. Data reported for juveniles ages 8 through 17. Cases for juveniles below age 8 are handled through Child Protective Services or other agencies. Referred indicates juveniles for whom a report was submitted to the juvenile court alleging the youth committed a delinquent act or incorrigible behavior. Diverted denotes a process by which a juvenile is able to avoid formal court processing and to have the referral alleging an offense adjusted if the juvenile fulfills one or more conditions. Petitions Filed refers to legal documents filed in the juvenile court alleging that a referred youth is delinquent, incorrigible, or dependent and which requests the courts to assume jurisdiction over the youth. Dismissed denotes the number of youth with petitions against them that were dismissed. The dismissal of a petition may occur because of a lack of evidence, extension of unfulfilled diversion conditions, disposition of other charges, etc. JIPS = Juvenile Intensive Probation. Asterisk indicates that data <10 and > 0 is suppressed, according to FTF guidelines.

Health

The health and safety of children is of the utmost importance to parents. Parents want to live in communities where they know their children will receive health services and care needed to develop into healthy adults. Research suggests that poor health in childhood can have lasting and cumulative effects on overall health and well-being (Russ, Garro, & Halfon, 2010), such as unaddressed physical, developmental, and mental health problems (Keating & Hertzman, 1999). Prenatal care for mothers is also crucial in preventing birth outcomes that may have lasting effects on children’s health.



While the last 50 years have seen declines in child mortality, rates of acute illness, and pediatric hospitalizations, there appears to be an increase in chronic illness (Wise, 2007). The percentage of American youth ages 2-19 who are obese has almost tripled over the last three decades and approximately one in six children and adolescents in that age ranges is obese (Centers for Disease Control and Prevention, n.d.). Recent analysis of data from the National

Health and Nutrition Examination Survey found that the percentage of children age's two to five who are obese increased from 5% in 1976-1980 to 10.4% in 2007-2008 (National Center for Health Statistics, 2010). Another study found a high prevalence of obesity and other chronic conditions in three nationally representative cohorts of children, which was gradually increasing in each cohort. (Van Cleave, Gortmaker, & Perrin, 2010). Furthermore, childhood obesity rates vary greatly based on demographic factors such as ethnicity and socioeconomic status. In 2007-2008, the obesity rate for Mexican American adolescent boys (26.8%) far exceeded the rate for white adolescent boys (16.7%). The obesity rate for low-income preschool-aged children (17%) is far above the 2007-2008 figure (10.4%) for all children age's two to five (National Center for Health Statistics, 2010). If current trends continue, it is estimated that by 2030, 16-18% of all health care expenditures in the U.S. will be attributable to overweight/obesity (Wang, Beydoun, Liang, Caballero, & Kumanyika, 2008).

Experts have suggested that initiating strategies to prevent the onset of chronic diseases in childhood can help limit the onset of chronic diseases in adulthood (Halfon & Newacheck, 2010). The Committee on Obesity Prevention Policies for Young Children of the Institute of Medicine of the National Academies (2011) has determined goals and action steps to prevent obesity in young children. Goals include: assessing and monitoring growth during early childhood; using social marketing to provide high quality information and strategies for the prevention; increasing the amount of physical activity engaged in by young children; and creating indoor and outdoor environments that promote physical activity.

In response to 2006 and 2009 Institute of Medicine reports on the growing obesity rates among children and the amount of fast food advertising directed to children Congress directed the Federal Trade Commission (FTC) to begin studying food and beverage marketing to children and teens. In 2009 marketing expenditures targeting youth totaled \$1.8 billion (Powell et al, 2013). Although 2012 data show that total expenditures by fast-food restaurant chains have decreased by about 20%, some chains have increased spending on promotional not covered under, a voluntary self-regulation program begun by large food and beverage companies. Such marketing techniques include product placement in movies and videos and cross-promotion licenses (Powell et al., 2013; Berhardt et al., 2013).

Other significant health disparities beyond obesity exist for children in the United States based on their socioeconomic status. Children who live in low-income households have been shown to have worse health outcomes than their peers from higher income households (Starfield, Robertson, & Riley, 2002; Larson & Halfon, 2010). This study found that the child health outcomes were positively correlated to family income.

With the high costs associated with health care, most families are dependent on health insurance to cover needed services. The expansion of public insurance programs such as the State Children's Health Insurance Program (CHIP) and The Individuals with Disabilities Act (IDEA) has played an important role in expanding health care access to children. The National Health Interview Survey (NHIS) found that the rate of uninsured children decreased from 14% in 1997 to 7% in the first quarter of 2011. Over that same period, the percentage of children covered by public insurance dramatically increased from 20-40%, while usage of private

coverage fell. Children from lower socioeconomic strata of society particularly benefit from public insurance programs. The early 2011 NHIS survey reported that 84% of poor children and 61% of near poor children were covered by such program (Cohen & Martinez, 2011).

Many families, however, are uninsured or underinsured. One study of 43,509 children ages two-17 (living with at least one parent) found that 74% of both children and parents were insured, 8% were both uninsured, and 19% had discordant patterns of coverage. Overall, about 12%, or roughly 7.4 million U.S. children each year, are uninsured (DeVoe, Tillotson, & Wallace, 2009).

In general, access to health insurance is associated with increased utilization of health services (Selden & Hudson, 2006) as well as fewer unmet health needs (Kenney, 2007). The Center for Budget and Policy Priorities suggested that public health insurance may offer better access to health care at a lower cost than private health insurance (Ku, 2007). A large number of children are expected to benefit from implementation of the Affordable Care Act (ACA). Provisions of the act that benefit children include: funding for maternal, infant, and early childhood home visitation programs; eliminating the denial of care due to a pre-existing condition; and a two year extension of funding for the Children's Health Insurance Act through the end of the 2015 (Voices for America's Children, n.d.).

Children's healthy development benefits from access to comprehensive preventive and primary health services that include screening and early identification for developmental milestones, vision, hearing, oral health, nutrition and exercise, and social-emotional health (Bruner, 2009). Eighty-eight percent of Graham/Greenlee parents responding to the 2012 First Things First Family Community Survey agreed that children age five and under should have regular visits at the same doctor's office. The following sections detail a variety of health indicators for the Graham/Greenlee Region including: health insurance coverage and access, prenatal care and healthy births, access and utilization of a range of other health programs/services, immunization rates, and child mortality and morbidity, among other indicators.

Health Insurance Coverage and Utilization

Exhibit 61 shows the figures for enrollment of children in the state's KidsCare program. In both counties enrollment decreased each year from 2009 to 2012, with the largest drop-off occurring between 2010 and 2011. In February 2013, enrollment in Graham County and Greenlee County were 11% and 30% lower, respectively, than in February 2009. These decreases are both lower than the 41% decrease in enrollment statewide over the same period. The significant decrease in the number of children enrolled in KidsCare was primarily a result of a statewide freeze on program enrollment as of January 1, 2010. From the beginning of 2010 to April 2012 only renewing applications were accepted; other eligible families were placed on a waiting list. Regular factors such as children reaching 18 years in age and, thereby, aging out of the program, families failing to pay a monthly premium, or families' income increasing to a level above program eligibility also likely contributed to the decrease.

In April 2012, the Centers for Medicare and Medicaid Services approved funding for a new health insurance programs for children, KidsCare II. KidsCare II at first began enrolling children from the KidsCare waiting list, but later opened enrollment to all children whose family met income eligibility. The KidsCare II income eligibility level as of May 2013 was 200% of the Federal Poverty Level. Funding was only available for a limited number of children, which prioritization based on how long a child had been on the waiting list. The almost 250% increase in enrollment from February 2012 to February 2014 reflects the input of new funding (Exhibit 61). However, the KidsCare/KidsCare II program ended on January 31, 2014. A small number of children who were in the KidsCare program prior to when enrollment was frozen in January 2010 and whose parents have made timely payment of premiums over the whole period continue to be served by the program.

It is expected that some children formerly served by KidsCare will enroll in health insurance through the Affordable Care Act (ACA). However, the ACA requires all individuals whose employer offers health insurance to take advantage of this benefit rather than purchase health insurance through the ACA. While some individuals may acquire health insurance for themselves in this way, employers are not obligated to provide such a benefit to an employee’s family members. Some individuals may not be able to afford the additional costs of adding their children on to their health insurance plan. In all states except Arizona, federal funds supplemented by state funds helps children living under 200% of the poverty level purchase health insurance through the Affordable Care Act. Therefore, it is likely that some children who formerly received health insurance coverage though Kids Care II will now be uninsured.

Exhibit 61. KidsCare Enrollment, 2009-2014

| | February 2009 | February 2010 | February 2011 | February 2012 | February 2013 | February 2014 |
|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Graham County | 217 | 205 | 100 | 56 | 194 | * |
| Greenlee County | 37 | 33 | * | * | 26 | * |
| Arizona | 59,574 | 42,162 | 22,153 | 12,147 | 35,147 | 2,296 |

Note. From *KidsCare Enrollment*, Arizona State, Arizona Health Care Cost Containment System (AHCCCS). Asterisk indicates that data <25 and >0 is suppressed, according to FTF guidelines.

Public Health Clinics

Within the Graham/Greenlee Region there are 3 public health clinics (Exhibit 62) that are designed to be permanent locations for public health services. Services available at these facilities include:

- Childhood Immunizations (no charge for children 18 and under)
- Well Woman Health Checks
- Cervical Cancer screenings



- Breast Cancer screenings
- Testing and treatment for sexually transmitted diseases
- Reproductive health services (non-surgical)
- Administration of the WIC Program (Women, Infant & Children nutrition education for eligible families)
- Flu shots

Exhibit 62. Graham/Greenlee Public Health Clinic Locations and Services

| Community | Location | Services |
|-----------|----------------------------------|---|
| Clifton | 253 Leonard St Clifton, AZ 85533 | Monday-Friday 8am-5pm Closed 1 st and 2 nd Tuesday |
| Duncan | 1684 Fairgrounds Rd. | 1 st and 3 rd Tuesday 8am-4pm |
| Safford | 820 W. Main St. | Monday – Thursday 7am-6pm Clinic Closed Friday |

Note. From Clinic Search. Arizona Department of Health Services, Retrieved March 24th, 2014 from <http://clinicsearch.azbnp.gov/>.

Healthy Births

A women’s utilization of pre and perinatal care have important short and long-term implications for child health. It is recommended that a woman have monthly medical visits throughout her pregnancy. The Arizona Department of Health Services tracks the number of prenatal visits associated with each birth. The number of births in a year may serve as a reasonable, though not exact, proxy for the number of women that give birth. Exhibit 63 shows that in Graham County the percentage of women who had nine or more prenatal visits increased from 47% in 2007 to 56% in 2011; in Greenlee County the visits increased from 34% to 50% over the same years. In Graham County, the percentage of women who had 13 or more prenatal visits has increased over the last three reported years.



These data suggest that an increasing number of pregnant women have visited their doctor at least once a month, on average, during their pregnancy. However, the percentage of women in both counties who had 9 or more prenatal visits lagged far behind that of the state as a whole, which ranged from 77% to 83%.

Exhibit 63. Number of Prenatal Visits by Pregnant Women, 2008-2012

| | Number of Visits | 2008 | 2009 | 2010 | 2011 | 2012 |
|---------------|------------------|------|------|------|------|------|
| Graham County | No visits | 1% | 1% | 1% | 2% | 2% |
| | 1-4 visits | 20% | 13% | 11% | 10% | 12% |
| | 5-8 visits | 41% | 38% | 35% | 32% | 31% |
| | 9-12 visits | 32% | 40% | 43% | 44% | 43% |
| | 13+ visits | 6% | 8% | 10% | 12% | 13% |

| | Number of Visits | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------|--------------------|------|------|------|------|------|
| Greenlee County | No visits | 1% | 0% | 0% | 1% | 1% |
| | 1-4 visits | 18% | 9% | 16% | 8% | 6% |
| | 5-8 visits | 48% | 43% | 36% | 41% | 24% |
| | 9-12 visits | 30% | 45% | 40% | 45% | 53% |
| | 13+ visits | 4% | 2% | 8% | 5% | 17% |
| Arizona | No visits | 2% | 2% | 2% | 2% | 1% |
| | 1-4 visits | 4% | 4% | 3% | 3% | 4% |
| | 5-8 visits | 17% | 16% | 14% | 14% | 14% |
| | 9-12 visits | 48% | 49% | 49% | 47% | 47% |
| | 13+ visits | 30% | 30% | 32% | 34% | 35% |

Note. From Table 5B-12 – Births by Number of Prenatal Visits and County of Residence, Arizona, 2008-2012; Arizona Birth and Maternal Characteristics, 2009-2012, Health Status and Vital Statistics, Arizona Department of Health Services. Percentages do not total to 100% due to rounding.

Low birth weight babies are at risk for serious health problems as newborns that may affect their health throughout their lives. Information regarding the prevalence of low birth weight babies for Graham/Greenlee County is presented in Exhibit 64. Low birth weight is defined as a baby that is less than 5.8 pounds at birth. The data show that from 2008 to 2012, the percentage of low birth weight babies born in Graham County has moved up and down, sometimes being higher than the statewide rate and sometimes being lower than it. In Greenlee County, the low birth weight ratio has also not followed a discernible pattern over that same period of time. However, in two of the reported years the percentage of low birth weight babies in Greenlee County exceeded 9%. In contrast, the statewide ratio has hovered around 7.1% for all five reported years.

Exhibit 64. Low Birth Weight Rates, 2008-2012

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------|------|------|------|------|------|
| Graham County | 10% | 7.1% | 5.1% | 6.8% | 7.6% |
| Greenlee County | 9.6% | 5.4% | 9.5% | 5.0% | 5.3% |
| Arizona | 7.1% | 7.1% | 7.1% | 7.0% | 6.9% |
| United States | 8.2% | NA | NA | NA | NA |

Note. From Table 5B-17 Low Birthweight Birth Ratios In The United States And In Urban And Rural Counties Of Arizona, 2000-2012; Arizona Birth and Maternal Characteristics, 2009-2012, Arizona Department of Health Services, Health Status and Vital Statistics. Low birth weight is defined as less than 5.8 pounds at birth. Data are per 1,000 live births. NA = not available.

Low birth weight babies are more likely to require immediate intensive health care than other newborns. Exhibit 65 shows that in 2011 there were 35 newborns admitted into intensive care units in Graham and Greenlee counties. Of admitted babies, 25 (71%) were pre-term and 16 (46%) had a low birth weight.

Exhibit 65. Newborns Admitted to Intensive Care Units, 2012

| | Total | Preterm | <2,500 Grams |
|-----------------|-------|--------------------|--------------------|
| Graham County | 25 | * | * |
| Greenlee County | * | * | * |
| Arizona | 4,158 | 2,380 [†] | 2,050 [†] |

Note. From Table 5B-24 Newborns Admitted To Newborn Intensive Care Units By Gestational Age, Birthweight, and Mother's County of Residence, Arizona, 2012. Arizona Department of Health Services, Health Status and Vital Statistics. Less than 2,500 grams is considered low birth weight. Asterisk indicates that data <25 and > 0 is suppressed, according to FTF guidelines.

[†] Sum rounded to nearest tens unit due to non-zero addend less than 6.

Exhibit 66 shows 2012 statistics on characteristics of newborns and activities of expectant mothers for Graham and Greenlee counties. Both counties had much higher rates of births with complications of labor and/or delivery and births with medical risk factors reported than the state as a whole. The percentage of preterm births in the two counties also exceeded the statewide rate. The percentage of primary and repeat caesarean births in Greenlee County exceeded the Arizona rate, as did the percentage of infants admitted to newborn intensive care units. The Graham County rate for primary and repeat caesarean births was slightly below the statewide rate. Of special concern for the health of both pregnant women and their babies is that the percentage of tobacco use during pregnancy in Graham County in 2012 was double the statewide rate; the percentage in Greenlee County was triple that of the state.

Exhibit 66. Occurrence of Selected Characteristics of Newborns and Expectant Mothers, 2012

| | Graham | Greenlee | Arizona |
|--|--------|----------|---------|
| Preterm Births (gestational age <37 weeks) | 12% | 11% | 9% |
| Births with complications of labor and/or delivery | 57% | 54% | 32% |
| Births with abnormal conditions reported | 21% | 21% | 10% |
| Births with medical risk factors reported | 55% | 55% | 38% |
| Primary and repeat caesarean births | 27% | 37% | 28% |
| Infants admitted to newborn intensive care units | 5% | 9% | 5% |
| Tobacco used during pregnancy | 8% | 12% | 4% |
| Alcohol use during pregnancy | <1% | 0% | <1% |

Note. From Table 5B-30 Rates of Occurrence for Selected Characteristics of Newborns and Mothers Giving Birth by County of Residence, Arizona, 2012, Arizona Department of Health Services, Health Status and Vital Statistics. Rate is per 100 births. Less than 2,500 grams is considered low birth weight. Arizona data does not include one pre-term and two full-term births for which weight data is not known.

Exhibit 67 presents the characteristics of newborns and prenatal care accessed by expectant mothers in the region. Data are available for two Graham County localities, the Graham/Greenlee Region, and the whole state. In Safford, 15% of births were to teen mothers and 48% of births were to women who were not married, both rates exceeding those of the state as a whole. The percentage of pregnant mothers in Safford that received prenatal care during the first trimester (73%) lagged behind the statewide rate of 83%.

Exhibit 67. Selected Birth Statistics, 2012

| Community | Total Births | Mother <19 yrs | Unwed Mother | Prenatal Care in 1 st Trimester | No Prenatal Care Received | Low Birth-weight Newborn | Public Payee for Birth |
|------------------------|--------------|----------------|--------------|--|---------------------------|--------------------------|------------------------|
| Safford | 184 | 15% | 48% | 73% | <1% | 7% | 57% |
| Thatcher | 233 | 9% | 30% | 80% | <1% | 6% | 50% |
| Graham/Greenlee Region | 530† | 11% | 38% | 71% | <1% | 6% | 50% |
| Arizona | 85,725 | 9% | 45% | 83% | 1% | 7% | 55% |

Note. From Table 9A Selected Characteristics of Newborns and Mothers by Preliminary Health Analysis Areas, 2012, Arizona Department of Health Services, Health Status and Vital Statistics and Arizona Birth and Maternal Characteristics FTF Territories TerrName15 2009-2012, Arizona Department of Health Services, Health Status and Vital Statistics as provided by FTF. No data were available for Greenlee County communities. A Community Health Analysis Area (CHAA) is a geographic unit created by the Arizona Department of Health Services Bureau of Public Health Statistics for use in disease monitoring programs. Arizona is divided into 126 CHAAs. †Sum rounded to nearest tens unit due to non-zero addend less than 6; totals include records with unknown number of previous live births; † Includes all infant deaths (age at death < 1) in current year that could be matched to a birth record from the previous or current year.

Immunizations

The importance of immunizations for young children cannot be over-emphasized.

Immunizations are a health measure that has made one of the most important contributions to public health in the past century (Pruitt, Kline, & Kovaz, 1995). According to the Center for Disease Control (CDC) (n.d.), if an unvaccinated child is exposed to a disease, the child's system may not be strong enough to fight off the disease. The CDC also notes that immunizing children helps protect the health of the community, particularly others who are not immunized, including those who are too young or have medical reasons that prevent immunization. Immunization also helps to slow or stop disease outbreaks when they occur. Despite the recognized importance of early childhood immunizations, a 2011 analysis of national data found that an increasing percentage of parents are refusing to have their children vaccinated (Stobbe, 2011). Decreased levels of immunization have been linked to recent increases in cases of vaccine-preventable diseases, such as measles, mumps, whooping cough, and Haemophilus influenzae (Hib) (Atwell, 2012; Purlain, 2011; Immunization Action Coalition, n.d.). Public health experts have suggested a variety of strategies to reduce the rate of nonmedical exemptions. These include education about the risks and benefits of vaccines; increasing the financial liability of those whose exempted children go on to contract and cause an outbreak of a disease; and a tax on those who refuse have their children vaccinated (Constable, Blank, & Caplan, 2014). Important indicators of child health are the percentage of young children who have completed vaccination series. The Arizona State Immunization Information System (ASIIIS) tracks two series of vaccinations. The 3:2:2:2 series of vaccinations is administered between 12 and 24 months of age, which includes:

- 3 DTaP/DT (Diphtheria/Pertussis/Tetanus) vaccinations;
- 2 IPV (Inactivated Polio Virus);
- 2 Hib (Haemophilus Influenza type b) vaccinations; and
- 2 HBV (Hepatitis B Virus)vaccinations,

The 4:3:1:3:3:1 series of vaccinations is administered between 24 and 35 months of age, which consists of:

- 4 DTaP/DT (Diphtheria/Pertussis/Tetanus) vaccinations;
- 3 IPV (Inactivated Polio Virus) vaccinations;
- 1 MMR (Measles/Mumps/Rubella) vaccination;
- 3 Hib (Haemophilus Influenza type b) vaccinations;
- 3 HBV (Hepatitis B Virus)vaccinations; and
- 1 VZV (Varicella-Zoster Virus) vaccination.



ASIS-based immunization coverage estimates are nearly always lower than actual coverage levels given the challenges in determining a completion rate. Fragmented records, children relocating out of state before completing their immunizations, and duplication of records are some reasons for these challenges. Exhibit 68 shows that rates of completing the 3:2:2:2 series in Graham County increased steadily from 2010 to 2012; however completion rates remained well below the statewide rate. The percentage of Greenlee County children that completed the 3:2:2:2 series was higher than the state as a whole in two of the years. Of the four vaccinations that make up the series, the DTAP vaccination had the lowest completion rate in both counties.

Exhibit 68. Children Ages 12-24 Months Receiving 3:2:2:2 Vaccination Series, 2010-2012

| Locality | Year | No. of Children Receiving any Vaccination | Percentage that Completed the Series | Percentage Vaccinated | | | |
|-----------------|------|---|--------------------------------------|-----------------------|-----|-----|-----|
| | | | | DTAP | IPV | HIB | HBV |
| Graham County | 2010 | 481 | 49% | 49% | 54% | 55% | 57% |
| | 2011 | 518 | 55% | 56% | 59% | 59% | 61% |
| | 2012 | 826 | 59% | 60% | 66% | 66% | 70% |
| Greenlee County | 2010 | 87 | 75% | 67% | 69% | 68% | 70% |
| | 2011 | 94 | 67% | 67% | 73% | 74% | 74% |
| | 2012 | 139 | 75% | 75% | 80% | 80% | 84% |
| Arizona | 2010 | 104,293 | 72% | 74% | 82% | 83% | 87% |
| | 2011 | 96,735 | 71% | 73% | 82% | 83% | 86% |
| | 2012 | 93,193 | 69% | 72% | 81% | 82% | 85% |

Note. From Arizona Department of Health Services, *Arizona State Immunization Information System*. 2010_1224_3222, 2011_1224_3222, and 2012_1224mo_3222. (Excel databases provided by FTF). The Arizona Department of Health Services collects data from child care centers.

The percentage of children ages 19 to 35 months that completed the 4:3:1:3:3:1 vaccination series from 2010 to 2012 varied from 40% to 43% in Graham County and 50% to 52% in Greenlee County (Exhibit 69). These rates largely mirrored the state rates for those years. Consistent with the 3:2:2:2 series, DTAP had the lowest completion rate by children ages 19-35 months.

Exhibit 69. Children Ages 19-35 Months Receiving 4:3:1:3:3:1 Vaccination Series, 2010-2012

| Locality | Year | No. of Children Receiving any Vaccination | Percentage that Completed the Series | Percentage Vaccinated | | | | | |
|-----------------|------|---|--------------------------------------|-----------------------|-----|-----|-----|-----|-----|
| | | | | DTAP | IPV | MMR | HIB | HBV | VZV |
| Graham County | 2010 | 713 | 40% | 43% | 54% | 50% | 52% | 56% | 49% |
| | 2011 | 647 | 41% | 43% | 54% | 53% | 55% | 58% | 52% |
| | 2012 | 774 | 43% | 45% | 58% | 55% | 58% | 60% | 53% |
| Greenlee County | 2010 | 154 | 50% | 51% | 66% | 68% | 68% | 69% | 69% |
| | 2011 | 105 | 52% | 55% | 75% | 70% | 76% | 76% | 68% |
| | 2012 | 133 | 50% | 53% | 70% | 73% | 68% | 72% | 71% |
| Arizona | 2010 | 147,795 | 50% | 58% | 71% | 76% | 74% | 74% | 75% |
| | 2011 | 136,941 | 51% | 58% | 72% | 75% | 75% | 73% | 74% |
| | 2012 | 128,337 | 48% | 55% | 70% | 74% | 73% | 71% | 73% |

Note. From Arizona Department of Health Services, Arizona State Immunization Information System. 2010_1935_431331, 2011_1935_431331, and 2012_1935mo_431331. (Excel databases provided by FTF). The Arizona Department of Health Services collects data from child care centers.

Additional 2012 data on vaccine completion rates were available by zip code (Exhibit 70). Graham County vaccination rates varied, from 0% in Ft. Thomas to 90% in Central. Whereas, throughout Greenlee County, series completion rates were 71% or higher.

Exhibit 70. Series 3:2:2:2 Vaccine for Children Ages 12-24 Months by Zip Code, 2012

| County | Locality | Zip Code | No. of Children Receiving any Vaccination | Percentage that Completed the Series | Percentage Vaccinated | | | |
|-----------------|------------|----------|---|--------------------------------------|-----------------------|---------|---------|---------|
| | | | | | DTAP | IPV | HIB | HBV |
| Graham County | Pima | 85543 | 56 | 68% | 68% | 75% | 80% | 84% |
| | Solomon | 85551 | * | 53% | 53% | 65% | 59% | 65% |
| | Thatcher | 85552 | 132 | 76% | 76% | 81% | 80% | 83% |
| | Safford | 85546 | 306 | 75% | 75% | 80% | 80% | 83% |
| | Ft. Thomas | 85536 | * | 0% | 0% | 100% | 100% | 100% |
| | Eden | 85535 | No data | No data | No data | No data | No data | No data |
| | Central | 85531 | * | 90% | 90% | 100% | 100% | 100% |
| Greenlee County | Duncan | 85534 | 28 | 71% | 71% | 75% | 75% | 82% |
| | Clifton | 85533 | 38 | 71% | 71% | 79% | 79% | 84% |
| | Morenci | 85540 | 72 | 78% | 78% | 82% | 82% | 85% |
| | Blue | 85922 | No data | No data | No data | No data | No data | No data |

Note From Arizona Department of Economic Security, 2014. [RNA DES DATA FILE 2014]. Unpublished raw data received from First Things First State Agency Data Request. Asterisk indicates that data <25 and > 0 is suppressed, according to FTF guidelines. Percentages are rounded up.

Graham County data on 4:3:1:3:3:1 vaccination series completion rates also show a wide variation, ranging from 48% in Duncan to 63% in Safford (Exhibit 71). Eden shows a 0% completion rate, however, the number of children receiving any vaccination in Eden was too few to report and the low percentage is an outlier in the context of the whole county. In Greenlee County, series completion rates ranged from 48% in Duncan to 51% in Morenci.

Exhibit 71. Series 4:3:1:3:3:1 Vaccine for Children Ages 19-35 Months by Zip Code, 2012

| County | Locality | Zip Code | No. of Children Receiving any Vaccination | Percentage that Completed the Series | Percentage Vaccinated | | | | | |
|-----------------|------------|----------|---|--------------------------------------|-----------------------|-----|------|------|-----|------|
| | | | | | DTAP | IPV | MMR | HIB | HBV | VZV |
| Graham County | Pima | 85543 | 69 | 54% | 54% | 68% | 68% | 72% | 74% | 68% |
| | Solomon | 85551 | * | * | 13% | 27% | 27% | 27% | 33% | 27% |
| | Thatcher | 85552 | 124 | 52% | 59% | 76% | 70% | 75% | 78% | 66% |
| | Safford | 85546 | 250 | 63% | 64% | 76% | 75% | 74% | 79% | 74% |
| | Ft. Thomas | 85536 | N/D | N/D | N/D | N/D | N/D | N/D | N/D | N/D |
| | Eden | 85535 | * | 0% | 0% | 0% | 100% | 100% | 0% | 100% |
| | Central | 85531 | * | 50% | 75% | 75% | 75% | 100% | 75% | 50% |
| Greenlee County | Duncan | 85534 | 40 | 48% | 48% | 68% | 73% | 68% | 73% | 73% |
| | Clifton | 85533 | 32 | 50% | 53% | 63% | 69% | 59% | 66% | 69% |
| | Morenci | 85540 | 61 | 51% | 57% | 75% | 75% | 72% | 75% | 72% |
| | Blue | 85922 | N/D | N/D | N/D | N/D | N/D | N/D | N/D | N/D |

Note From Arizona Department of Economic Security, 2014. [RNA DES DATA FILE 2014]. Unpublished raw data received from First Things First State Agency Data Request. Asterisk indicates that data <25 and > 0 is suppressed, according to FTF guidelines. Percentages are rounded up. N/D indicates no data was available.

Developmental Screening

Developmental screening is another family health practice essential for ensuring children grow and develop optimally. The Arizona Chapter of the American Academy of Pediatrics recommends that all children receive a developmental screening at 9, 18, and 30 (or 24) months with a valid and reliable screening instrument. Research has documented that early identification through developmental screening can lead to enhanced developmental outcomes and reduced developmental problems for children who have special needs. Providing children at risk for developmental delays with the supports and services they need early in life leads to better health and educational outcomes into adulthood.

There are several elements of developmental screening that are reported by the Arizona Department of Economic Services. These include Individualized Family Service Plans (IFSP), evaluation/assessment, and in-home or out-of-home services or programs. The Arizona Early Intervention Program (AzEIP) was established under Part C of the Individuals with Disabilities Education Act (IDEA) to serve as Arizona’s statewide, interagency system of supports and services for families with infants and toddlers with developmental delays.

County and zip code level data are not currently available from AzEIP data because the program is in the process of upgrading its data system. However, statewide data offers a global view of the scope and effectiveness of the program. Exhibit 72 shows the statewide outcomes for 3 key performance indicators. The outcomes show that AzEIP implementation in Graham and Greenlee counties must operate at a high level of effectiveness to match outcomes of the state as a whole.

Exhibit 72. AzEIP Performance Outcomes, Arizona, 2007-2012

| Percentage of infants and toddlers with IFSPs: | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|------|------|------|------|------|------|
| Who receive the early intervention services on their IFSP in a timely manner. | 71% | 97% | 84% | 78% | 78% | 87% |
| Who primarily receive early intervention services in the home or community-based settings. | 63% | 76% | 74% | 86% | 93% | 94% |
| For whom an evaluation and assessment and an initial IFSP meeting were conducted within Part C's 45-day timeline. | 63% | 72% | 85% | 98% | 97% | 95% |

Families in the Graham/Greenlee Region access special services for children with developmental disabilities from the Arizona DES's Division of Developmental Disabilities. Exhibit 74 presents data regarding the number of children that were referred, screened, received such services as well as the number of service visits. A total of 1,215 service visits were provided to 36 children ages 0 - 5.9 with developmental disabilities in 2012. The original data set separated results according to age groups 0-2.9 and 3-5.9, but a large portion of the resulting small number counts must be suppressed according to FTF guidelines to ensure the confidentiality of program participants. Data for children ages 0-2.9 and 3-5.9 were combined regionally in Exhibit 73 in order to better demonstrate the developmental disability service process.

Exhibit 73. Developmental Disability Service Process for Ages 0-5.9, 2007-2012

| Locality | Year | Referred | Screened | Number Served | Number of Visits |
|----------------------------|------|----------|----------|---------------|------------------|
| Graham & Greenlee Counties | 2007 | * | * | 33 | 1,896 |
| | 2008 | * | * | 35 | 2,402 |
| | 2009 | * | * | 27 | 2,161 |
| | 2010 | * | * | * | 1,720 |
| | 2011 | * | * | 29 | 1,526 |
| | 2012 | * | * | 36 | 1,215 |
| Arizona | 2007 | 3,104 | 1,850 | 5,403 | 473,106 |
| | 2008 | 3,148 | 1,618 | 5,409 | 538,568 |
| | 2009 | 3,125 | 1,616 | 5,810 | 614,540 |
| | 2010 | 2,750 | 1,454 | 5,688 | 579,650 |
| | 2011 | 2,874 | 1,473 | 5,424 | 555,483 |
| | 2012 | 2,817 | 1,405 | 5,231 | 534,419 |

Note . From Arizona Department of Economic Security, 2014. [RNA DES DATA FILE 2014]. Unpublished raw data received from First Things First State Agency Data Request. Asterisk indicates that data <25 and > 0 is suppressed, according to FTF guidelines.

Injuries

One measure of child well-being is the number of severe injuries sustained in childhood. While some injuries are expected, an uncharacteristically high number can indicate homes that lack a safe environment for raising a child or dangers within the community. It may also indicate whether parents are following safe parenting practices for handling newborns.

The number of Graham County youth under 15 years of age and 15-19 years of age with inpatient discharges for injury and/or poisoning as a first-listed diagnosis fluctuated between 2008 and 2011 (Exhibit 74). However, the 2011 data for both age groups in Graham County were the lowest of the four reported years. Limited data are available for Greenlee County due to an Arizona Department of Health Services rule that suppress small number counts in data released to ensure confidentiality.

In each year and for both age groups in Graham County and at least one year for both age groups in Greenlee County, males had a higher number of discharges for injury and/or poisoning, sometimes by a large margin. These data suggest that public health campaigns addressing injury and poisoning prevention should target families with boys under the age of 15 years.

Exhibit 74. Child Inpatient Discharges for Injury and/or Poisoning as First-Listed Diagnosis, 2008-2011

| | 2008 | | 2009 | | 2010 | | 2011 | |
|------------------------|---------|-----------|---------|-----------|---------|----------------|----------------|-----------|
| | <15 yrs | 15-19 yrs | <15 yrs | 15-19 yrs | <15 yrs | 15-19 yrs | <15 yrs | 15-19 yrs |
| Graham County | | | | | | | | |
| Female | * | * | * | * | * | * | * | * |
| Male | * | 40 | * | 31 | 29 | * | * | * |
| County Total | 41 | 57 | 41 | 44 | 48 | 33 | 37 | * |
| Greenlee County | | | | | | | | |
| Female | 0 | * | * | * | * | * | * | * |
| Male | * | * | * | 0 | * | * | * | * |
| County Total | * | * | * | * | * | 0 [†] | 0 [†] | * |

Note. From Table 1 – Number of Inpatient Discharges with the Diagnosis of Injury and Poisoning as First-listed Diagnosis by Age Group, Gender, Race/Ethnicity, and County of Residence, 2008-2011, Arizona Department of Health Services, Arizona Health Status and Vital Statistics. An asterisk indicates that a cell's number is suppressed due to a non-zero count less than 25. † Health Status and Vital Statistics states: "Sum rounded to nearest tens unit due to non-zero addend less than 6."

Child Mortality and Morbidity

Over the last 50 years, the United States has seen a significant decline in infant and child mortality, likely attributed to fewer infectious diseases, improved living conditions, and advances in medical technology. However, many deaths still occur that could be prevented. Moreover, the child mortality rate in the United States is almost twice that of the rate in the United Kingdom (Land, 2009). In 2012, 6 countries in the world had a lower mortality rate for children under 5 years of age (The World Bank, n.d.).

Infant mortality is defined as the death of an infant at any time from birth up to 5 years of age, but not including, the first year of life. Two distinct periods make up the infant mortality timeframe: neonatal (from birth through 27 days) and post-neonatal (28 days to 11 months after birth). A majority of infant deaths occur in the neonatal period. Quantitative data for child mortality cannot be presented in this report due to low data counts requiring data suppression. However, it is worth noting that one cause of infant mortality in the region stands out for its size and consistency over time – conditions originating in the perinatal period. The perinatal period commences at 20 completed weeks (140 days) of gestation and ends 28 days after birth. It is possible that some of these conditions may be addressed by the expansion of programs targeting perinatal mothers and their newborns.

Arizona Department of Health Service fatality data from 2006 to 2012 for children of a wider age range (1-14 years old) shows that the most consistent causes of death in 2006 to 2012 among Graham County and Greenlee County children in this age range was motor vehicle accidents and accidental drowning and submersion. The total for child deaths trended downward over the period.

Comparative data for child fatalities that take into account a county’s population show that Graham County had 56.5 child fatalities per 100,000 residents in 2012 (Exhibit 75). This figure places Graham County’s child fatality rate seventh among the state’s 15 counties. Greenlee County had 41.5 child fatalities per 100,000 residents in 2012, placing it 13th.

Exhibit 75. Fatality Rates for Children 0-18 Years of Age, Arizona Counties, 2012

| County | Fatality Rate per 100,000 Residents (N=854) |
|------------|---|
| La Paz | 217.1 |
| Gila | 123.7 |
| Navajo | 88.7 |
| Coconino | 63.9 |
| Santa Cruz | 62.5 |
| Yavapai | 60.6 |
| Graham | 56.5 |
| Cochise | 55.9 |
| Mohave | 52.1 |
| Maricopa | 49.6 |
| Pinal | 46.8 |
| Yuma | 46.1 |
| Greenlee | 41.5 |
| Apache | 41.2 |
| Pima | 40.7 |

Note. From *Arizona Child Fatality Review Program Twentieth Annual Report*, November, 2013, Arizona Department of Health Services.

Behavioral Health

Women’s access to behavioral health services for themselves and their children has important implications for the well-being of young children. Research has identified a relationship between depression and other behavioral health conditions during pregnancy and negative birth outcomes, such as preterm birth and low birthweight (Glover, 2014; Kim, Sockol, Sammel, Kelly, Moseley, & Epperson, 2013; Osborne & Monk, 2013). Some research suggests that it would be useful to screen mothers for depression following delivery and before they leave a hospital (Burton et al., 2013) and that such screening might be widely acceptable (Kingston et al., 2014).

Regarding infant and preschool mental health, research has found that certain psychological disorders diagnosed at a very early age may continue into adulthood (Luby, 2012). Therefore, attempts to treat disorders at an early age is of consideration. A recent study found that an increased percentage of preschool children are treated with psychotropic medication, yet they are not receiving specialized psychological and social services that treatment guidelines recommend (Fontanella, Hiance, Phillips, Bridge, & Campo, 2013). Early childhood education programs benefit from institutionalizing a focus on children’s mental health, with special attention to specialized training of staff (Green, Malsch, Kothari, Busse, & Brennan, 2012).

Arizona is divided into six Geographical Service Areas (GSAs) served by Regional Behavioral Health Authorities (RBHA) or Tribal Behavioral Health Authorities (TBHA). Graham and Greenlee Counties fall within GSA-3, which is served by Cenpatico Behavioral Health Services (CBHS). Data about usage of behavioral health services by pregnant women, women with dependent children, and children ages 0-5 are available for GSAs but not at the county or zip code levels. Exhibit 76 shows that the percentage of pregnant women utilizing behavioral health services was much lower in GSA-3 in 2013 than in 2010. Similarly, the percentage of women with dependent children that utilized services decreased from 2010 to 2013. However, the percentage of children ages 0-5 using behavioral health services increased over the period. GSA-level data is instructive, but county-level data is needed for the region to better understand usage of behavioral health service by these populations.

Exhibit 76. Usage of Behavioral Health Services in Geographical Service Area (GSA) 3, by Pregnant Women, Women with Dependent Children, and Children 0-5, 2010 and 2013

| | Pregnant Women | | Women with Dependent Children | | Children 0-5 | |
|------------------|----------------|------------|-------------------------------|--------------|--------------|--------------|
| | 2010 | 2013 | 2010 | 2013 | 2010 | 2013 |
| GSA - 3 | 169 (4%) | 36 (1%) | 1,057 (26%) | 196 (5%) | 272 (12%) | 415 (16%) |
| GSA Total | 2,715 (2%) | 2,757 (2%) | 20,040 (17%) | 11,468 (15%) | 9,162 (14%) | 11,468 (15%) |
| Statewide | 120,567 (2%) | 2,867 (2%) | 20,770 (17%) | 21,163 (18%) | 9,253 (14%) | 11,496 (15%) |

Note. From Arizona Department of Health Services, Division of Behavioral Health Services, 2010 & 2013. [First Things First CY2010, 2013 data file]. Unpublished raw data received from First Things First State Agency Data Request.

Oral Health

More than two-thirds (69%) of Graham/Greenlee parents responding to the 2012 First Things First Family Community Survey agreed that their children age five and under have regular visits with the same dental provider. In SFY 2014, the Graham/Greenlee Region allotted \$80,000 for oral health screening activities, including: oral health screenings and fluoride varnish application for children ages 0-5; oral health care training for families with young children; and outreach to dentists to elicit cooperation in encouraging families to have children receive a dental examination by the age of one year. Exhibit 77 provides information about oral health activities in the region in SFY 2014 and proposed activities for SFY 2015.

Exhibit 77. Oral Health Promotion Activities, 2014 and 2015 (Proposed)

| Type of activity | 2014 | | 2015 |
|---|--------|------------|--------|
| | Target | Contracted | Target |
| Number of children receiving oral health screenings | 500 | 300 | 500 |
| Number of children having fluoride varnish applied | 60 | 300 | 500 |
| Number of participating pregnant women | 75 | 75 | 75 |
| Number of participating professionals | 15 | 15 | 15 |
| Number of prenatal women receiving oral health screenings | 25 | 23 | 25 |

Note. From First Things First, FTF Graham/Greenlee SFY 2015 Regional Partnership Council Funding Plan.



Public Awareness and Collaboration

Any successful initiative aimed at effectively impacting early childhood development must be designed and implemented in an environment that includes both public awareness and collaboration. A high level of public awareness helps to ensure that families in need of assistance are able to locate and utilize available services and that they recognize the importance of early childhood development. Collaboration is important in any context where multiple services are provided to a target population from different sources. The BUILD Initiative is a national organization that has recognized both the power and necessity for collaboration in early childhood systems development (Coffman, 2007.). The following section examines the extent to which the First Things First Graham/Greenlee Regional Partnership Council has

enhanced public awareness of early childhood issues and fostered systems coordination as well as strategies for improvement.

Public Awareness of Early Childhood Issues

The Graham/Greenlee Regional Partnership Council identified “limited understanding and information about the importance of early childhood development and health” as a regional priority to be addressed in its Strategic Plan for SFY 2013-2015. In SFY 2014, the Regional Partnership Council allotted \$120,000 to the Safford City-Graham County Library for parent outreach and awareness programming. This programming includes providing families with education, materials, activities, and referrals to resources that promote healthy child development and school readiness. The proposed SFY 2015 budget includes \$130,000 for parent outreach and awareness. The SFY 2014 budget also included \$7,320 for community awareness, to be increased to \$12,320 in SFY 2015. Funding for a Community Outreach Coordinator similarly demonstrates the Regional Council’s commitment to increasing public awareness of early childhood issues. Funding for the work of the Community Outreach Coordinator was \$13,680 in SFY 2014, which is increased in the proposed SFY 2015 budget in acknowledgement of the wide scope of work the consultant has been providing. Exhibit 78 shows that in 2013 the region’s Community Outreach Coordinator made 48 presentations about early childhood resources, reaching 482 individuals. Among the organizations and groups which received such presentations were Graham County School, Child & Family Resources, Arizona DES, Eastern Arizona Science Initiative, and several churches and libraries. In addition to presentations, the Community Outreach Coordinator also worked through various media outlets to disseminate program information on topics like oral health, child care scholarships, literacy, childhood obesity, and diaper drives. Media outlets included print and online newsletters and newspapers, and radio stations. A total of 42 articles were disseminated through these outlets in 2013. The Council allotted \$10,000 to media coverage in SFY 2014, and this allotment is increased to \$15,000 in the proposed SFY 2015 budget.

Exhibit 78. Community Outreach Efforts, 2013

| | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | TOTAL |
|----------------------------------|------------------|-----|-----|-----|-----|------|------|-----|------|-----|-----|-----|-------|
| Presentations | 4 | 4 | 4 | 2 | 4 | 10 | 0 | 7 | 3 | 4 | 5 | 1 | 48 |
| Other Outreach Activities | 2 | 3 | 2 | 2 | 5 | 3 | 0 | 7 | 4 | 4 | 6 | 4 | 42 |
| People reached | 139 [†] | 44 | 33 | 19 | 45 | 27 | 0 | 60 | 28 | 36 | 50 | 1 | 482 |

Note: Data were taken from unpublished monthly community outreach activity reports completed by the Community Outreach Coordinator that are submitted to the Regional Director. No presentations were reported for July. [†]This number is significantly larger than other months due to a one-time presentation for group of 50 people.

System Coordination

Over the last year, the Graham/Greenlee Region has been actively involved in activities to increase collaboration and coordination in the region's early childhood system. In October of 2013, through MIECHV (Maternal Infant and Early Childhood Home Visitation) funding, a home visitation coordinator was hired to organize a home visitation coalition for the Graham/Greenlee Region. The coalition has been meeting monthly since January 2014, with about 40 people attending. The purpose of the coalition is to support home visiting staff and programs by creating on-going professional development opportunities and improving coordination of services to families in need of extra support. This collaboration provides local home visiting programs a chance to work together in identifying service gaps in the community and problem-solve to address these gaps. This collaboration is also charged with the education and outreach to the community about the importance of home visiting services through community events, presentations, and local media. The Graham/Greenlee Home Visitation Coalition is an opportunity to highlight the benefits of home visiting and has representation from all of the regional home visitation programs as well as the early childhood community at large.

In addition to launching a home visitation coalition, the region has also partnered with the Graham County and Greenlee County School Superintendents, Eastern Arizona's College's Early Childhood Department, and First Things First to form the Graham/Greenlee Early Childhood Coalition. Membership in the coalition is open to anyone who provides services to children from birth through the 3rd grade. Although pre-school providers and K-3 teachers have the common goals guiding children towards success in education, until now they have seldom had opportunities to share their experiences and strategies and form networking connections.

At its inaugural meeting of the coalition in March, 2014, the attendees began the development of a mission statement for the group. The mission statement will be finalized at the Southeast Arizona Teachers' Academy (SEATA) on June 2, 2014. SEATA has been offered to K-12 teachers for nearly two decades. But for the first time in its history, in recognition of the importance of early childhood education, the Graham County and Greenlee County School Superintendents have added an early childhood strand throughout the 4-day professional development event.

Summary and Conclusions

This report is the fourth biennial assessment of the health, welfare, and educational needs and assets of the children, families, educators, caregivers, and family support providers served by the Graham/Greenlee Regional Partnership Council. A vast amount of data have been presented in this report to: a) provide an expansive look at the current state of the region's children and their myriad supports, b) examine trends in key indicators and needs of specific sub-populations, and c) recommend strategies to improve child health and developmental outcomes in the Graham/Greenlee Region.

Demographics

Graham and Greenlee counties, which constitute the Graham/Greenlee Region, have a combined 2013 population of 46,531 people, with the majority of them residing in Graham County (37,482.). Graham County's population is projected to increase by 14% to 43,384 people over the next 10 years; Greenlee County is expected to grow by 1% to 8,535 over the same period. The region is ethnically and racially diverse, with approximately 28% of the 2012 births in Graham County and 39% of births in Greenlee County to Hispanic/Latina mothers. Of the births in 2012 in Graham County, 22% were to mothers who were American Indian or Alaskan Native, compared to less than 1% in Greenlee County. Just over half (52%) of families in Graham County and nearly half (48%) in Greenlee County self-identify as white/non-Hispanic. Families in this region are also diverse in composition, with 14% of births in Graham County in 2012 and 8% in Greenlee County being to teen parents. The Graham County teen birth rate exceeded that of the state as a whole by 5%. In addition, 34% of Graham County grandparents and 66% of Greenlee County grandparents that live with their children and grandchildren have assumed primary caregiving responsibility for their grandchildren.

Economic Circumstances

Median family gross annual income in Graham County increased by 46% between 2000 and 2012; median income in Greenlee County increased by 18% over the same period. However, Graham County's median family income in 2012 was 16% lower than that of the state as a whole; the median family income in Greenlee County trailed that of the state by 14%. In both counties there were differences in median income for families based on family type. In 2012, the median income of married couple families with children under 18 in Graham County was \$63,189 for married couples, \$46,593 for male-headed families, and \$27,523 for female-headed families. This means that the median income of male-headed families and female-headed families was 72% and 44%, respectively, of the median income of married couple families. In Greenlee County, the median income of male-headed households and female-headed households with children were 95% and 44%, respectively of the median income of married couple families.

While median gross annual income has risen in both counties in recent years, it is estimated that an average of 18% of families in Graham County and 13% of the families in Greenlee County lived below the poverty line between 2008 and 2012. In Graham County, this percentage increases to 26% for families with children under the age of five and 45% for single-parent, female-headed households with children under the age of five. At 35%, Greenlee County's poverty rate for single-parent female-headed households is also high. These data suggests that female-headed households with children, particularly young children, constitute a high-need population in the region.

Graham and Greenlee County School Districts also show wide variability in the prevalence of poverty in the region. In 2013, in the majority of the region's school districts and charter schools the percentage of students who were economically disadvantaged surpassed 40%. The unemployment rate is another important indicator for understanding a region's economic condition. In 2013, the unemployment rate in Graham County was 8.1% and 6.7% in Greenlee County. The rates in both counties were higher than before the economic recession. Net job

flow data emphasizes the challenges many families in the region face in finding employment. In Graham County, net job flow has been positive in all quarters between the end of 2010 and the beginning of 2013 except for the fourth quarter of 2010 and the third and fourth quarters of 2011. Greenlee County's net job flow was negative in two of the periods, the third quarter of 2011 and the second quarter of 2012.

Many families rely on government programs to help them survive times of unemployment or an ongoing low income level. SNAP enrollment by Graham County families with children ages 0-5 almost steadily increased from 670 in January 2009 to 1,037 in January 2012, a 55% rise in enrollment over the period. In Greenlee County, SNAP enrollment by families with children ages 0-5 rose from 72 in January 2009 to 143 in January 2012, 97% increase. In 2011, 40% or more of students were enrolled in free or reduced lunch in 8 of the 9 districts for which data were available.

Education Indicators

Research suggests that a mother's education level has important implications for the educational progress of her children. From 2008 to 2012, the educational level of mothers in Graham and Greenlee counties mostly followed a mostly positive trend. In Graham County, the percentage of mothers with no high school diploma gradually decreased from 2008 onward but rose again in 2012. The percentage of Graham County mothers with 1 or more years of college followed a general upward trend from 31% in 2008 to 39% in 2012.

In Greenlee County, the percentage of mothers with no high school diploma showed an almost steady downward trend from 2008 to 2012. The county also experienced relatively steady growth over the period in the percentage of mothers that had attended college for 1 or more years. In both counties, the percentage of mothers with some college experience lagged far behind that of the state as a whole.

Other important education indicators include assessments of kindergarten readiness, special education needs, standardized test scores, and graduation rates. Third grade AIMS scores reveal a great deal of variation in performance by school district. As a whole, 72% of Graham County students and 81% of Greenlee County students met or exceeded academic targets (i.e., passed) in mathematics in 2013 and 80% and 86%, respectively, met or exceeded targets in reading. In 2013, passing math scores are up from 72% in Graham County and 68% in Greenlee County in 2012. Reading scores also showed improvement in 2013 from the 76% and 78% that passed in 2012, respectively, in Graham County and Greenlee County.

Special Education students require additional resources to succeed in school. English Language Learners (ELL) constitutes a major subgroup of Special Education students. Data show that in most districts the number of Special Education students varied only slightly between 2010 and 2013. However, there was a steady increase in the number of Special Needs students for the county as a whole over the period. Only Safford Unified School District and Thatcher Unified School District had reportable numbers of ELL students for the period. Given that the number of ELL students in Safford Unified District is the largest of all the region's districts in the last two years suggests that the Safford Unified may have a need for ELL services for the foreseeable future.

High school graduation rates show longer term outcomes for students enrolled in the region's districts. The Graham/Greenlee Region's high school graduation rates vary widely both longitudinally within school and between schools. However, it is worth noting that 5 of the region's 7 public high school districts had a graduation rate of 90% or higher in 2012.

Early Care and Education

A majority of children in the United States ages birth to six years participate in regular, out of home child care, which justifies the emphasis on quality care for health early childhood development. Quality of child care has been shown to affect many youth outcomes. There are a total of 23 licensed child care facilities in Graham/Greenlee Region, which includes 7 child care centers, 4 child care centers in schools, and 12 small group homes. The capacity of the small group homes is not known but the child care centers have a combined capacity of 582 children. The community with the highest percentage of child care center capacity (46%) was Safford, followed by Morenci (24%). Clifton and Duncan each had 10% of the region's child care center capacity.

Representative of the Graham/Greenlee Partnership Council's commitment to quality early care and education is its support of the First Things First Quality First initiative. Six of the region's child care centers and 3 of its child care homes are currently participating in Quality First, and in the next fiscal year the region will expand its funding in this area to a newly opened child care center in Greenlee County.

The region recognizes the central role early childhood professionals play in providing quality educational opportunities to young children. In SFY 2014, the Graham/Greenlee Region provided \$27,000 in incentives to 20 early childhood workers through the Professional REWARD\$ program. The region's proposed SFY 2015 budget increases the budget for the program to \$40,500, funding 30 incentives. Additionally, 6 individuals in the region received T.E.A.C.H. scholarships through FTF statewide Quality First support.

Even in communities that have quality early care and education facilities, economic challenges may prevent some families from accessing them. Examination of child care assistance data by Graham and Greenlee County reveals that the number of families in the two counties eligible for child care assistance steadily decreased between January 2011 and July 2012 while the number of families receiving assistance remained the same until it dropped in July 2012. The number of children in the two counties eligible for child care assistance decreased between January 2011 and January 2012 but showed a slight increase in July 2012. The number of children receiving such assistance fluctuated over the period.

Family Support

Family Support is a broad system of programs, services, and collaborations designed with the goal of helping families function to their potential. The Graham/Greenlee Regional Partnership Council implements Family Support programming in the region in a number of ways. The Graham/Greenlee Region allotted \$120,000 for home visitation in SFY 2014 and has included the same amount for such funding in the proposed SFY 2015 budget. Child & Family Resources received most of the home visitation funding to deliver Healthy Families programming; the

program was expanded to serve Greenlee County. The region also provides Quality First Scholarships to low-income families so their children can have access to high quality early care and education programs. The Regional Partnership Council allotted funding for 70 such scholarships in SFY 2014 and 79 slots in SFY 2015.

The region also provides family support programming through parent outreach and awareness activities implemented by the Safford-Graham County Library. These activities help parents connect to resources and activities that promote healthy development and school readiness.

Recent developments in coordination and collaboration in the region will offer new resources for family support. Over the last year, the Graham/Greenlee Regional Partnership Council helped organize a regional home visitation coalition. The region has also partnered with the Graham County's and Greenlee County's School Superintendents, Eastern Arizona's College's Early Childhood Department, and First Things First to form the Graham/Greenlee Early Childhood Coalition. While both coalitions are only in a formative stage, bringing together the region's early education and health agencies is likely to have a positive impact on family support activities.

Child Abuse/Neglect, Foster Care and Juvenile Justice

The number of child abuse report in the Graham and Greenlee region fluctuated from October 2010 to March 2012, ranging from 98 to 124 for each six month period in Graham County and 13 to 26 in Greenlee County. The number of new removals from the home in Graham County ranged from 7 to 19 for the five most recent periods; in Greenlee County, the number of new removals ranged from 0 to 2.

Foster care families and youth in the juvenile justice system may require specific services or support. According to the Arizona DES's most recent reporting, in the second half of the year, the percentage of Graham County children with a prior removal in the prior 12 months (3.2%) was half of what it was in the first half of the reporting year (6.4%). The percentage of Greenlee County children with a prior removal in the prior 12 months increased from 0% to 50% between the first half of the reporting year and the second half; however, this was more a reflection of very small numbers rather than a great increase in incidence. In both counties, the percentage of children with a prior removal in the last 12-24 months dropped to 0% in the April 2013-September 2013 period.

According to the Administrative Office of the Courts, 231 juveniles in Graham County were referred to the Arizona Court System in 2012, a 32% decrease from the previous year. Of the 231 juveniles referred in Graham County, 45% were detained. Less than half (45%) received standard probation, 28% were diverted to non-judicial alternatives such as community service, and 2% were committed to ADJC. In Greenlee County, there were 79 referrals to the court in 2012, down 10% from the 88 referrals reported in the previous year. Of these 79, 29% were detained. In terms of dispositions, 46% received standard probation, and 28% were diverted to non-judicial alternatives such as community service.

Health Coverage and Utilization

With high costs associated with health care, most families are dependent on health insurance to cover needed services. The most critical factor affecting the number of children enrolled in KidsCare was the statewide freeze of KidsCare enrollment in effect from January 1, 2010 to May 1, 2012. In April 2012, the Centers for Medicare and Medicaid Services approved funding for a new health insurance programs for children, KidsCare II. KidsCare II at first began enrolling children from the KidsCare waiting list, but later opened enrollment to all children whose family met income eligibility. An almost 250% increase in enrollment from February 2012 to February 2014 reflects the input of new funding. However, the KidsCare/KidsCare II program ended on January 31, 2014.

It is expected that some children formerly served by KidsCare will enroll in health insurance through the Affordable Care Act (ACA). However, while the ACA requires all individuals whose employer offers health insurance to take advantage of this benefit rather than purchase health insurance through the ACA, it does not require employers to provide such a benefit to an employee's family members; as a result, some individuals may not be able to afford the additional costs of adding their children on to their health insurance plan and it is likely that some children who formerly received health insurance coverage through Kids Care II will now be uninsured.

Healthy Births

A woman's access and use of prenatal and perinatal care has important short and long-term implications for the health of her child. It is recommended that a woman access monthly medical care throughout her pregnancy. In Graham County, the percentage of women who had nine or more prenatal visits increased from 47% in 2007 to 56% in 2011; in Greenlee County the visits increased from 34% to 50% over the same years. However, the percentage of women in both counties who had 9 or more prenatal visits lagged far behind that of the state as a whole, which ranged from 77% to 81%.

Low birth-weight babies are at risk for serious health problems that may affect their lifelong health. Between 2008 and 2012, the percentage of low birthrate babies in Graham County has fluctuated around the state average, with the highest percentage (10%) in 2008, almost three points higher than the state average of 7.2%. In 2012, 7.6% of babies were rated as low birthrate in Graham County compared with 6.9% of the state as a whole. Between 2008 and 2012, the percentage of low birthrate babies in Greenlee County also fluctuated around the state average; in 2012, 5.3% of babies were rated as low birthrate in Greenlee County, lower than the state average of 6.9%.

Looking at prenatal practices of pregnant women and characteristics of births, 2012 data from the Graham/Greenlee Region compares somewhat unfavorably with the state. Both counties had much higher rates of births with complications of labor and/or delivery and births with medical risk factors reported than the state as a whole. In addition, the percentage of tobacco use during pregnancy in Graham County in 2012 was double the statewide rate and the percentage in Greenlee County was triple that of the state.

Teen mothers often face added pre-natal and perinatal challenges. Data were available only for two communities in Graham County. One of the communities, Safford, reported that 15% of births were to mothers less than 19 years of age, compared with a state average of 9%. The teen birth rate of the other community, Thatcher, was comparable to the state rate; however, the rate of births to unmarried mothers was far higher than the state rate (70% compared to 45%). At least half of births in these two communities were paid for by public health insurance. No data was available for Greenlee County on these indicators.

Other Health Indicators

Immunizations are preventative measures that have made a significant contribution to public health in the past century. Completion rates for the 3:2:2:2 series in Graham County increased steadily from 2010 to 2012; however completion rates remained well below the statewide rate. The percentage of Greenlee County children that completed the 3:2:2:2 series was higher than the state as a whole in two of the years.

Developmental screening is another essential family health practice to ensure that children grow and develop optimally. Regionally in 2012, children ages 0 to 2.9 who receive developmental disability services had a total of 477 service visits; children ages 3.5 to 5.9 who receive developmental services received 738 service visits.

Over the last 50 years, the United States has seen significant declines in infant and child mortality, however, many deaths still occur that are the result of preventable injuries. Quantitative data for child mortality were not presented in this report due to low data counts requiring data suppression. However, it is worth noting that one cause of infant mortality in the region stands out for its size and consistency over time – conditions originating in the perinatal period.

Next Steps

The Graham/Greenlee Regional Partnership Council has implemented a variety of strategies to address the needs of young children and their families. These strategies aim to improve: 1) the health, safety, and school readiness of children; 2) the parenting knowledge and skills of caregivers; and 3) the quality of the early child care and education services provided. Many of the Council's strategies are evidence-based and all appear to be appropriate for meeting the needs of the region's young children and their families. The region's SFY 2014 and SFY 2015 funding plans demonstrate that the Graham/Greenlee Regional Partnership Council is carefully evaluating the effectiveness of the programming it funds and revising funding priorities and levels based on such evaluation. The region's recent launch of home visitation and early childhood coalitions demonstrates that it is committed to providing the best possible support to families with young children. The recent data included in this Needs and Assets Report may help guide the decision-making of these coalitions and the Regional Partnership Council as they implement strategies to help children 0-5 years of age receive the quality education, health care and family support they need to arrive at school healthy and ready to succeed.

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Appendix B. AIMS 3rd Grade Score Achievement Levels

Exhibit 1B. AIMS 3rd Grade Score Achievement Levels in Mathematics by School District, 2011-2013

| | Year | FFB | A | M | E | M or E |
|------------------------------|------|-----|-----|-----|-----|--------|
| Bonita Elementary District | 2011 | 7% | 50% | 36% | 7% | 43% |
| | 2012 | 0% | 28% | 50% | 22% | 72% |
| | 2013 | 18% | 18% | 45% | 18% | 63% |
| Discovery Plus Academy | 2011 | 11% | 11% | 44% | 33% | 77% |
| | 2012 | 0% | 21% | 42% | 37% | 79% |
| | 2013 | 0% | 24% | 71% | 6% | 77% |
| Duncan Unified District | 2011 | 17% | 35% | 26% | 22% | 48% |
| | 2012 | 7% | 37% | 50% | 7% | 57% |
| | 2013 | 0% | 32% | 64% | 4% | 68% |
| Fort Thomas Unified District | 2011 | 14% | 43% | 36% | 7% | 43% |
| | 2012 | 13% | 43% | 35% | 9% | 44% |
| | 2013 | 14% | 36% | 36% | 14% | 50% |
| Morenci Unified District | 2011 | 0% | 32% | 34% | 34% | 68% |
| | 2012 | 3% | 25% | 46% | 25% | 71% |
| | 2013 | 0% | 11% | 49% | 40% | 89% |
| Pima Unified District | 2011 | 12% | 31% | 35% | 22% | 57% |
| | 2012 | 12% | 22% | 46% | 20% | 66% |
| | 2013 | 6% | 20% | 46% | 28% | 74% |
| Safford Unified District | 2011 | 10% | 24% | 45% | 21% | 66% |
| | 2012 | 10% | 25% | 44% | 21% | 65% |
| | 2013 | 5% | 30% | 45% | 20% | 65% |
| Solomon Elementary District | 2011 | 4% | 25% | 42% | 29% | 71% |
| | 2012 | 0% | 6% | 56% | 38% | 94% |
| | 2013 | 5% | 16% | 47% | 32% | 79% |
| Thatcher Unified District | 2011 | 5% | 7% | 36% | 51% | 87% |
| | 2012 | 6% | 10% | 46% | 38% | 84% |
| | 2013 | 1% | 7% | 55% | 37% | 92% |
| Triumphant Learning Center | 2011 | 0% | 25% | 50% | 25% | 75% |
| | 2012 | 0% | 9% | 36% | 55% | 91% |
| | 2013 | 8% | 33% | 25% | 33% | 58% |
| Graham County | 2011 | 9% | 23% | 42% | 27% | 69% |
| | 2012 | 8% | 22% | 44% | 26% | 70% |
| | 2013 | 5% | 23% | 47% | 25% | 72% |
| Greenlee County | 2011 | 4% | 32% | 33% | 30% | 63% |
| | 2012 | 4% | 28% | 47% | 21% | 68% |
| | 2013 | 2% | 17% | 51% | 31% | 82% |
| Arizona | 2011 | 10% | 22% | 43% | 24% | 67% |
| | 2012 | 8% | 22% | 42% | 27% | 69% |
| | 2013 | 9% | 23% | 43% | 26% | 69% |

Note. FFB = Falls Far Below; A = Approached; M = Met; and E = Exceeded. M or E = cumulative passing scores; From AIMS Assessment Results, 2013 AIMS Results, Arizona Department of Education, Research and Evaluation.

Exhibit 2B. AIMS 3rd Grade Score Achievement Levels in Reading by School District, 2011-2013

| | Year | FFB | A | M | E | M or E |
|-------------------------------------|-------------|------------|----------|----------|----------|---------------|
| Bonita Elementary District | 2011 | 0% | 43% | 50% | 7% | 57% |
| | 2012 | 6% | 11% | 72% | 11% | 83% |
| | 2013 | 0% | 27% | 64% | 9% | 73% |
| Discovery Plus Academy | 2011 | 0% | 22% | 78% | 0% | 78% |
| | 2012 | 0% | 21% | 58% | 21% | 79% |
| | 2013 | 0% | 24% | 76% | 0% | 76% |
| Duncan Unified District | 2011 | 4% | 22% | 65% | 9% | 74% |
| | 2012 | 3% | 7% | 80% | 10% | 90% |
| | 2013 | 0% | 11% | 86% | 4% | 90% |
| Fort Thomas Unified District | 2011 | 14% | 48% | 36% | 2% | 38% |
| | 2012 | 11% | 50% | 39% | 0% | 39% |
| | 2013 | 8% | 42% | 47% | 3% | 50% |
| Morenci Unified District | 2011 | 3% | 24% | 62% | 11% | 73% |
| | 2012 | 2% | 22% | 66% | 11% | 77% |
| | 2013 | 0% | 13% | 74% | 13% | 87% |
| Pima Unified District | 2011 | 4% | 14% | 71% | 12% | 83% |
| | 2012 | 5% | 24% | 51% | 20% | 71% |
| | 2013 | 2% | 22% | 61% | 15% | 76% |
| Safford Unified District | 2011 | 1% | 20% | 65% | 13% | 78% |
| | 2012 | 2% | 21% | 65% | 12% | 77% |
| | 2013 | 2% | 21% | 70% | 7% | 77% |
| Solomon Elementary District | 2011 | 0% | 9% | 83% | 9% | 92% |
| | 2012 | 0% | 0% | 75% | 25% | 100% |
| | 2013 | 0% | 11% | 89% | 0% | 89% |
| Thatcher Unified District | 2011 | 1% | 8% | 61% | 30% | 91% |
| | 2012 | 2% | 13% | 75% | 10% | 85% |
| | 2013 | 1% | 4% | 77% | 18% | 95% |
| Triumphant Learning Center | 2011 | 0% | 17% | 75% | 8% | 83% |
| | 2012 | 0% | 0% | 73% | 27% | 100% |
| | 2013 | 1% | 17% | 75% | 8% | 83% |
| Graham County | 2011 | 2% | 20% | 63% | 15% | 78% |
| | 2012 | 3% | 21% | 64% | 12% | 76% |
| | 2013 | 2% | 18% | 70% | 10% | 80% |
| Greenlee County | 2011 | 3% | 23% | 64% | 10% | 74% |
| | 2012 | 2% | 19% | 68% | 10% | 78% |
| | 2013 | 0% | 13% | 76% | 10% | 86% |
| Arizona | 2011 | 5% | 19% | 62% | 13% | 75% |
| | 2012 | 4% | 21% | 61% | 15% | 76% |
| | 2013 | 4% | 21% | 62% | 13% | 75% |

Note. FFB = Falls Far Below; A = Approached; M = Met; and E = Exceeded. M or E = cumulative passing scores; From AIMS Assessment Results, 2013 AIMS Results, Arizona Department of Education, Research and Evaluation.