

# Building Bright Futures



Arizona's Early Childhood Opportunities 2009 Report

 FIRST THINGS FIRST

Every child deserves the opportunity to achieve their full potential without being hindered by circumstances that impact their early growth and development. There is substantial evidence that the quality of the learning and health experiences of our children between birth and age five plays a critical role in their success – in school and throughout life.

*Building Brighter Futures* shows us that, since the year 2000, an increasing number of Arizona's youngest children face barriers to their success: more young children are living in poverty; more young children lack access to health screenings and preventive oral and medical care; and, less than half of young children are read to regularly, impacting the development of both language and literacy.

Without quality early childhood experiences – both in their homes and in their communities – too many of these children will start school unprepared. As a result, they will be more likely to drop out of school, depend on welfare programs or be in jail.

Despite these challenges, Arizona has a bright spot: *First Things First*. In the past year, *First Things First* has allocated \$286 million to enhance or expand services for children from birth through age five. Some examples of the difference this investment is making include:

- The parents of more than 100,000 newborns each year receive critical information before they leave the hospital on healthy parenting practices and how they can support their baby's learning.
- More than 28,000 children in 600 early education settings statewide will benefit from the support FTF is providing to their programs and teachers, resulting in improved curriculum and more nurturing environments.
- And, 8,400 children didn't lose their child care provider when their families faced tough times.

Studies have demonstrated that dollars invested in the youngest children have the largest rate of return – ranging from \$4 to \$16 for every dollar invested. Children who participate in early learning and health programs are more likely to be successful in school and in their careers. They are less likely to have health problems, less likely to depend on social welfare programs and less likely to be involved in crime.

These are uncertain times for Arizona. Decreased work hours, job losses and budget cuts have forced many families to make tough sacrifices. But, if there is one thing we cannot afford to sacrifice, it is our children. The educational and health services they receive today are crucial to their success tomorrow. The resources and services provided by *First Things First* are critical, now more than ever.

As budget cuts are enacted and crucial programs are being lost, policy makers, state representatives and community leaders should take into consideration the importance of investing in our youngest children. The high quality early childhood experiences we provide today will determine the stability and prosperity of our state tomorrow.

Steven W. Lynn  
Chair, First Things First Board

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Submitted in accordance with ARS 8-1192. The Early Childhood Development and Health Board shall conduct a biannual assessment of existing early childhood development and health programs in the State of Arizona, including an analysis of any unmet early childhood development and health needs of Arizona children, utilization of available Federal, State and private funds, suggestions for improved program coordination, and outcomes for children and families. The Board shall submit a report of its findings and recommendations to the Governor, the President of the Senate and the Speaker of the House of Representatives on or before December 15 of every odd-numbered year beginning in 2007 and shall provide a copy of this report to the Secretary of State and the Director of the Arizona State Library, Archives and Public Records. The report shall be distributed in accordance with section 41-4153.

First Things First expands opportunities for Arizona's children to have a bright, healthy future by improving the accessibility and quality of early childhood education and health services. From birth to age five, critical mental, physical, emotional and social developments take place. These are pivotal years in shaping a child's foundation.

Realizing the economic impact that early childhood investment can have on Arizona's future, voters enacted First Things First to give all children in our state the opportunity to start school healthy and ready to learn. By focusing on children in the critical early learning stages of their life, we can prevent or minimize the need for costlier remediation and public assistance programs in later years and ultimately save the state millions of dollars.

Decisions about which early childhood services to fund are made at the local level by 31 First Things First Regional Partnership Councils, which have the best understanding of the resources and needs of young children and families in their communities.

First Things First is committed to staying at the forefront of early childhood development and health in Arizona through measuring outcomes and creating close partnerships with community organizations and leaders. The more we learn, the better we can effectively measure current programs and services available and make decisions to support and enhance those services. Making smart, informed decisions will ensure our children and families are being given the best possible opportunities at a successful future.

As we move forward, the strength of our organization will rely on the support from the community, the experience of our leaders and the relationships we build. We are truly grateful for the many partnerships and look forward to continuing to build lasting relationships.

We would like to thank the following groups and organizations who have contributed their time, expertise and research in pursuing our vision to provide Arizona's children a brighter future.

Parents and caregivers of children in Arizona

Service providers

Researchers

State agency staff

Office of the Governor

Philanthropic groups

Regional Partnership Council Members

First Things First staff

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The state of Arizona is diverse and growing.

- Between 2000 and 2007, the number of children under six in the U.S. grew by almost 7%. In Arizona, the number of children under six grew by 29% – an increase from 461,929 to 594,110.
- The number of families with children five and under has increased by more than one-fourth since 2000.
- About one-fifth of children five and under in Arizona are Hispanic/Latino.

Many Arizona children and their families face challenges.

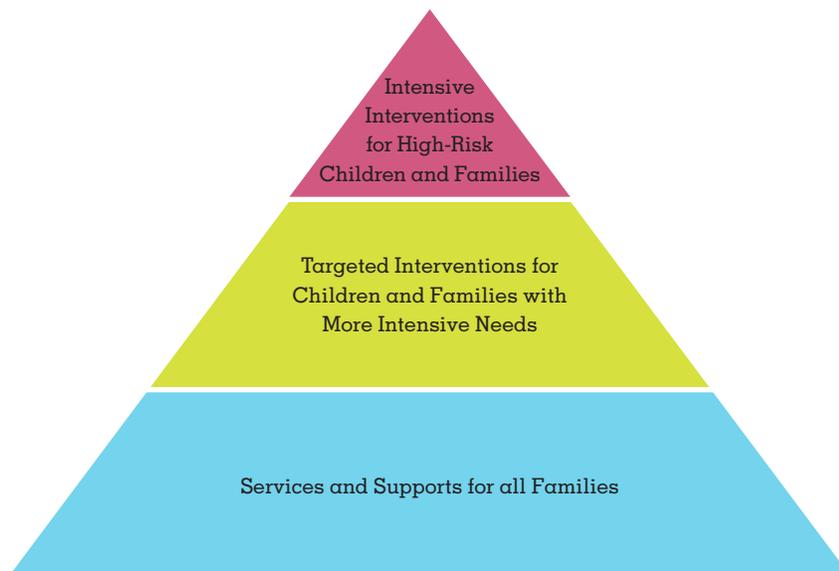
- Since 2000, the number of U.S. children under six living with a single parent increased by approximately 22%. In Arizona, the number of children under six living with a single parent increased by approximately 41%, from about 96,000 to 135,000.
- More than half of Arizona's young children live in low-income homes (under 200% of the federal poverty level).
- American Indian and Hispanic/Latino families with children are disproportionately likely to live in poverty.

These characteristics describe a disparate and rapidly growing population of children five and under and their families with unique characteristics, strengths, and needs. Details about the youngest Arizonans and their families are available in Appendix A.

First Things First (FTF) seeks to improve the developmental and health outcomes of Arizona’s children ages birth through five years. Ensuring that all children birth through five years are afforded opportunities to achieve their maximum potential to succeed in school and life involves work in many areas. First Things First’s Guiding Principles set out requirements for the delivery of early childhood services through a comprehensive early childhood system. Fundamental to the FTF Guiding Principles is the need for a high quality, interconnected, comprehensive service delivery system that is timely, culturally responsive, family driven, community based, and directed toward enhancing a child’s overall development. Resources to provide such comprehensive early childhood services depend on the delivery and sustenance of public (federal and state) support.

The early childhood system has three primary areas of focus: 1) early learning; 2) family support; and 3) health, mental health, nutrition and special needs. In order to build a statewide early childhood system that supports all young children birth through five, and their families, it is necessary to identify the system requirements in each area of focus, clarify the current status of the system in each area, understand where gaps occur in the system, and recognize what system components need to be developed to fill these gaps.

The early childhood system uses a three-tiered approach to understanding family needs and supporting young children and their families. The bottom tier includes services, programs and information that reinforce all families’ parenting efforts. The middle tier represents children and families with higher needs who will benefit from targeted services. FTF’s initiatives focus on the first two tiers of the triangle. The top of the triangle comprises children and families with more severe intervention needs – a number of agencies in Arizona have specialized services for these more intensive issues.



### **The Early Childhood System: Early Learning**

Many children will spend time in early care and education (ECE) settings before their sixth birthday. This aspect of the early childhood system emphasizes the importance of nurturing, educational environments that support children's later success, in and out of school.

### **The Early Childhood System: Family Support**

To best support their young child's optimal development, families need access to coordinated, integrated education and information systems that provide high quality, diverse and relevant information and resources.

### **The Early Childhood System: Health, Mental Health, Nutrition, and Special Needs**

To optimally support children's development, families need access to well-child, preventive, and ameliorative health and dental care including comprehensive services that meet children's vision, hearing, nutrition, behavioral, and oral health (as well as medical health) needs. This includes universal newborn screening and follow-up, screening and referral services at all well-child visits, beginning at birth, a system of qualified providers in all communities, and a medical home model that encourages coordination of care. A focus on early identification requires that all persons who come in contact with a child have the skills and knowledge to screen for health, developmental, and learning issues; and up to date, accurate information to make appropriate and timely referrals.





# Early Learning

In 2008, more than 340,000 children in Arizona ages five and under (about 55%) lived in families where all parents in the home were in the labor force.<sup>48</sup> Many of these children spent a portion of their day in out-of-home care either in a center- or home-based setting. In the past, young children in the care of others were considered to be “with the babysitter” or “at day care.” In light of current knowledge about the importance of early experience, these terms have given way to a new concept: *early care and education (ECE)*.

In a comprehensive early childhood system:

- All children have access to ECE settings that meet high quality standards.
- ECE settings have providers and teachers who are:
  - qualified, and
  - remain in their positions.
- Information about ECE is available and easy for families to find.
- Financing supports and strategies help ensure access to targeted intervention services such as Early Head Start, Head Start, and “at risk” preschools.
- Special needs children have access to high quality ECE.

This chapter addresses a critical aspect of the early childhood system – early learning – and its components: **quality, access/affordability, and professional development**. It describes the current status of the Arizona Early Care and Education system, highlighting its assets, identifying areas for improvement, and describing current efforts to support development of a coordinated early care and education system.

<sup>48</sup>National Association of Child Care Resource and Referral Agencies. (2009). *2009 Child Care in the State of Arizona*. Retrieved August 30, 2009, from <http://www.naccra.org/randd/data/docs/AZ.pdf>.

High quality ECE optimizes children's physical, cognitive, social and emotional development. There are many important facets of quality in early care settings, including maintaining recommended adult/child ratios and group sizes, providing appropriate learning opportunities in an interesting and stimulating environment, being culturally and linguistically responsive, providing a healthy and safe environment, and emphasizing family involvement. The following table lists the indicators of high quality compared with those of poor quality.<sup>49</sup>

Research indicates that the quality of ECE settings is related to improved developmental and academic outcomes for young children.<sup>50</sup> Children who attend high quality early care and education programs have:

- Improved cognitive skills including math and language ability,
- Better social and interpersonal skills,
- Better behavioral self-regulation,
- Improved school attendance,
- Higher likelihood of high school graduation and college attendance,
- Higher rates of employment and earnings,
- Lower rates of involvement in juvenile justice and adult criminal behavior,
- Lower rates of remedial education.<sup>51</sup>

Access to quality early care requires that there be adequate numbers of quality ECE options in safe and healthy environments. Access includes the availability of financial supports and strategies that ensures access to affordable quality care for all families, even those experiencing financial challenges. Information about ECE should be easy for families to find; and within local communities there should be a choice of quality care in different settings such as family child care homes, licensed centers, etc.

Quality early care depends on the professional development of a skilled and educated workforce wherein caregivers, staff, and teachers are qualified to care for and educate children from five and under, and receive compensation and benefits that encourage them to remain in their positions.

<sup>49</sup>National American Academy of Pediatrics. (2005, January). *Quality Early Education and Child Care From Birth to Kindergarten*. Retrieved August 30, 2009, from <http://aappolicy.aappublications.org/cgi/content/abstract/pediatrics;115/1/187>

National Association of Child Care Resource and Referral Agencies. (n.d.). *Why Choosing Quality Child Care Matters*. Retrieved August 30, 2009, from <http://www.childcareaware.org/en/subscriptions/dailyparent/volume.php?id=18>.

National Network for Child Care. (1997). *Ingredients for Quality Child Care*. Retrieved August 30, 2009, from <http://www.nccc.org/Choose.Quality.Care/ingredients.html>

<sup>50</sup>Burchinal, M.R., Byler, P., Clifford, R.M., Culkin, M.L., Howes, C., Kagan, S.L., Peisner-Feinberg, E.S., Rustici, J., Yazejian, N., & Zelazo, J. (1999). *The Children of the Cost, Quality, & Outcomes Study Go to School: Public Report*. Chapel Hill: University of North Carolina, Frank Porter Graham Child Development Center.

<sup>51</sup>Barnett, S.W., & Masse, L.N. (2002). *A Benefit Cost Analysis of the Abecedarian Early Childhood Intervention*. Retrieved August 30, 2009, from <http://nieer.org/resources/research/AbecedarianStudy.pdf>

Mann, E.A., Reynolds, A.J., Robertson, D.L., & Temple, J.A. (2001). *Age 21 Cost-Benefit Analysis of the Title I Chicago Child-Parent Center Program*. Retrieved August 30, 2009, from Waisman Center Web site: <http://www.waisman.wisc.edu/cls/cbaexecsum4.html>

Schweinhart, L.J. (2005). *The High/Scope Perry Preschool Study Through Age 40*. High/Scope Press: High Scope Educational Research Foundation. Retrieved August 30, 2009, from <http://www.peelearlyyears.com/pdf/Research/INTERNATIONAL%20Early%20Years/Perry%20Project.pdf>

- There is limited availability of quality early care settings.
- The cost of quality early care is outside of the means of most Arizona families.
- Financing options are poor – many families cannot afford regulated care.
- Many children are cared for in settings that are poor quality or for which quality is undetermined.
- There is some access to information about ECE through the Child Care Resource and Referral Service (CCR&R).
  - Many families are not aware of this service.
  - Information doesn't identify quality of ECE options.
- There is a low percentage of educated, qualified caregivers/teachers.
- ECE providers have a high turnover rate.
- Some children with greater needs are served by Head Start/Early Head Start, but programs are not available to all children who need them.



## Availability of High Quality ECE Centers

There are currently few measures of quality ECE in Arizona. The primary available indicator of quality in ECE is accreditation. NAEYC, the National Association for the Education of Young Children provides a national, voluntary accreditation based on professional standards for ECE. NAEYC accreditation is recognized as the national benchmark for accrediting high quality early care programs. There are currently 216 NAEYC accredited ECE centers in Arizona,<sup>52</sup> representing about 11% of all ECE centers in the state. Only about 13% of children in licensed centers are attending these accredited programs.

Table 1: Number and percent of Arizona early care and education facilities that are accredited; and the number and percent of children in care attending accredited facilities.<sup>53</sup>

# of facilities**	% of facilities*	# of children**	% of children in care*
216	11%	14,944	13%

\* 2008 Arizona Market Rate Survey

\*\* NAEYC Accredited Program Search

<sup>52</sup> National Association for the Education of Young Children: NAEYC Accredited Program Search. (n.d.). Retrieved August 30, 2009, from <http://www.naeyc.org/accreditation/search>

<sup>53</sup> National Association for the Education of Young Children: NAEYC Accredited Program Search. (n.d.). Retrieved August 30, 2009, from <http://www.naeyc.org/accreditation/search>

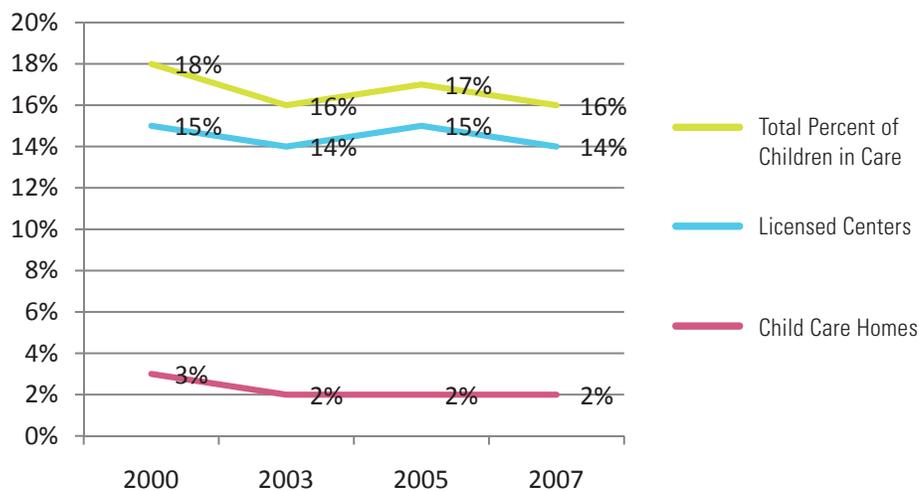
### Supply and Demand

There are currently no reliable and/or valid measures of supply and demand for early care in Arizona. However, the following data provide an approximate picture of the availability of child care in the state. Data from the National Association of Child Care Resource & Referral Agencies indicates that there are about 1900 licensed child care centers and 2200 certified family child care homes in Arizona.

### Number of Children Enrolled in Care

Using the Arizona 2008 Market Survey data, an estimate of the number of young children in care, and the proportion of the total population of young children who are utilizing care can be calculated. Using this process, only an estimated 16% of all Arizona children, birth through five, are receiving regulated child care.

Figure 1: Total number of young children enrolled in regulated early care and education programs as a proportion of the total population birth through five.<sup>54 55</sup>



<sup>54</sup> Arizona Department of Economic Security Division of Employment, and Rehabilitation Services Child Care administration. (2000-2008). *Arizona Child Care Market Rate Survey 2000-2008. U.S. Census Population Estimates Program (PEP): Proportion of children age 0-5 in care is an estimate.* Phoenix, AZ: Maricopa County Office of Research and Reporting.

<sup>55</sup> Numbers are rounded to the nearest 1000.

**BREAKING TREND! The Economic Downturn and Supply and Demand**

There is evidence of decreased enrollment in regulated child care settings due to the current economic downturn, as parents encounter economic challenges and are less able to pay for child care. A national survey of Child Care Resource and Referral (CCR&R) agencies reported that as some parents are unable to keep up with the cost of child care, they are removing their children from care, resulting in child care providers closing classrooms or shutting their doors.<sup>56</sup>

About one-third (34%) of CCR&R agencies indicated that the number of centers had declined in the last year and about two-thirds (64%) of CCR&Rs reported increased vacancies in child care centers in the last six months. A similar trend is seen for family child care homes, with about 45% of CCR&Rs reporting decreases in the number of homes and 76% of CCR&Rs noting increased vacancies in family child care homes in the last six months of 2008.<sup>57</sup>

<sup>56</sup> National Association of Child Care Resource and Referral Agencies. (2009). *The Impact of the Recession on Child Care: A Survey of Local Child Care Resource & Referral Agencies*. Retrieved April 4, 2009, from [http://www.naccrra.org/policy/economic-stimulus-briefing-room/docs/EconImpact\\_One\\_Pager.pdf](http://www.naccrra.org/policy/economic-stimulus-briefing-room/docs/EconImpact_One_Pager.pdf)

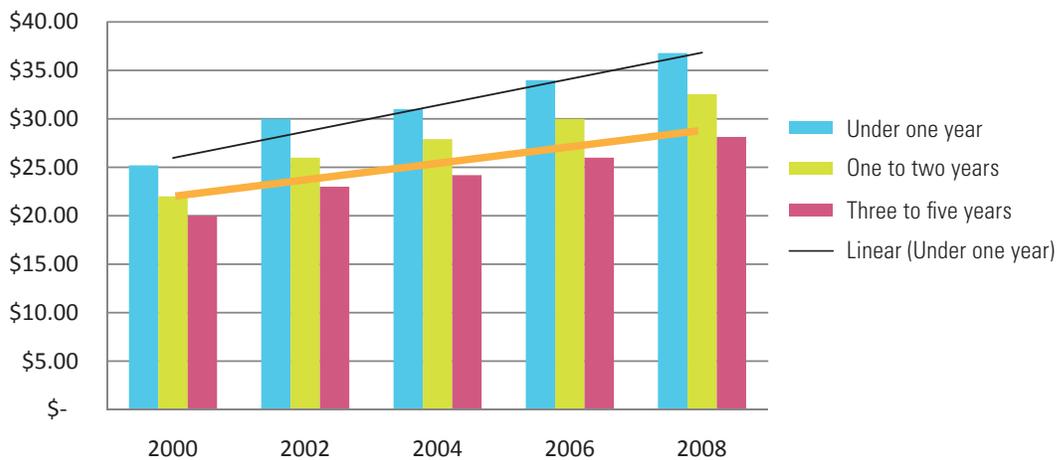
<sup>57</sup> National Association of Child Care Resource and Referral Agencies. (2009). *The Impact of the Recession on Child Care: A Survey of Local Child Care Resource & Referral Agencies*. Retrieved April 4, 2009, from [http://www.naccrra.org/policy/economic-stimulus-briefing-room/docs/EconImpact\\_One\\_Pager.pdf](http://www.naccrra.org/policy/economic-stimulus-briefing-room/docs/EconImpact_One_Pager.pdf)

### Affordability

Quality care requires skilled, educated child care professionals who are trained to meet the developmental needs of young children. Maintaining low staff to child ratios, evidence-based curricula, and environments that contain materials and equipment to stimulate imagination, creativity and learning further contributes to the cost of quality care.

The average daily cost of care is increasing for all types of providers. The following chart shows the increase in the average cost per day, over time, for licensed centers.<sup>58</sup> As costs have increased for all three types of care, increases outpaced inflation.

Figure 2: Average daily cost of care in Licensed Centers from 2000 to present (orange line represents inflation)



According to Arizona’s 2008 Child Care Market Rate Survey, the median cost of child care in Arizona was \$9,583 for an infant and \$7,328 for a four-year-old in center-based care, an 8% increase from the 2006 Market Rate Survey.<sup>59</sup> Care provided in regulated family home settings was significantly lower at a median of \$5,208 for children birth through five, representing no change from the 2006 survey.<sup>60</sup>

<sup>58</sup> DHS Certified group homes are licensed by DHS to care for up to 10 children in their homes for compensation. DES Certified Family Child Care homes are monitored by DES and may care for up to 4 children (a total of six including their own children) for compensation. DHS Licensed Child Care Centers are non-residential child care facilities.

<sup>59</sup> Arizona Department of Economic Security, Division of Employment and Rehabilitation Services, Child Care Administration. (2000-2008). *Arizona Child Care Market Rate Survey 2008*. Phoenix, AZ: Maricopa County Office of Research and Reporting.

<sup>60</sup> Arizona Department of Economic Security, Division of Employment and Rehabilitation Services Child Care administration. (2000-2008). *Arizona Child Care Market Rate Survey 2008*. Phoenix, AZ: Maricopa County Office of Research and Reporting.

Thus, access to quality care may be impeded by high costs that leave most low-income and many middle-income families without the ability to select a child care setting that best meets the needs of their children.<sup>61</sup> The yearly cost of care for one child consumes 10 to 33% (or more) of the family's income, and single mother-led families are hit the hardest.

Table 2: Cost of early care as percent of median income by family type

	2005: Married- couple families	2007: Married- couple families	2005: Single female parent families	2007: Single Female parent families
Infant in center	12%	12%	31%	33%
4 year old in center	9%	9%	25%	26%
Infant in child care home	9%	9%	24%	25%
4 year old in child care home	8%	9%	22%	24%
Before and after school care for a school age child in a center	**	8%	**	23%
Before and after school care for a school age child in a child care home	**	9%	**	26%

\*\* No data available

<sup>61</sup> National Association of Child Care Resource and Referral Agencies. (2008). *Parents and the High Price of Care: 2008 Update*. Retrieved April 10, 2009, from <http://www.naccra.org/publications/naccra-publications/parents-and-the-high-price-of-child-care-2008>.

## Professional Development

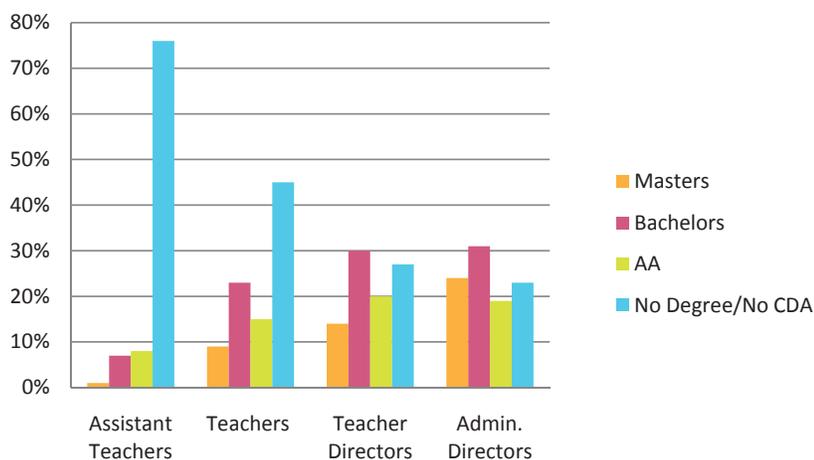
### *Educational Attainment*

High educational attainment by ECE teachers has been found to have a positive impact on young children. A study of 238 pre-kindergarten classrooms reported: “teachers with a 4-year college degree and a teaching certificate in early childhood were rated as creating a more positive emotional climate and providing more activities . . . than were teachers with no formal training in early childhood.”<sup>62</sup> Other studies show that better-educated teachers have “more positive, sensitive and responsive interactions with children” and “provide richer language and cognitive experiences, are less authoritarian, punitive and detached.”<sup>63</sup>

In 2007 only 27% of early childhood center-based teachers in Arizona were required by employers to have some college or a college degree.<sup>64</sup> These requirements varied greatly according to setting, with programs administered through the Early Childhood Development Block Grant and Head Start requiring higher levels of education for teachers than for-profit and nonprofit settings. In fact, Arizona’s child care licensing regulations only require teachers to have a high school diploma or GED.<sup>65 66</sup>

Despite low employer requirements, nearly half of all early care and education teachers in Arizona were college graduates: 15% had an Associate’s degree, 23% had a Bachelor’s degree and 9% had earned a Master’s degree.<sup>67</sup> Rates of college degree attainment were even higher for teacher directors and administrative directors.<sup>68</sup>

Figure 3: Total number and percentage of professionals working in early childhood care and education settings with a credential, certificate, or degree in early childhood development <sup>69</sup>



<sup>62</sup> National Association of Child Care Resource and Referral Agencies. (2008). *Parents and the High Price of Care: 2008 Update*. Retrieved April 10, 2009, from <http://www.naccra.org/publications/naccra-publications/parents-and-the-high-price-of-child-care-2008>.

<sup>63</sup> Barnett, W.S. (2003). *Better Teachers, Better Preschools: Student Achievement Linked to Teacher Qualifications*, *Preschool Policy Matters*, 2. New Brunswick, NJ: NIEER, pp.4.

<sup>64</sup> Children’s Action Alliance. (2008). *A Decade of Data: The Compensation and Credentials of Arizona’s Early Care and Education Workforce*. Retrieved August 30, 2009, from <http://www.azchildren.org>

<sup>65</sup> Arizona Department of Health Services Child Care Facilities. (n.d.). *Arizona Administrative Core: Revised Rules for Child Care Facilities*. Retrieved August 30, 2009, from [http://www.azsos.gov/public\\_services/Title\\_09/9-05.htm](http://www.azsos.gov/public_services/Title_09/9-05.htm).

<sup>66</sup> Since licensing requirements mandate at high school diploma or GED, it is assumed that all teachers have attained that level of education.

<sup>67</sup> Children’s Action Alliance. (2008). *A Decade of Data: The Compensation and Credentials of Arizona’s Early Care and Education Workforce*. Retrieved August 30, 2009, from <http://www.azchildren.org>

<sup>68</sup> Children’s Action Alliance. (2008). *A Decade of Data: The Compensation and Credentials of Arizona’s Early Care and Education Workforce*. Retrieved August 30, 2009, from <http://www.azchildren.org>

<sup>69</sup> Children’s Action Alliance. (2008). *A Decade of Data: The Compensation and Credentials of Arizona’s Early Care and Education Workforce*. Retrieved August 30, 2009, from <http://www.azchildren.org>

## Wages and Job Retention

Research confirms that teachers' wages play a significant role in program quality. Higher wages enable centers to hire better-qualified teachers, which in turn contributes to both lower turnover rates and more secure attachments between children and teachers.<sup>70</sup> Furthermore, an examination of teachers' formal education levels, early childhood training, and overall classroom quality in the Cost, Quality, and Outcomes study<sup>71</sup> indicated that "caregivers with a BA or BS in early childhood education or a related field were rated substantially higher on the global measure of classroom quality." Teachers who had the most sensitive and least harsh and detached behaviors were those with a BA and specialized, college-level early childhood training<sup>72</sup> and that security and attachment were associated with sensitivity, involvement and quality of care given by the provider.<sup>73</sup> Moreover, "more knowledge in early childhood education does influence beliefs, attitudes, and practices of teachers"<sup>74</sup> which in turn influences the quality of care and the education that young children receive in child care programs.

Child care teachers in Arizona earned a median salary of \$8.25 per hour in 2007 with hourly wages differing significantly based on program setting: Head Start and public school pre-kindergarten teachers earned a median salary of \$11.75 per hour.<sup>75</sup> The majority of Arizona's children, however, are in settings with teachers who have both low educational requirements and low wages.<sup>76</sup>

For all child care workers, including home-based providers in Arizona, the median hourly wage was \$8.63 (\$18,940 annually) in 2008 compared with a national median hourly wage of \$9.12 (or \$20,350 annually).<sup>77</sup> The 2009 Federal Poverty Guidelines by income and family size define a family of three earning \$18,310 or less as surviving at below the official poverty level.<sup>78</sup> In fact, because of low earnings, many early care and education teachers in Arizona qualify for subsidized child care themselves.

<sup>70</sup> Phillips, D., Mekos, D., Scarr, S., McCartney, K., & Abbott-Shim, M. (2000). Within and beyond the classroom door: Assessing quality in child care centers. *Early Childhood Research Quarterly*, 15(4), 475-496.

Scarr, S.; Eisenberg, M.; & Deater-Deckard, K. (1994). Measurement of quality in child care centers. *Early Childhood Research Quarterly*, 9(2), 131-151.

<sup>71</sup> Burchinal, Margaret R.; Cryer, Debby; Clifford, Richard M.; & Howes, Carollee. (2002). Caregiver Training and Classroom Quality in Child Care Centers. *Applied Developmental Science*, 6(1), 2-11.

<sup>72</sup> Howes, C., Whitebook, M. & Phillips, D., & (1992). Teacher Characteristics and Effective Teaching in Child Care: Findings from the National Child Care Staffing Study. *Child and Youth Care Forum*, 22(6), 399-414.

<sup>73</sup> Howes, C.; Phillips, D.A.; and Whitebook, M. (1992). Thresholds of Quality: Implications for the Social Development of Children in Center-Based Child Care. *Child Development*, (63), 440-467.

<sup>74</sup> Vartuli, Sue. (1999). How early childhood teacher beliefs vary across grade level. *Early Childhood Research Quarterly*, 14(4), 489-514.

<sup>75</sup> Children's Action Alliance. (2008). *A Decade of Data: The Compensation and Credentials of Arizona's Early Care and Education Workforce*. Retrieved August 30, 2009, from <http://azchildren.org>.

<sup>76</sup> Arizona Workforce Informer. (2009). *Arizona Statewide – 2007 Occupational Employment and Hourly Wage Estimates*. Retrieved April 13, 2009, from [http://www.workforce.az.gov/admin/uploadedPublications/2717\\_Arizona07.pdf](http://www.workforce.az.gov/admin/uploadedPublications/2717_Arizona07.pdf).

U.S. Bureau of Labor Statistics. (2009). *Occupational Employment and Wages, May 2007*. Retrieved April 13, 2009, from <http://data.bls.gov/cgi-bin/print.pl/oes/current/oes399011.htm>

<sup>77</sup> Arizona Workforce Informer. (2009). *Arizona Statewide – 2007 Occupational Employment and Hourly Wage Estimates*. Retrieved April 13, 2009, from [http://www.workforce.az.gov/admin/uploadedPublications/2717\\_Arizona07.pdf](http://www.workforce.az.gov/admin/uploadedPublications/2717_Arizona07.pdf).

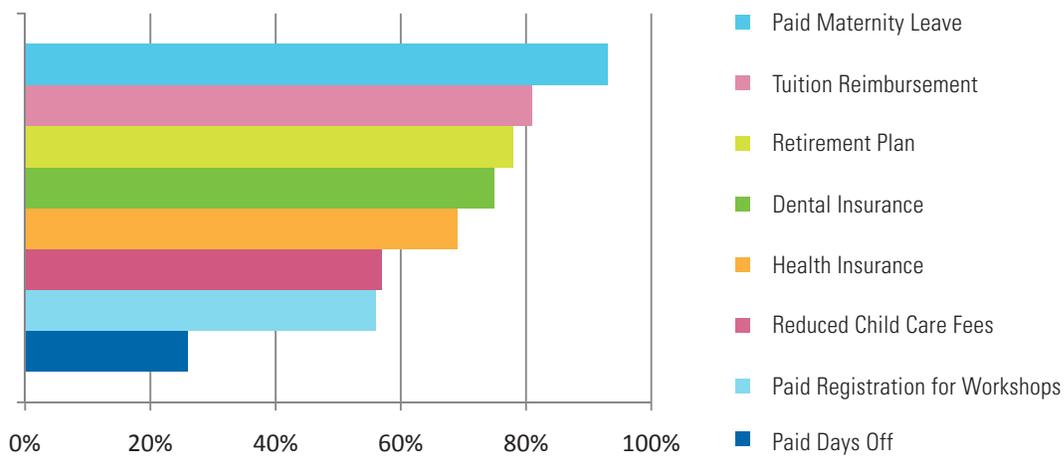
U.S. Bureau of Labor Statistics. (2009). *Occupational Employment and Wages, May 2007*. Retrieved April 13, 2009, from <http://data.bls.gov/cgi-bin/print.pl/oes/current/oes399011.htm>

<sup>78</sup> U.S. Department of Health & Human Services. (2009). *The 2009 HHS Federal Poverty Guidelines*. Retrieved April 13, 2009, from <http://aspe.hhs.gov/POVERTY/09poverty.shtml>

## Benefits

Most center-based early care and education employers in Arizona offer at least some benefits to their full-time employees. Part-time employees have access to few or no benefits.<sup>79</sup>

Figure 4: Benefits available to full-time employees of center-based childcare centers in 2007<sup>80</sup>



## Effect of Subsidies and Reimbursement on Wages

Most home- and center-based providers who offer affordable services to low-income parents in Arizona accept child care subsidies through the Arizona Department of Economic Security. Despite the rising cost of child care, current reimbursement rates paid to providers caring for young children in families receiving child care subsidies are based on the cost of care in 2000 + 5%, making Arizona among the lowest states in the nation.<sup>81</sup> Current reimbursement rates are much lower. Recent legislative cuts to the fiscal year 2009 budget rolled back even these outdated reimbursement rates nearly 10 years providing little support to an industry that offers families access to and opportunity for workforce and economic participation.

<sup>79</sup> Children's Action Alliance. (2008). *A Decade of Data: The Compensation and Credentials of Arizona's Early Care and Education Workforce*. Retrieved August 30, 2009, from <http://azchildren.org>.

<sup>80</sup> Children's Action Alliance. (2008). *A Decade of Data: The Compensation and Credentials of Arizona's Early Care and Education Workforce*. Retrieved August 30, 2009, from <http://azchildren.org>.

<sup>81</sup> National Women's Law Center. (2008). *State Child Care Assistance Policies 2008: Too Little Progress for Children and Families*. Retrieved August 30, 2009, from <http://www.nwlc.org/pdf/StateChildCareAssistancePoliciesReport08.pdf>

The difference between the cost of providing services (as documented in the 2008 Market Rate Survey) and current reimbursement rates significantly contributes to the low wages paid in the child care industry. For example, a center providing care for a child 12 to 36 months of age loses \$4,518 per year, per child in the amount they should ideally be paid if reimbursements were in line with actual costs of doing business. In just one classroom with 10 children, a total of \$45,179 is unavailable to make quality program improvements including improved wages to attract and retain higher credentialed child care professional staff.

Low industry wages and poor access to benefits contributes to the high turnover rates, particularly among center-based teachers and assistant teachers. Fifty-nine percent of assistant teachers and 44% of teachers were employed for two years or less in their center-based programs in 2007.<sup>82</sup> Staff retention has a positive impact on children's development. Continuity of care and nurturing, quality relationships between staff and children mean that children are able to form more secure attachments, which translate to optimal social, emotional and cognitive growth.<sup>83</sup>

Table 3: Percent of retention of early childhood workers: 2007<sup>84</sup>

	Assistant Teachers	Teachers	Teacher Directors	Admin. Directors
Less than 2 years	39%	25%	16%	13%
2 Years	20%	19%	12%	10%
3 Years	15%	15%	12%	9%
4 Years	10%	8%	11%	6%
5+ Years	16%	33%	50%	62%

<sup>82</sup> Children's Action Alliance. (2008). *A Decade of Data: The Compensation and Credentials of Arizona's Early Care and Education Workforce*. Retrieved August 30, 2009, from <http://azchildren.org>.

<sup>83</sup> Hale-Jinks, C. (2006). *Tackling Teacher Turnover in Child Care: Understanding Causes and Consequences, Identifying Solutions*. Retrieved August 30, 2009, from [http://findarticles.com/p/articles/mi\\_qa3614/is\\_200607/ai\\_n17174724](http://findarticles.com/p/articles/mi_qa3614/is_200607/ai_n17174724).

<sup>84</sup> Hale-Jinks, C. (2006). *Tackling Teacher Turnover in Child Care: Understanding Causes and Consequences, Identifying Solutions*. Retrieved August 30, 2009, from [http://findarticles.com/p/articles/mi\\_qa3614/is\\_200607/ai\\_n17174724](http://findarticles.com/p/articles/mi_qa3614/is_200607/ai_n17174724).

The current status and needs of the EC system have been presented in the previous section. Although there is currently little data about the current quality of early care and education, available data indicate that improvements are needed to promote availability and support professionalization. To optimally support its young children, the Arizona early childhood system needs to:

- Evaluate/assess current quality of early care and education setting,
- Set standards for quality early care,
- Improve the quality of ECE settings through
  - Quality improvement opportunities,
  - Higher licensing standards,
  - Alignment of early learning standards and development of infant/toddler standards,
- Provide families with information about quality of, as well as availability of, care settings,
- Retain a qualified ECE workforce,
  - Provide wages and benefits that encourage retention,
  - Provide professional development and education information and opportunities,
- Provide full funding for Head Start and other “at-risk” preschool programs to ensure provision of services to all children with additional needs.

### Arizona’s Early Learning Assets

The following section presents current work to address the needs in Arizona’s EC system. These efforts include: Quality First; supports for family, friend, and neighbor providers; Early Learning Standards; childcare scholarships; T.E.A.C.H.; and Arizona’s Compensation and Retention Program. These initiatives build on existing EC efforts, additional information on Arizona’s early learning assets is found in Appendix C.



## Quality Improvement Strategies

Early care and education quality improvement and rating systems (QIRS) are a growing trend across the nation over the last decade. At least 18 states have developed a QIRS and many more are in the process of doing so. QIRS align standards, support programs in improving quality, and insert accountability into a complex system.<sup>85</sup> As they unfold, rigorous evaluation monitors the validity of each rating system. Improved outcomes for children take longer to reveal themselves as QIRS are implemented and refined and best practices validated. The value of Quality Improvement has been empirically demonstrated in a study by Rand.

Rand Corporation's California Preschool Study<sup>86</sup> is the first comprehensive statewide research-based examination of an ECE system. The study, which evaluated California's large number of early care and education providers, found socio-economic gaps in kindergarten readiness that increase as children progress through school. More importantly, the study found that children's participation in high-quality early care and education helps bridge the achievement gap.

The RAND study recommends ensuring the availability of high-quality programs are for all children by assessing and monitoring quality, a reimbursement system based on quality, a coordinated plan to prepare ECE teachers, and increasing system coordination.

### *Arizona's Quality First*

In 2009, First Things First launched Quality First, a statewide QIRS designed to increase the availability of quality early care and education in both center- and home-based settings. Quality First is Arizona's first statewide voluntary quality improvement and rating system for early care and education programs serving children from birth through five. The purpose of Quality First is to improve the quality of early care and education so young children can begin school safe, healthy, and ready to succeed.

The first year of Quality First is focused on quality improvement and involves a variety of supports for providers including a coach, financial incentives, child care health consultation and the ability of staff to participate in T.E.A.C.H. (Teacher Education And Compensation Helps) Early Childhood<sup>®</sup> ARIZONA Scholarships. Participating providers develop a quality improvement plan based on standardized assessments and recognized industry standards of quality. During the second and subsequent years, providers will be rated so that parents can choose providers based on the level of quality the provider has attained.

As of October 2009, 463 centers and homes statewide were enrolled in Quality First.



<sup>85</sup> Department of Early Education and Care, Massachusetts State Government. (2009). *Quality Improvement and Rating Systems*. Retrieved August 30, 2009, from <http://www.eec.state.ma.us/QIRS.aspx>.

<sup>86</sup> *Rand's California Preschool Study*. (2009). Retrieved August 30, 2009, from <http://www.preschoolcalifornia.org/rand-study/>

### *Improving the quality of family, friend and neighbor care*

Along the continuum of childcare options available to parents is care provided by families, friends and neighbors. Family, friend and neighbor care (FFN) – also known as kith and kin care – is generally not regulated by DES or DHS.

Although it is impossible to know definitively how many children are being cared for in FFN homes, national research estimates that over 40% of infants and toddlers and one-third of preschool age children are being cared for by a family member, friend or neighbor.<sup>87</sup> African-American families (37%) and Hispanic families (40%) are more likely to use FFN care, primarily relatives, as are families earning less than 200 percent of the federal poverty level.<sup>88</sup> Single parents are also more likely than their married counterparts to use FFN care; as are parents living in rural areas.<sup>89</sup>

FFN care takes many forms: it may be provided by a grandparent or other relative in their home at no cost or it may be provided by a neighbor who cares for several children other than her own for a fee. A child may also spend part of their day in a Head Start or preschool setting and the other part in the home of a family member or other informal setting. FFN care may be the only option available to parents who work nontraditional hours such as nights or weekends. FFN providers are legal, unregulated providers in Arizona and may care for up to four children. FFN providers may also register with Child Care Resource and Referral in Arizona to receive referrals if they have a vacancy.

The Association for Supportive Child Care (ASCC), through its Arizona Kith and Kin Project, was awarded a contract to expand its work with FFN providers by First Things First through the competitive bid process.

### *Early Learning Standards*

Arizona's Early Learning Standards continue to be held in high regard across the country. The early learning standards are available to all regulated child care providers across the state. The Arizona Early Learning Standards provide the framework for quality practices within early care and education programs.

A key component of creating a system that values use of Early Learning Standards includes expanding access to the standards for all providers. Additional venues to expand access to training related to the standards, such as on-line tutorials, are being developed.

<sup>87</sup> Maher, E.J. (April, 2007). *Measuring Quality in Family, Friend and Neighbor Child Care*. *Child Care & Early Education Research Connection*. Retrieved August 30, 2009, from <http://www.researchconnections.org/location/12033>

<sup>88</sup> Annie E. Casey Foundation. (2003). *Analysis of the National Survey of Children's Health as document in the 2006 Kids Count Essay, Family, Friend and Neighbor Care: Strengthening a Critical Resource to Help Young Children Succeed*. Retrieved August 30, 2009, from [http://www.aecf.org/upload/publicationfiles/2006\\_databook\\_essay.pdf](http://www.aecf.org/upload/publicationfiles/2006_databook_essay.pdf)

Snyder, K. & Adelman, S. (2004). *The Use of Relative Care While Parents Work: Findings from the 1999 National Survey of America's Families*. Washington, DC: Urban Institute. Retrieved August 30, 2009, from <http://www.urban.org/publications/311131.html>

<sup>89</sup> Smith, K., (2006). *Rural Families Choose Home-Based Child Care for their Preschool-Aged Children*. (Policy Brief No. 3). University of New Hampshire, Carsey Institute.

### *Early learning standards for infants and toddlers*

By 2007, 21 states had developed infant-toddler standards to address the earliest years.<sup>90</sup> Arizona is poised to join this group. The process will include combined efforts between each of the state agencies, community partners, practitioners working with young children, experts across the state and national reviews. Once completed, an extensive training plan will be created to assure access and understanding among all early care and education providers as well as families.

### Improving Access

Families who earn up to 165% FPG qualify for child care subsidies in Arizona; however, because of budget cuts there is a waiting list for childcare subsidies. When waiting lists were established in Arizona in the past, up to 7,000 low-income families were left to figure out childcare solutions on their own. As a result, parents cut back on work hours, quit their jobs or left their children in less desirable settings such as with an older sibling.<sup>91</sup> Moreover, parents earning even slightly more than 165% FPL do not qualify for subsidies at all and the costs of childcare, particularly quality childcare, may be out of their reach altogether.

#### BREAKING TREND! Childcare Scholarships: An Emergency Response

Due to the current economic downturn, many Arizona families have been unable to afford the costs of early care and education for their children as a result of job loss, decreased earnings or other factors. The First Things First Emergency Child Care Scholarships is a temporary plan to financially help families with young children (birth through age five) with incomes up to 200% of the FPL access needed child care.

The strategy provided temporary scholarships for children throughout Arizona. The distribution of scholarships was based on a combination of the number of children birth through age five and the number of children birth through age five living in poverty in any given region as a proportion of the total number of children in the state. The Scholarships were awarded directly to participating providers for eligible families by the administrative home, comprised of a partnership between the Valley of the Sun United Way, United Way of Northern Arizona and United Way of Tucson and Southern Arizona.

As of June 2009, more than 6,700 children birth to five years old, received expedited scholarships. About 47% of those were infants or toddlers. Centers in 22 Regional Partnership Council areas and homes in 17 Regional Partnership Council areas participated in the scholarship program. About 95% of participating families co-paid less than \$200 dollars a month. The largest number of participating families, 65%, paid no out-of-pocket co-pay. No co-pay was paid for 68% of participating infants/toddlers, 65% of participating preschoolers, and 55% of participating children at Family/Group homes.

Families who would have paid from 15% to 36% of their income on child care, paid from zero to only about 5% to 10% of their income when supplemented by the scholarship funds.

<sup>90</sup> Scott-Little, C. & Kagan, S.L. (2008). *Inside the Content of Infant-Toddler Early Learning Guidelines: Results from Analyses, Issues to Consider and Recommendations*. Retrieved August 30, 2009, from The University of North Carolina at Greensboro, Teachers College Columbia University. Web site: <http://ccf.tc.columbia.edu/pdf/inside%20the%20Content%20of%20Infant-Toddler%20ELGs-Full%20Report.pdf>.

<sup>91</sup> Children's Action Alliance. (2004). *The Real Reality of Arizona's Working Families*. Retrieved August 30, 2009, from <http://www.azchildren.org/MyFiles/PDF/CAARealityWorkingFamily.pdf>.

***Child care scholarships: ongoing strategies***

A number of Regional Partnership Councils are funding strategies that provide financial assistance to families to improve access to quality ECE. Targeted families will be provided financial assistance so that they are better able to afford quality early care and education for their children. Scholarships will be provided to at-risk families based on income.

***Expanding access***

Regional Partnership Councils will be providing funding to expand access by increasing the number of classrooms, expanding the number of slots available for infants, toddlers, and children with special needs, and increasing the availability of Pre-K programs.



## Professional Development

### *T.E.A.C.H. (Teacher Education And Compensation Helps) Early Childhood® ARIZONA Scholarships*

T.E.A.C.H. is a scholarship program for early care and education providers in Arizona who want to get their Child Development Associate (CDA), certificate of completion, Associate's Degree or (in the near future) Bachelor's Degree in Early Childhood Education or a related field from one of Arizona's community colleges or public universities. The scholarships provide teachers, administrators and family child care providers with a way to pay for college coursework. In return, T.E.A.C.H. recipients must agree to remain at their sponsoring program or to continue to operate their family child care home for one year for each year that they receive the scholarship. For T.E.A.C.H. recipients completing the CDA Assessment, they must agree to remain at their sponsoring program for six months.

The Board of FTF approved funding for the first three years of the T.E.A.C.H. statewide scholarship program as a component of Quality First. In addition, many of the Regional Partnership Councils have funded T.E.A.C.H. scholarships in their communities beginning in SFY2010.

### *Additional professional development opportunities*

Regional Partnership Council strategies are in place to provide training and professional development opportunities for early childhood workers through a number of venues, including:

- Community based trainings and other local educational options,
- Targeted mentoring and training for ECE Directors,
- Loan forgiveness and incentives for retention,
- Non- T.E.A.C.H scholarships for teachers desiring to enhance their education,
- Programs to recruit new workers into the field.

### *Arizona's Compensation and Retention Program*

The Board of FTF approved funding to establish a statewide administrative home which would develop and administer a comprehensive statewide Compensation & Retention Incentives Program. The goal of the program is to acknowledge and reward educational advancement and attainment for early care and education staff who have remained with their same employer for at least one year. The program is limited to regulated centers and homes that are participating in Quality First. This funding provides the necessary infrastructure as the state progresses towards building a comprehensive professional development system. The Board decided to invest in creating an Arizona-specific Compensation & Retention program that reflects both the needs of Arizona's early care and education workforce and the First Things First brand. Eleven Regional Partnership Councils have invested additional funds for compensation and retention incentives for nearly 1000 individuals working within their regional boundaries.



# Family Support

Families are their children's first and most influential caregivers and teachers, and they play a critical role in shaping their children's lives and future outcomes. Supporting families is a unique challenge that demands collaboration between parents, service providers, educators and policymakers to promote the health and well-being of young children. Children's health, development, and overall well-being depend upon the care, nurturing and education provided by their families.

Research confirms that early relationships impact brain growth and healthy development.<sup>92</sup> The early childhood system supports most young children and their families by ensuring safe environments, supplying accurate information about parenting and child development, providing needed economic supports, ensuring information about and access to needed services, and supporting language and literacy. In addition a smaller number of families need targeted interventions delivered by trained professionals.

In a comprehensive early childhood system:

- All families have access to accurate, high-quality information about how to promote optimal child development and strengthen families.
- Service providers are qualified, educated, and trained in the issues of early childhood.
- Programs and services adhere to standards of practice.
- Families have access to and use supports that enhance economic stability.
- Language and literacy is promoted and supported.
- Families with more intensive needs can readily access economic and family support programs.
- Families are economically stable.



<sup>92</sup> Perry, B.D. *Traumatized children: How childhood trauma influences brain development*. In: *The Journal of the California Alliance for the Mentally III* 11:1, 48-51, 2000

Arizona parents and communities recognize the vital role families play in children's healthy development and getting them ready to succeed in school. In a survey prepared for Valley of the Sun United Way (2005) the majority of the respondents (95%) chose family as having the major responsibility for children's positive school outcomes. Forty-five percent (45%) of the respondents' believed that teachers and schools share the responsibility for children's success in school. Society/community, government, and religion all shared some responsibility for children's success as well. More than half of the respondents (57%) did not believe that Arizona children were well prepared to enter kindergarten. These results indicate that, even five years ago, Arizonans believed that there is more the state should do to support children's growth and development. In particular, access to programs for improving parenting was seen as a major change that was needed to better support children and their families.



Currently in Arizona:

- There is limited access to consistent, accurate, appropriate information about parenting and child development.
- There is limited access to and availability of statewide home visitation, educational, and other family support programs.
- There is limited access to and availability of early language and literacy programs.
- There is limited access to existing native language literacy development programs.
- There is limited availability of well-trained and skilled professionals, especially in rural/remote communities.
- There is a lack of stable and adequate economic supports for families.
  - There is a lack of knowledge about eligibility to and access to financial supports.
  - There are few viable financing strategies for quality early care.
- Families with more intensive needs have limited information about and access to targeted intervention programs and services.

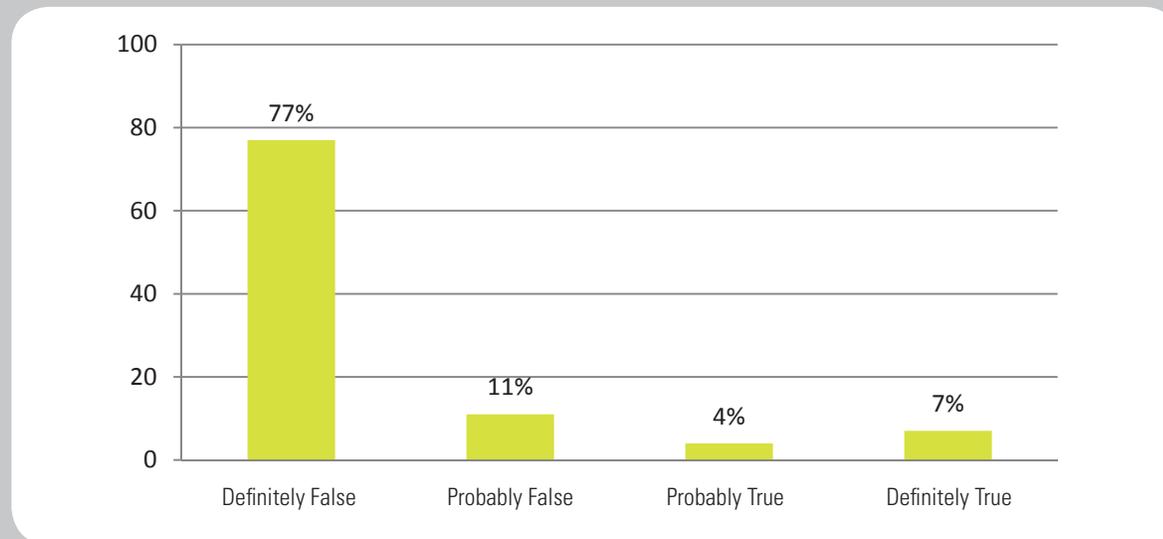
## Information About Parenting and Child Development

The First Things First (FTF) Family and Community Survey provided baseline information about families' understanding of early development. The results help identify parents' current knowledge about early development as well as the areas in which families need additional informational support to optimize their children's development.

### *Is capacity to learn "set at birth"?*

Most Arizona parents (77%) understood that children's capacity to learn is not "set at birth". However, almost one-fourth of parents surveyed (22%) still believe that children's abilities might be fixed at birth. Research has shown that newborn babies are continuously learning through interactions with adult caregivers and their environment, their neurons constantly firing and wiring.<sup>93</sup> Parents who believe that an infant's learning capacity is unchangeable may be at risk of not providing adequate experiences to support the healthy development of their growing children.

Figure 5: Percentage of Arizona parents indicating that capacity for learning is set from birth

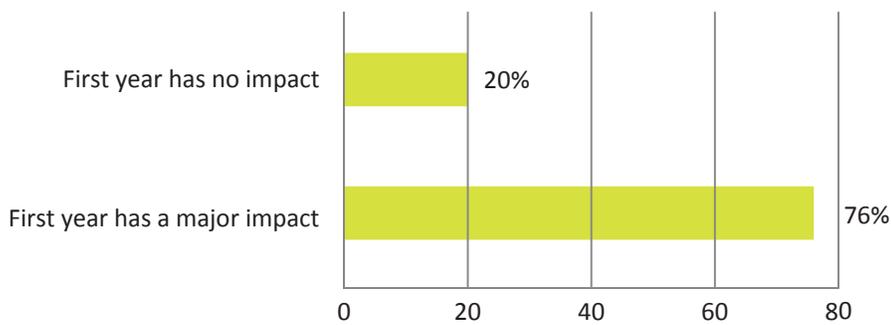


<sup>93</sup> Shonkoff, J., & Phillips, D., eds. (2000). From Neurons to Neighborhoods: The Science of Early Childhood Development. A Report of the National Research Council. Washington, DC: National Academies Press.

*Does the first year of life impact later academic achievement?*

Although many Arizona parents understood the importance of early experiences in later school performance, about one-fifth did not believe that the first year has an impact on later school performance.<sup>94</sup>

Figure 6: Does first year impact later school performance?

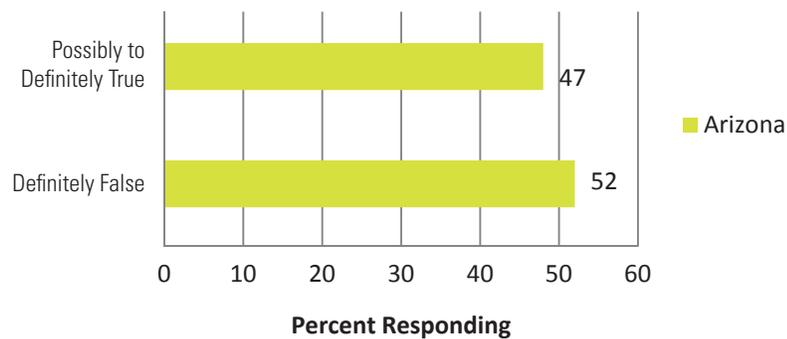


<sup>94</sup> 3% responded "Don't Know"

*Can children learn language as effectively from TV as from interactions with adults?*

More than half (52%) of Arizona parents understood that TV is definitely not a substitute for real conversation. However, almost half of Arizona respondents (48%) believed that television may promote language development as effectively as personal interaction. The large percentage of parents who still believe that TV can substitute for face-to-face interactions with their young children suggests that information about the importance of talking to babies and young children needs to be more broadly disseminated.

**Figure 7: Child’s language benefits equally from TV or real person**

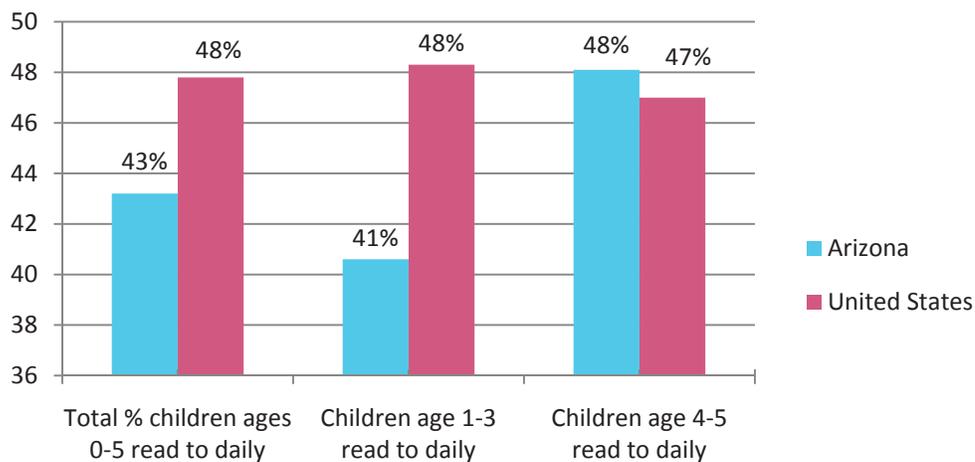


### Reading and Literacy Skills

Reading is one of the critical literacy skills that families can support at home. Reading to children early in their lives provides an opportunity for quality parent child bonding and gives the children a good educational start in life. Parental involvement in their child’s reading has been found to be the most important determinant of language and emergent literacy.<sup>95</sup>

Compared to the national average (47%), fewer Arizona young children are read to daily (43%). Moreover, the youngest children are read to even less often in Arizona: only about 41% of Arizona toddlers are read to each day, compared to almost half (48%) of toddlers nationwide.

Figure 8: Percentage of children birth through age five read to daily in their primary language.<sup>96</sup>



<sup>95</sup> Bus, A.G., van Ijzendoorn, M.H., & Pellegrini, A.D. (1995). Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research*, 65(1), 1-21.

<sup>96</sup> Russ, S., Perez, V., Garro, N., Klass, P., Kuo, A.A., Gershun, M., Halfon, N., & Zuckerman, B. (2007, November). *Reading Across the Nation: A Chartbook: Reach Out and Read National Center*. Boston, MA. Boston: University School of Medicine.

## Child Safety

### *Child abuse/neglect and out-of-home placement*

Child abuse and neglect are strongly linked with negative outcomes for children including poor school performance, frequent grade retention, juvenile delinquency, and teenage pregnancy. Children who have been neglected, physically abused, or sexually abused are more likely to exhibit cognitive and emotional problems.<sup>97</sup>

Child abuse/neglect reports are filed for about 2% of Arizona children each year.

**Table 4: Number of reports of child abuse/neglect**

Year	2000	2005	2008
Number	32,348	34,690	35,121
Percent	2.3%	2.4%	2%

<sup>97</sup> MacMillan, H. L., Fleming, J. E., Streiner, D. L., Lin, E., Boyle, M. H., Jamieson, E., et al. (2001). Childhood Abuse and Lifetime Psychopathology in a Community Sample. *Am J Psychiatry*, 158(11), 1878-1883.

Children are placed in out-of-home care by the Department of Economic Security (AZDES) when the child is determined to be at imminent risk or harm from abuse or neglect or when the parent is unwilling or unable to care for them. Children in out-of-home (substitute care) arrangements live in shelters, homes with foster parents or relatives, group homes, residential treatment centers, and other locations.<sup>98</sup> About one-third of those children are in kinship foster care with grandparents or other relatives.<sup>99</sup> The number of children in foster care or other out-of-home placement in Arizona has increased by 57% since 2000.

**Table 5: Number of children in out-of-home care (such as foster care)**

Year	2000	2005	2008
Number	6,337	9,450	9,965
Percent	4.6%	6%	5.8%

More than 40% of all children placed in out-of-home care situations are under six years old. About seven percent (7.3%) of children in out-of-home care are less than one year old; and one-third of children placed in substitute care arrangements are between one and five years old.<sup>100</sup>

**Table 6: Percent of children five and under in out-of-home care**

Age	Under 1 year old	1 to 5 years old
Percent	7.3%	33.4%

<sup>98</sup> The Annie E. Casey Foundation, KIDS COUNT Data Center, [www.kidscount.org](http://www.kidscount.org).

<sup>99</sup> Arizona Department of Economic Security, Division of Children, Youth and Families. (2008). *The Arizona Kinship Foster Care Program 2008 Report*. Retrieved August 30, 2009, from [https://egov.azdes.gov/CMS400Min/InternetFiles/Reports/pdf/kinship\\_foster\\_care\\_report\\_2008.pdf](https://egov.azdes.gov/CMS400Min/InternetFiles/Reports/pdf/kinship_foster_care_report_2008.pdf)

<sup>100</sup> Arizona Department of Economic Security, Division of Children, Youth and Families. (2008). *Children Welfare Reporting Requirements Semi-Annual Report for the Period of October 1, 2008 Through March 31, 2009*. Retrieved August 30, 2009, from [https://egov.azdes.gov/CMS400Min/InternetFiles/Reports/pdf/child\\_welfare\\_oct\\_08\\_mar\\_09.pdf](https://egov.azdes.gov/CMS400Min/InternetFiles/Reports/pdf/child_welfare_oct_08_mar_09.pdf)

### *Child Mortality*

In 2007 in Arizona, 1,143 children died.<sup>101</sup> Of these:

- The number of deaths involving substance use (illegal drugs, prescription drugs, and/or alcohol) increased from 12% (in 2006) to 17% in 2007.
- Motor vehicle accidents remained the number one cause of preventable child deaths, with 122 children losing their lives in crashes in 2007 (compared to 164 in 2006).
  - Excessive driving speed was identified as a preventable factor in 53 crashes with lack of vehicle restraints identified as a preventable factor for 50 fatalities.
  - Twenty-six children died in crashes involving a substance-impaired driver (all but three were alcohol-impaired).
- Nine children died in all terrain vehicle (ATV) crashes.
- Twenty-three (23) Arizona children drowned in 2007.
- Deaths due to maltreatment increased from 60 in 2006 to 65 in 2007.

Seventy-two percent (72%) of child mortality was among children under five years old. The largest percentage (42%) of child deaths was infants during the first month of life. Ninety-five percent of neonatal deaths were medical; with a little more than half of those due to prematurity.<sup>102</sup>

An additional 20% of child deaths occurred between 28 days and the child's first birthday. Sixty-five percent (65%) of mortality at these ages was due to natural causes; and 38% of deaths were determined to be preventable. There was an increase in unexpected deaths in this age group, from 90 in 2006 to 143 in 2007. Almost two-thirds of these unexpected deaths (62%) resulted from unsafe sleeping environments.<sup>103</sup>

<sup>101</sup> Arizona Department of Health Services, Bureau of Women's and Children's Health. (2009, January). *The Arizona Child Fatality Review Program Fifteenth Annual Report. JANUARY 2009*. Retrieved August 30, 2009, from <http://www.azdhs.gov/phs/owch/cfr.htm>

<sup>102</sup> Arizona Department of Health Services, Bureau of Women's and Children's Health. (2009, January). *The Arizona Child Fatality Review Program Fifteenth Annual Report. JANUARY 2009*. Retrieved August 30, 2009, from <http://www.azdhs.gov/phs/owch/cfr.htm>

<sup>103</sup> Arizona Department of Health Services, Bureau of Women's and Children's Health. (2009, January). *The Arizona Child Fatality Review Program Fifteenth Annual Report. JANUARY 2009*. Retrieved August 30, 2009, from <http://www.azdhs.gov/phs/owch/cfr.htm>

Ten percent (10%) of deaths were among children one through four years old. Fifty-three percent (53%) of deaths in this age group were identified as preventable. Motor vehicle crashes accounted for 18% of mortality and 11% of deaths were due to drowning.<sup>104</sup>

**Table 7: Cause of death by age: Children under five years old**

	Up to 27 days old	28 to 365 days old	1 to 4 years old
Prematurity	281	83	4
Medical*	180	35	45
Motor Vehicle Crash	5	7	21
Suffocation/Choking	5	21	2
SIDS	4	33	0
Drowning	1	5	12
Poisoning	0	1	2
Other/Undetermined	9	40	27
<b>Total</b>	<b>485</b>	<b>225</b>	<b>113</b>

\* Excluding SIDS and prematurity

<sup>104</sup> Arizona Department of Health Services, Bureau of Women's and Children's Health. (2009, January). *The Arizona Child Fatality Review Program Fifteenth Annual Report*. JANUARY 2009. Retrieved August 30, 2009, from <http://www.azdhs.gov/phs/owch/cfr.htm>

## Economic Supports

There are a number of economic supports available to Arizona families with young children, from a variety of economic statuses. These supports include cash assistance, tax credits, child care subsidies, nutritional support and medical assistance, depending on the family's level of need.

Qualifying Arizonans can take advantage of a number of Federal tax credits, including the child tax credit, earned income tax credit, and child care tax credit. The Arizona Department of Economic Security programs provide monetary, nutritional, and medical assistance for some qualifying families.



**BREAKING TREND! Increased Enrollment in Family Assistance Programs\***

The current economic downturn has resulted in a rapidly growing number of families who are accessing nutritional and medical support from state programs.

In July, 2009 about 39,000 families received Temporary Assistance to Needy Families (TANF: formerly Aid to Families with Dependent Children, AFDC; commonly known as welfare payments), providing support to about 64,000 children. This represents a 6% increase in the number of families receiving TANF since July 2008. In the previous two years the cash assistance rolls changed by about +/-0.15%.

TANF Summary		
	July '08	July '09
<b>Families</b>	36,614	38,875
<b>Persons</b>	79,013	84,823
<b>Adults</b>	19,169	20,908
<b>Children</b>	59,844	63,915

About 375,000 households received nutrition assistance (formerly called food stamps) in July 2009. This represents a 38% increase since July 2008. The increase from 2007 to 2008 was 20%; and the previous two years saw changes in the food stamp rolls of about +/- 0.4%.

National Assistance (Food Stamps)		
	July '08	July '09
<b>Households</b>	272,205	376,957
<b>Persons</b>	659,295	894,269

The number of persons receiving medical assistance has grown by 17% since July, 2008. The increase from 2007 to 2008 was 7% and the increase was less than 2% for each of the previous two years.

Medical Assistance Program		
	July '08	July '09
<b>Total Cases</b>	960,029	1,125,745

\*Arizona Department of Economic Security, Family Assistance Administration Statistical Bulletins, July 2008 and July 2009.

The current status and needs of the EC system have been presented in the previous section. All data available indicate that improvements are needed to increase support for families through high quality information on young children as well as economic stability. To optimally support its families and young children, the Arizona early childhood system needs to:

- Support availability of consistent, accurate information about resources, child development and health, early language and literacy, and parenting,
- Provide service coordination at the state and regional level, including a coordinated data system,
- Provide information about and access to needed financial supports,
- Support family access to safe recreational and community services,
- Provide higher needs families with access to targeted interventions and programs and a financial safety net when needed that is
  - Based on practice standards,
  - Delivered by well-trained, skilled professionals,
  - Responsive to the culture and value of the family.

### Arizona's family support assets

The following section presents current work to address the needs in Arizona's EC system. These efforts include: resource mapping, the Birth to Five Helpline, Arizona Parent Kits, support for home visiting programs. Coordination of family supports, focus on early literacy and native language enrichment, and community based trainings for parents, with a special focus on cultural responsive practices. These initiatives build on existing EC efforts. Additional information on Arizona's early learning assets is found in Appendix C.



**BREAKING TREND! Food Insecurity**

Demand for emergency food assistance is growing during these difficult economic times. Many food banks are reporting that an increasing number of middle income families are seeking food assistance for their families as the economy becomes increasingly unstable and job loss grows. The supply for such assistance is not keeping pace with the growing demand. In 2007, more than 1,250 food banks, pantries and other agencies provided first line defenses against hunger for Arizona's children, yet 36% of pantry programs reported lack of food as the most frequent reason for having to turn families away. According to the Arizona Association of Food banks, demand for emergency food boxes grew by over 40% in the last quarter of 2008 from the previous year. In Arizona, 19.2% of children ages five and under are food insecure, ranking 14th in country.<sup>105</sup>

At the same time that demand is increasing, emergency food resources appear to be static or declining. Arizona food banks are reporting decreases in corporate contributions, and \$62,251 was cut from the State FY 09 budget that is typically directed towards the purchase of food for these emergency food boxes. Currently, many food banks are placing quotas on the amount of food families are able to receive. Other food pantries and agencies, such as those operated by St. Vincent de Paul, have shortened their hours of operation due to insufficient amounts of food for those seeking assistance.

An expedited strategy was implemented to address the immediate and emergency need for food faced by families with children ages birth through five, providing funding for food boxes to be distributed to Arizona families.

FTF grantees in five Regional Partnership Council areas distributed about 17,000 food boxes, more than 100,000 pounds of food, between April and June 2009. In addition, more than 5,500 other items such as formula, diapers and infant foods were distributed.

<sup>105</sup> Association of Arizona Food Banks. (2009). *Hunger & Poverty in Arizona*. Retrieved August 30, 2009, from [http://www.azfoodbanks.org/?action=gjd\\_64](http://www.azfoodbanks.org/?action=gjd_64).

## Resource Mapping

In collaboration with Arizona State University and a consortium of the three Arizona universities, Geographic Information System mapping of Arizona's regions and neighborhoods will be available from a FTF Web site link. These maps will provide information on the location of a variety of resources, including quality early childhood learning settings, family resources, and FTF services.

## Parent Information Phone Lines

The Birth to Five Helpline is a toll-free helpline for parents, families and caregivers of children ages birth to five. The Helpline serves parents in all socioeconomic groups, with additional information that focuses on families at risk for abuse or neglect. The helpline is manned by early childhood development specialists. Callers can access support from psychologists, registered nurses, early literacy specialists, and occupational, speech/language and physical therapists on a variety of issues, including sleep and behavior problems, health, nutrition/feeding/eating, potty training, fussy babies, safety, and other child development questions.

The Helpline also connects with the Fussy Baby Program; an affiliate of the Fussy Baby Network at Chicago's Erickson Institute. This program provides phone and in some instances home visiting support for families with babies who cry excessively during their first months of life.

In the first quarter with FTF funding the helpline reported receiving 620 calls from callers in 22 Regional Partnership Council areas. Callers asked over 1500 questions about child development, fussy babies, health, resources, and other topics. A widespread campaign is underway to increase awareness of availability of the helpline across the state.

## Parent Kits

The Arizona Parent Kit is an adaptation of the California Parents Kit, developed and evaluated by the University of California, Berkeley, School of Public Health. Kit contents include: six videos/DVDs on prenatal care, child health and nutrition, child development, safety, quality child care, early literacy, and discipline; 80-page Arizona Parents Guide: a resource guide for families to accompany the videos/DVDs; and a board book for parents to read to their baby.

Through 2008, new parents received a kit free of charge during childbirth classes or upon discharge after childbirth at 21 of Maricopa County's 22 birthing hospitals through funding from the Virginia G Piper Charitable Trust. FTF is funding the kit's distribution in birthing hospitals outside of Maricopa County statewide beginning March 2009.

The Virginia G Piper Charitable Trust completed a study in January 2009. Data indicates that the Arizona Parent Kit influenced parents' behaviors and, in combination with findings of the Berkeley evaluation, yields convincing evidence that the Kit is an effective education and information tool for parents. National data "provides evidence for the effectiveness of the kit in diverse community contexts. Knowledge gains in this study compared favorably with results from other studies. The kit also affected important parenting practices."

For example,

- Parents were more likely to put babies to sleep on their backs to minimize the chances of Sudden Infant Death Syndrome,
- Increased the incidence and duration of breastfeeding,
- Increased the rate of reading to babies,
- Increased the amount of time adults played with their babies,
- Produced more appropriate methods of dealing with infant behavior,
- Increased the correct use of car seats.

## Home Visiting

Statewide and regional home visitation strategies will expand on existing, and develop new, home visiting programs that serve more Arizona families. The research literature suggests that the best home visiting programs have been able to help parents learn parenting skills, increase confidence in their parenting skills, promote appropriate parent-child interactions and increase linkages with community services including health and social services.<sup>106</sup> Home visiting has been shown to be highly effective with regard to promoting effective parenting in the area of preventing abuse and neglect.<sup>107</sup> The U.S. Department of Justice gives a high rating to early home visitation by nurses, other professionals, and trained paraprofessionals for preventing crime and its risk factors.<sup>108</sup> The Canadian Task Force on Preventive Health Care recommends early childhood home visitation programs for preventing child maltreatment in disadvantaged families.<sup>109</sup> Family support is the foundation for enhancing children's positive social and emotional development.<sup>110</sup> Parents and families need education and support to understand child development and health and to develop parenting skills as well as having access to resources to be the best parents possible.

Home visitation strategies include nurse home visiting and home visiting with parent kits, health support, insurance outreach, and literacy support.

Twenty-nine expedited home visitation programs served families in 18 Regional Partnership Council areas in May through July 2009. The programs served over 1,100 families including more than 1,000 infants and toddlers and about 300 three- to five-year old children.

<sup>106</sup> Barnard, K. (1998). Developing, implanting and documenting interventions with parents and young children. *Zero to Three*, 18(4) 23-29.

<sup>107</sup> Krugman, R.D. (1993). Universal home visiting: a recommendation from the U.S. Advisory Board on Child Abuse and Neglect. *Future Child*, 3:184-200.

<sup>108</sup> Sherman, L. W., Gottfredson, D.C., MacKenzie, D. L., Eck, J., Reuter, P., & Bushway, S.D. (1997). *Preventing crime: what works, what doesn't, what's promising. A report to the United States Congress* (NCJ 171676). Washington DC: U.S. Department of Justice, Office of Justice Programs.

<sup>109</sup> MacMillan, H. L., Feightner, J. W., & Goldbloom, R. (2000) Preventive Health Care, 2000 Update: Prevention of Child Maltreatment. *CAMJ*, 163(145), 1-8.

<sup>110</sup> Levison-Johnson, J., & Meeker, E. (2005, September). *Evidence-Based Parenting Education Programs: Literature Search: Coordinated Care Services, Inc.* Retrieved August 30, 2009, from <http://www.socialwork.buffalo.edu/ebp/strategies/documents/ParentingEducationLiteratureSearch.pdf>

## Coordinating Family Support

Several Regional Partnership Council strategies focus on coordinating family support agencies and services within the region. Programs set up family resource centers, as well as encourage the development of family support networks of service providers.

The purpose of coordination is to develop family support networks that provide the mechanism to coordinate a cross-system of family support, early childhood development, early care and education, health care, and parenting education programs to develop a comprehensive system of service, while reducing the frequency of service duplication.

## Early Literacy

Effective literacy development programs understand the parent's literacy history and strengths and reinforce their knowledge and skills as well as provide an opportunity for adults and children to reflect on literacy practices in their daily lives. Programs consider the family's socio-cultural context, including children's experiences with the world which greatly influences their ability to comprehend what they read.

Regional Partnership Council Early literacy strategies are in place to expand the capacity of existing early language and literacy programs, or create new early literacy, language, and child development programs to provide literacy development supports and services to young children and their families where they spend time, such as their homes, child care centers, public spaces, doctors offices, libraries, etc.

The programs are delivered in two models. The "in-home" model provides comprehensive language acquisition activities to young children and their parents/caregivers in a home setting. The "in-community" model provides literacy support community settings – such as libraries, child care centers, family child care homes, community centers, medical settings, etc.

FTF is funding expansion of Reach Out and Read Arizona (RORAZ), a program that trains, and provides books for, physicians and other practitioners to distribute to young children at well-child visits.

Between May and July 2009, RORAZ distributed books, recruited and trained in six Regional Partnership Council areas. They additionally recruited practitioners in new participating offices or clinics. The program distributed over 4,500 books to physician/practitioners' offices to be disseminated to about 4,500 children across five Regional Partnership Council areas.

### ***Native language enrichment***

*Unlike “world” languages, such as Spanish, Indigenous languages have no external pool of speakers to replace dwindling speech communities; the loss of an Indigenous language is terminal. Because language is the primary medium through which social, communal, and governance relationships are constructed, the loss of a heritage language negatively impacts those relationships as well.”<sup>111</sup>*

Regional Partnership Council strategies are in place to support and expand native language enrichment programs for children ages five and under and their families. These strategies enhance existing early literacy and language development curriculum to incorporate native language and train teaching staff in the implementation of an evidence-based early language and literacy program that is culturally rooted.



<sup>111</sup> Eunice, M., McCarty, Teresa, L., & Little, R. (2006). *Language Planning Challenges and Prospects in Native American Communities and Schools*. Retrieved August 30, 2009, from Arizona State University, Education Policy Research Unit and Language Policy Research Unit Web site: <http://epicpolicy.org/publication/language-planning-challenges-and-prospects-native-american-communities-and-schools>

## Community Based Trainings

Successful family education programs help parents acquire and internalize parenting and problem-solving skills necessary to build a healthy family. Effective parent education increases knowledge of parenting and of child development, develops nurturing and attachment, parental resilience, and social connections and support for parents. Research suggests that improving fundamental parenting practices reduces the likelihood of problem behaviors in children. It has been shown that parent-child relationships can be enhanced through parent training and family strengthening programs.

A number of FTF's Regional Partnership Council strategies expand or establish community-based family education programs that use a family-centered and strengths-based approach. These trainings address parenting practices and early development and growth.

Some programs target populations with specific needs such as low-income families, single parents, teen parents, first time parents, families with children with developmental delays or disabilities, families struggling with substance abuse, domestic violence or mental health issues, relatives raising children, or underserved geographic areas.

In response to the economic crisis, funding was provided for expedited Community Based Training programs. Between May and July 2009, 77 Community Based Training sessions for teen parents were provided in three Regional Partnership Councils in Pima County. The sessions covered topics in childbirth education and parenting.

## Culturally-based Community Strategies

This strategy assists in strengthening families through community trainings in the use of culturally-centered child rearing practices for parents with young children, birth through five. Research shows that differential concepts of family structure and identity exist between various ethnic groups and mainstream America.<sup>112</sup> This is especially true in the case of Native American Tribes. For example, child care on some Native American reservations may be based on a traditional sense of community responsibility, rather than individual family responsibility for children.

Family support programs that are not familiar with native cultures may readily apply their own assumptions about family structure and responsibility and, in so doing, may fail to recognize the strengths that are engendered when there is a broader assumption of community responsibility for children. The strategy provides parent education using a curriculum within the context of Native American values.

<sup>112</sup> Algea O. Harrison, Melvin N. Wilson, Charles J. Pine, Samuel Q. Chan and Raymond Buriel *Child Development*, Vol. 61, No. 2, Special Issue on Minority Children (Apr., 1990), pp. 347-362



# Health



Healthy children are ready to learn; ready to engage in the developmental tasks of early childhood and to achieve the physical, cognitive, and social-emotional well-being necessary for success in school and life.

A system which promotes children's optimal healthy development is one that recognizes that health maintenance is a lifelong process that begins prenatally and follows individuals throughout their growth and development.

In a comprehensive early childhood system:

- There is an adequate number of well-trained dental, medical and behavioral health care professionals in all geographic locations.
- User-friendly, accurate information about health is available to parents, providers and caregivers.
- All expectant mothers, newborns and young children and their parents/guardians have adequate and accessible medical, dental, and behavioral services.
- Early and regular screening is included in all well-child care.
- All children have access to accurate and effective screening, referral, and necessary services.
- Families with more intensive needs have ready access to developmental, medical, and behavioral screening and services.



Currently in Arizona:

- There is limited information about the health issues of children five and under.
- There is little support to expand educational and training for health professionals specializing in the issues of early childhood.
- In some areas there is limited access to prenatal services.
- There are unclear eligibility requirements for available services.
- Behavioral health has limited behavioral health services for children five and under.
- There is a lack of health care providers in remote and rural communities.
- There is a large percentage of under- and un-insured young children and families.
- There is an insufficient number of professionals who treat children with special needs.
- Much of the workforce lacks the expertise to treat children five and under.
- There is a lack of coordination of services and little use of the medical or dental home model.
- There is poor understanding of the importance of early regular screening .



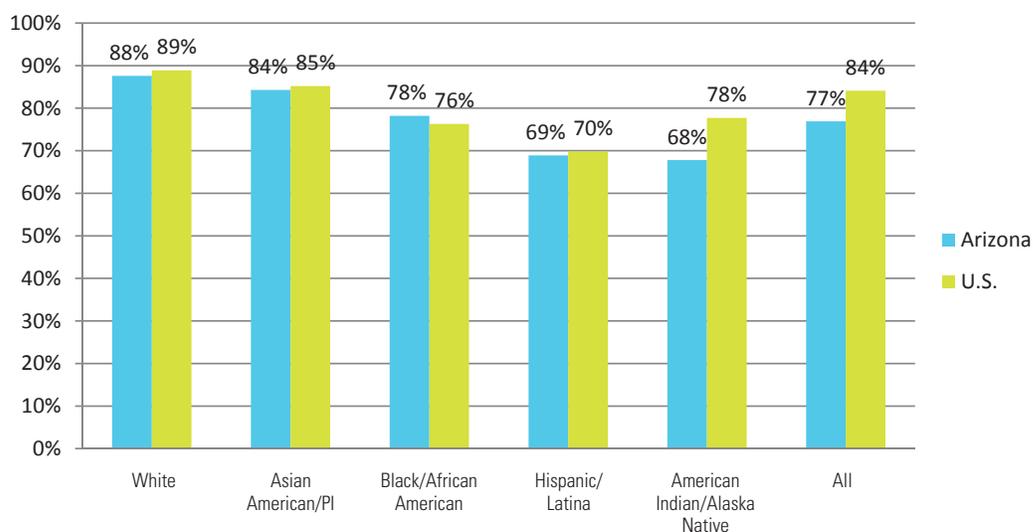
### Prenatal Care

Maternal health before and during pregnancy profoundly impacts the health and well-being of a child. Thus, achieving optimal child health is dependent upon optimizing the health and well-being of a child's mother during pregnancy. Adequate prenatal care contributes to the birth of a healthy child.

The importance of early and continuous prenatal care for Arizona women cannot be overstated. Within an integrated health care system, expectant mothers receive ongoing, regular prenatal care to support safe, healthy pregnancies. Women who do not receive early and continuing prenatal care have twice the risk of delivering a premature baby and are three times more likely to deliver a baby with a low birth weight (5.5 pounds or less).<sup>113</sup> Infants with low birth weight or who are born prematurely are at greater risk for physical and developmental challenges than full-term infants and babies of normal weight. Premature and low birth weight children are 50% more likely to be identified as in need of special education and to be a grade behind their age-appropriate academic level.<sup>114</sup>

The percentage of women in Arizona obtaining prenatal care in the first trimester has increased from 75% in 2000 to 79% in 2008. However, a smaller percentage of Arizona mothers access early prenatal care than the national average. In 2003-05, 77% of pregnant women in Arizona received prenatal care in the first trimester, compared to 84% nationally. Certain subgroups of women are at higher risk. Hispanic/Latina (69%) and Native American women (68%) are the least likely to receive early prenatal care in Arizona.<sup>115</sup>

Figure 9: Percentage of U.S. and Arizona women receiving prenatal care in the first trimester: 2003-2005



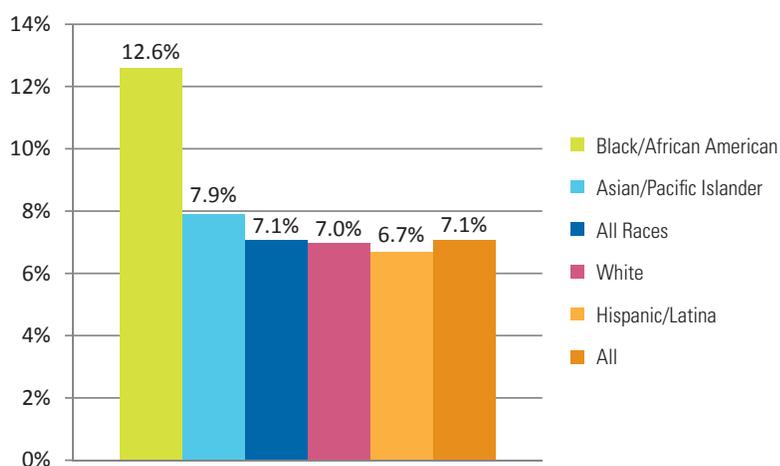
<sup>113</sup> U.S. Department of Health and Human Services, Health Resources and Services Administration and Services Administration, Maternal and Child Health Bureau. (2009). *A Healthy Start: Begin Before Baby's Born*. Retrieved August 30, 2009, from <http://www.mchb.hrsa.gov/programs/womeninfants/prenatal.htm>.

<sup>114</sup> U.S. Department of Health and Human Services, Health Resources and Services Administration and Services Administration, Maternal and Child Health, Bureau. (2009). *A Healthy Start: Begin Before Baby's Born*. Retrieved August 30, 2009, from <http://www.mchb.hrsa.gov/programs/womeninfants/prenatal.htm>.

<sup>115</sup> Center for Disease Control and Prevention (2009). *Vital Statistics System, Birth File United States*. Retrieved August 30, 2009, from <http://www.cdc.gov/hchs/>

A higher percentage of African American women (13%) have low birth weight babies (<2500 grams) compared to the overall percentage of about 7%.<sup>116</sup>

Figure 10: Percent of low birth weight births (LBWB) by ethnicity: 2004-2006



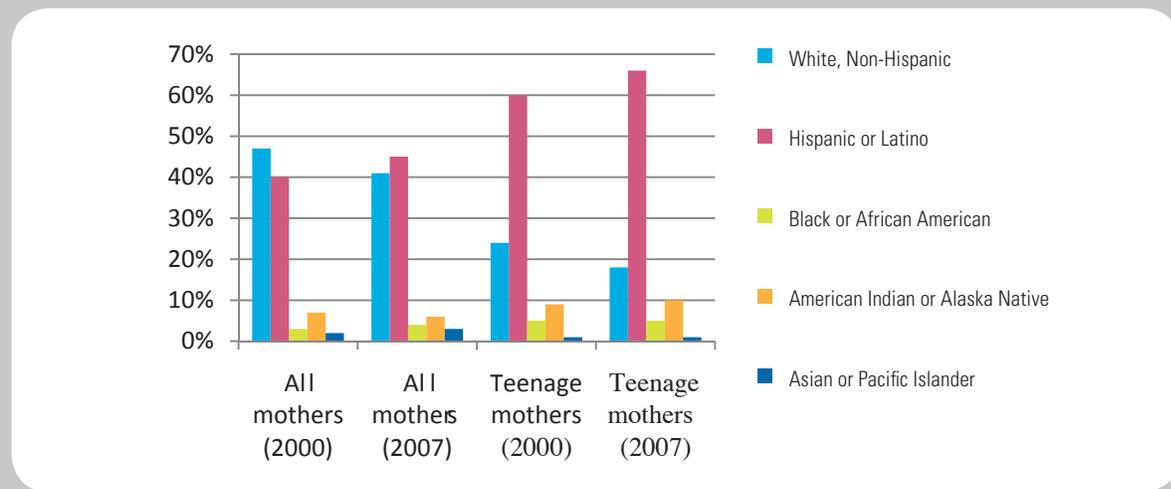
These findings indicate that early and continuous prenatal care and its relation to prematurity and low birth weight continue to be of concern in Arizona; and certain subgroups of women are at higher risk.

<sup>116</sup> Center for Disease Control and Prevention (2009). *Vital Statistics System, Birth File United States*. Retrieved August 30, 2009, from <http://www.cdc.gov/hchs/>

## Births

The total number of births in Arizona has increased over the years, doubling from 50,049 in 1980 to 102,687 in 2007.<sup>117</sup> In 2007, births to Hispanic mothers accounted for 45% of total births, a 5% increase from 2000; and the percentage of White, Non-Hispanic mothers was 41%, down from 47% in 2000. The proportion of teen births to Hispanic/Latina mothers increased by 6% to 66% in 2007.<sup>118</sup>

Figure 11: Births and teen births by race/ethnicity in Arizona: 2000 and 2007



## Health Insurance Coverage and Utilization

Children without health insurance are much less likely to receive needed medical care. In 2003, an analysis of children under 18 without health insurance found that one-third of uninsured children had no medical care at all during the year, although almost 88% of insured children did receive care.<sup>119</sup> In fact, children without insurance are 10 times more likely to not get needed care.<sup>120</sup> In 2003 Arizona had the largest percentage (47%) of uninsured children not receiving any medical care all year.<sup>121</sup> In 2007, about 11% of Arizona children birth through five had no health insurance, down a little from about 14% in 2002.

<sup>117</sup> Arizona Department of Health Services. (2009). *Birth Statistics*. Retrieved August 30, 2009, from <http://www.azdhs.gov/plan/menu/for/births.htm>

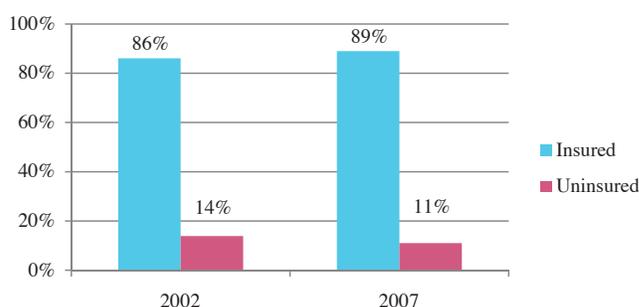
<sup>118</sup> Arizona Department of Health Services. (2009). *Birth Statistics*. Retrieved August 30, 2009, from <http://www.azdhs.gov/plan/menu/for/births.htm>

<sup>119</sup> *Going without: America's uninsured children*. Prepared for the Robert Wood Johnson Foundation by the State Health Access Data Assistance Center (SHADAC) and the Urban Institute using data from the U.S. Centers for Disease Control and Prevention's National Center for Health Statistics and the U.S. Census Bureau's Current Population Survey (CPS). Retrieved August 30, 2009, from <http://www.rwjf.org/files/newsroom/ckfresearchreportfinal.pdf>

<sup>120</sup> *Going without: America's Uninsured Children*. Prepared for the Robert Wood Johnson Foundation by the State Health Access Data Assistance Center (SHADAC) and the Urban Institute using data from the U.S. Centers for Disease Control and Prevention's National Center for Health Statistics and the U.S. Census Bureau's Current Population Survey (CPS). Retrieved August 30, 2009, from <http://www.rwjf.org/files/newsroom/ckfresearchreportfinal.pdf>

<sup>121</sup> *Going without: America's Uninsured Children*. Prepared for the Robert Wood Johnson Foundation by the State Health Access Data Assistance Center (SHADAC) and the Urban Institute using data from the U.S. Centers for Disease Control and Prevention's National Center for Health Statistics and the U.S. Census Bureau's Current Population Survey (CPS). Retrieved August 30, 2009, from <http://www.rwjf.org/files/newsroom/ckfresearchreportfinal.pdf>

Figure 12: Percentage of Arizona children birth through five without health insurance



### Oral Health

Tooth decay is one of the most common health issues affecting young children.<sup>122</sup> Appropriate health care for young children also includes timely dental health care. Regular dental visits, starting at age one, promote healthy development of the teeth and mouth, which in turn helps prevent later dental disease to permanent teeth or some developmental conditions such as speech delays. The relatively large percentage of young children in elementary school with tooth decay or other oral health problems indicates that Arizona's children need earlier dental exams and treatment. Almost half of the children in kindergarten have some decay experience, and about one-third have untreated decay. Nearly one-tenth is in need of urgent dental treatment.<sup>123</sup>

Table 8: Kindergarten children needing dental treatment

% with decay experience	50%
% with untreated decay	35%
<i>need non-urgent dental treatment</i>	28%
<i>need urgent dental treatment</i>	7%
% with dental sealants	2%
<i>% needing dental sealants</i>	28%

<sup>122</sup> Arizona Department of Health Services, Office of Oral Health: 2005. *The Oral Health of Arizona's Children: Current Status, Trends and Disparities*. Retrieved August 30, 2009, from [http://www.azdhs.gov/cfhs/ooH/pdf/OOH\\_AZSchoolChildrenReport-pagebypage.pdf](http://www.azdhs.gov/cfhs/ooH/pdf/OOH_AZSchoolChildrenReport-pagebypage.pdf)

<sup>123</sup> Arizona Department of Health Services, Office of Oral Health: 2005. *The Oral Health of Arizona's Children: Current Status, Trends and Disparities*. Retrieved August 30, 2009, from [http://www.azdhs.gov/cfhs/ooH/pdf/OOH\\_AZSchoolChildrenReport-pagebypage.pdf](http://www.azdhs.gov/cfhs/ooH/pdf/OOH_AZSchoolChildrenReport-pagebypage.pdf)

The American Academy of Pediatric Dentistry recommends regular dental visits beginning at one year of age. However, only about half of kindergarten aged children have had a dental visit in the past year. This percentage is much less if the children do not have dental insurance. In 2005, less than one-fourth of kindergarten children without dental insurance had seen a dentist, whereas about one-third of children with government insurance (AHCCCS or KidsCare) and a little less than half of children with private insurance had timely dentist visits.<sup>124</sup>

**Table 9: Percentage of children receiving appropriate and timely oral health visits by dental insurance**<sup>125</sup>

Dental Care	Percent of Kindergarten Children (n = 3289)
Dental Insurance	
<i>% with no insurance</i>	23.9%
<i>% with "government" insurance</i>	33.9%
<i>% with private insurance</i>	42.1%

## Early Screening and Intervention

Developmental and health screenings for the early identification of possible physical or developmental concerns is a key indicator of quality and comprehensive health care. When risks to children's health and development are identified early, children have a greater potential for enhanced growth and development. Health concerns and learning delays can be reduced when risk factors are addressed during a child's earliest years. Children with disabilities who receive early intervention services show developmental improvement after only one year. After receiving services, many infants and toddlers reach milestones in motor skills, self-help, communication and cognition. Families also report feeling better able to help their children learn and cope.<sup>126</sup>

<sup>124</sup> Arizona Department of Health Services, Office of Oral Health: 2005. *The Oral Health of Arizona's Children: Current Status, Trends and Disparities*. Retrieved August 30, 2009, from [http://www.azdhs.gov/cfhs/ooh/pdf/DOH\\_AZSchoolChildrenReport-pagebypage.pdf](http://www.azdhs.gov/cfhs/ooh/pdf/DOH_AZSchoolChildrenReport-pagebypage.pdf)

<sup>125</sup> Arizona Department of Health Services, Office of Oral Health: 2005. *The Oral Health of Arizona's Children: Current Status, Trends and Disparities*. Retrieved August 30, 2009, from [http://www.azdhs.gov/cfhs/ooh/pdf/DOH\\_AZSchoolChildrenReport-pagebypage.pdf](http://www.azdhs.gov/cfhs/ooh/pdf/DOH_AZSchoolChildrenReport-pagebypage.pdf)

<sup>126</sup> U.S. Department of Education. (2002). *Twenty-fourth Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act*. Retrieved August 30, 2009, from <http://www.ed.gov/about/reports/annual/osep/2002/toc-execsum.pdf>

Children with special developmental or health delays who do not receive needed care and support are extremely vulnerable to poor growth outcomes. Early treatment of children's special health needs is of utmost importance in preventing possible negative and lasting effects. Assuring their children receive intervention services early is difficult for Arizona parents, particularly in rural areas. There are a variety of challenges that families face.

Currently, Arizona (1.8%) falls below the national average (2.4%) in the percentage of children two and under that are served by early intervention programs.

Table 10: Percentage of population of young children served by early intervention programs

	% of population birth through two served: 2006	% of population under one served: 2006
U.S.	2.43%	1.01%
Arizona	1.81%	0.60%

Children who would benefit from early intervention may not receive services for a number of reasons. Children in Arizona may not receive the benefit of early screening, may lack insurance coverage, or may lack access to available therapists or other intervention professionals in their communities. Compared with other states in the nation, Arizona has a narrow definition of eligibility for early intervention services for children birth to three. This means that Arizona children may not have a delay that is severe enough, at the time of screening, to qualify for early intervention services (such as the Arizona Early Intervention Program (AzEIP)). As a result, children may not receive intervention services until their developmental delays become much greater.

Table 11: Number and percentage of children, age birth to three years old, referred and found eligible in 2006

Number of Children Referred	Number of Referred Children that Are Eligible	Percent of Referred Children that Are Eligible
11,093	3,800	34%

### Availability of Service Providers

Regardless of insurance benefits, children in Arizona have limited options for services, especially if they have special health care or social-emotional needs. Families must often travel great distances to obtain services for their child with special health care needs. There are not enough doctors or therapists in Arizona to serve the vast majority of communities, and the problem is not necessarily unique to rural areas of the state.

Arizona has many areas in which health, dental, or mental health providers are sparse. The federal Health Professional Shortage Area (HPSA) designation identifies areas or populations that have a shortage of dental, mental, and primary health care providers. Arizona has 62 areas and 55 facilities that have had been designated as Primary Care Shortage areas (as of March, 2009). In addition, there are 33 Dental HPSAs and four Mental HPSAs in Arizona.

Appendix C includes maps of Arizona's Medically Underserved Areas, Primary Care Shortage Areas, Dental HPSAs, and Mental HPSAs.



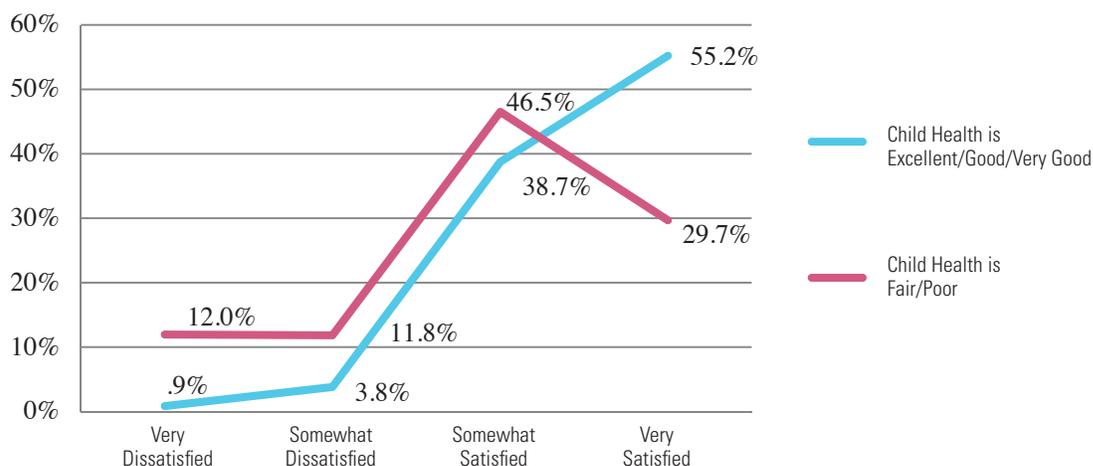
### Parents' Perceptions of Available Services

To what degree do the families of young children experience challenges from limited service options? The First Things First Family and Community Survey asked parents and caregivers of children five and under about the quality and availability of needed services. The survey additionally asked parents about their child's health status in comparison to other children the same age. Analyses of these data indicated that parents with children whose health is less than optimal (the child's health is fair or poor) encounter challenges in accessing appropriate services compared to parents whose children's health is excellent, very good, or good.

#### Availability of information and resources

When asked how satisfied they are with the availability of information and resources about their child's development, parents with children with poorer health reported less satisfaction.

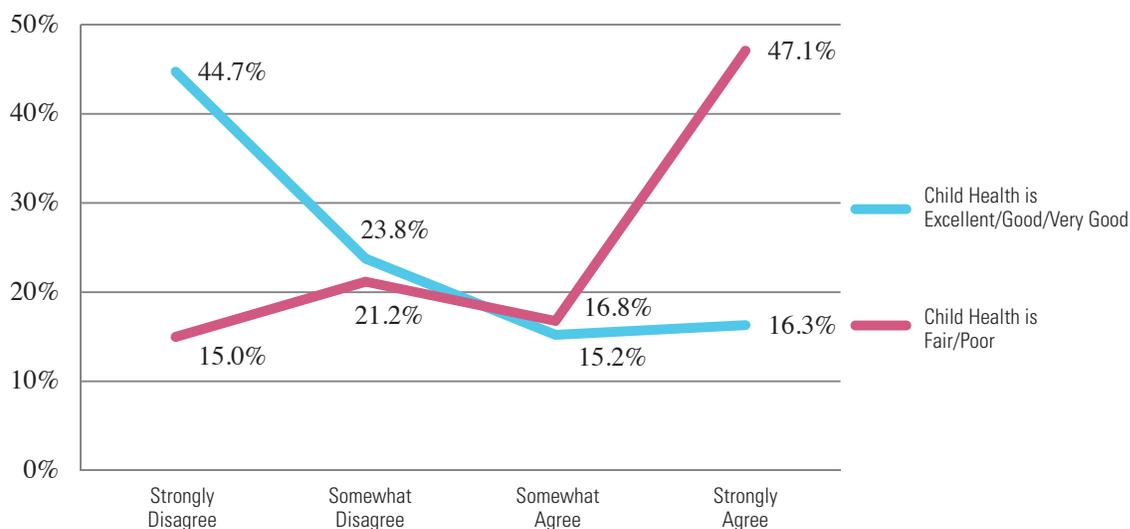
Figure 13: Satisfaction with information and resources by child health



**Availability of preventative services**

Parents who had children with less than optimal health also reported that preventive services were often not available; that they can only obtain services after problems become severe.

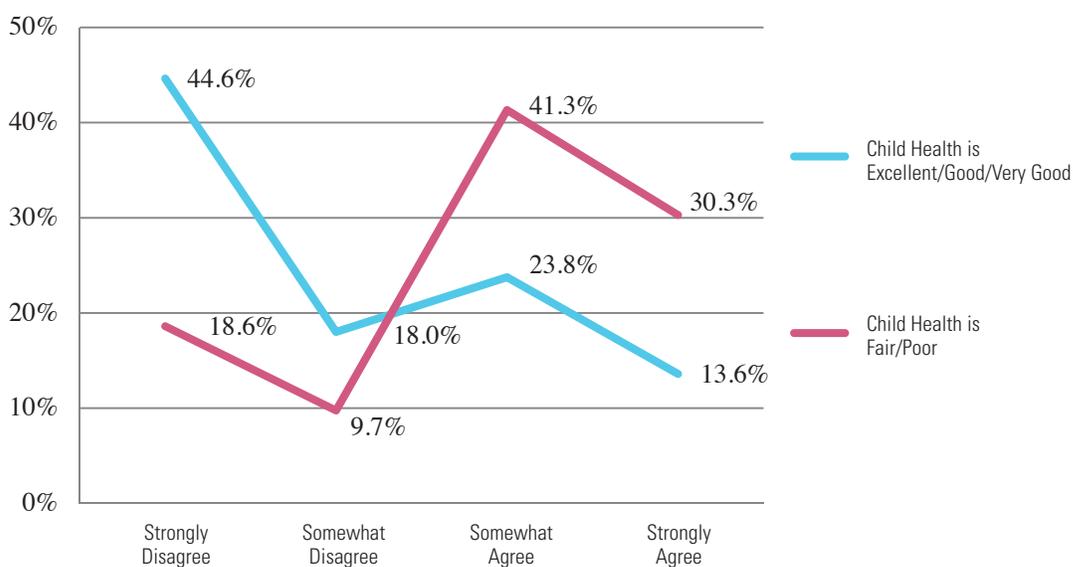
Figure 14: Help is available only after problems become severe



*Family focus of services*

Parents of children with health issues also were more likely to indicate that services fill some needs, but do not meet the needs of their whole family.

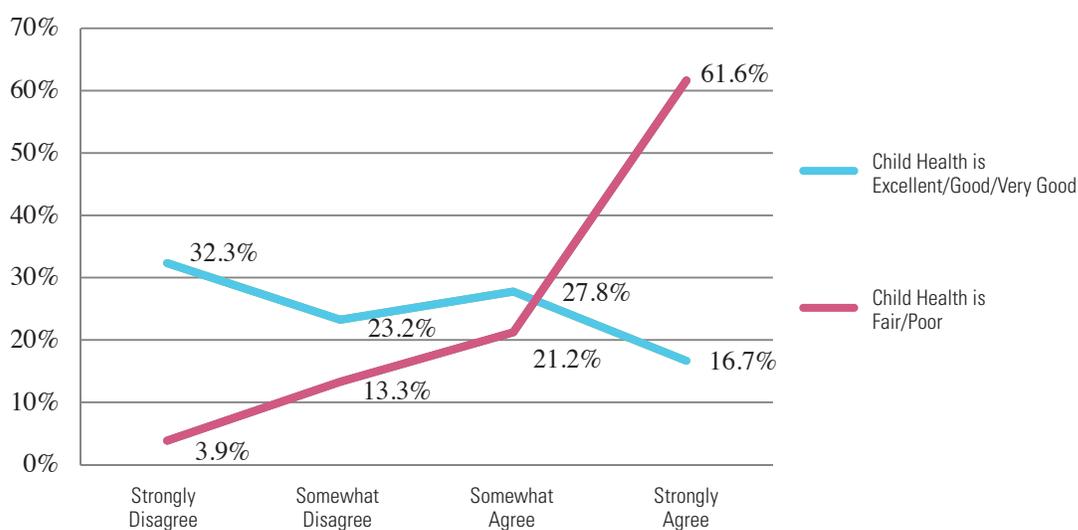
Figure 15: Help is available only after problems become severe



**Accessibility of services**

A large percentage of parents whose children's health is less than optimal also noted that the times and locations of services were not convenient.

Figure 16: Services are not at convenient times or locations



A system which promotes children's healthy development is one that recognizes that health maintenance is a lifelong process that begins prenatally and follows individuals throughout their growth and development.

In an integrated health care system, expectant mothers receive ongoing, regular prenatal care to support safe, healthy pregnancies. In addition, children's access to ongoing and high-quality preventive, primary, and comprehensive health services strongly supports their healthy development. Finally, high-quality and comprehensive health care includes developmental and health screenings for the early identification of possible physical or developmental concerns.

To optimally support its young children the Arizona early childhood system needs to:

- Support availability of a consistent statewide referral and information network,
- Have trained health professionals with information specific to children five and under,
- Provide information about, and enrollment support for, health insurance coverage of all children and families, including AHC-CCS (Medicaid) and KidsCare (SCHIIP),
- Have a comprehensive, accessible state health information system,
- Ensure regular screening and referral of all children age five and under,
- Have adequate numbers of providers serving children with special needs in all geographical areas.

### Arizona's Health and Early Intervention Assets

The following section presents current work to address the needs in Arizona's EC system. These efforts include: oral health programs, developmental and sensory screening, child care health consultation and coaching, prenatal outreach and education, nutrition/obesity/physical education programs, injury prevention programs, and health insurance outreach. These initiatives build on existing EC efforts. Additional information on Arizona's health assets is found in Appendix C.

## Oral Health

Tooth decay is the single most common chronic infectious disease of childhood; five times more common than asthma. Low-income and minority children have more untreated decay and visit the dentist less frequently.

A number of regional oral health strategies will implement dental health education and practice with young children and their families to:

- Provide outreach for health insurance enrollment to parents and expectant mothers,
- Provide oral health education opportunities to parents, children and expectant mothers,
- Increase delivery of oral health screenings; apply fluoride (varnish), where applicable; and refer families for oral health care,
- Educate child care providers/educators on how to talk to parents on the importance of oral health care and how to explain what preventative oral health care includes, as appropriate,
- Encourage child care providers/educators to make appropriate referrals for improved oral health.

## Developmental & Sensory Screening

Children's healthy development benefits from comprehensive developmental screenings, including screening and early identification of delays or issues that can negatively affect milestones such as vision, hearing, oral health, healthy physical development, and social-emotional health.

Regional Partnership Council strategies will implement, expand, and/or enhance screening efforts aimed at identifying potential delays among children ages birth to five so that appropriate follow up assessments, diagnosis, and treatment can occur. Screening efforts will be expanded to a variety of venues, including childcare, community, and home-visiting settings.

While developmental, vision, and hearing screenings are optimally conducted in a medical home, this is not always possible. Many children and families lack a medical home or a primary care provider. Children and families may lack health coverage, or face other barriers that prevent children from receiving screenings within a medical setting. Understanding the barriers that prevent a child from receiving screenings within a medical home setting, the National Institutes of Health recommends that screenings should occur across a variety of settings, including (but not limited to) childcare settings, community health and care fairs, community-based programs, and homes (as part of home visiting programs).

### Child Care Health Consultation/Coaching

Statewide and regional strategies are providing Child Care Health Consultants (CCHC) to centers enrolled in Quality First, and other childcare sites. The consultants will provide an initial review of health and safety of the environment and the health and safety policies within the center. Based on that review, the consultant and the center will develop a plan for addressing any concerns or staff training needs identified. CCHCs will also be available to provide assistance to centers that are serving children with special health care needs and to assist with emergency health and safety concerns related to illness or disease within the center.

The CCHCs will help child care providers identify health professionals and/or health resources in the community that can provide needed treatment for individual children. The CCHCs will serve as a link to the community and will help assure that appropriate referrals are made to address the needs of specific children.



## Prenatal (Outreach/Education)

Adequate use of prenatal care has been associated with improved birth weights and reduced risk of preterm delivery. Inadequate use of prenatal care has been associated with increased risk of low birth weight births, premature births, neonatal mortality, infant mortality, and maternal mortality. Moreover, the beneficial effects of prenatal care may be strongest among socially disadvantaged women.<sup>127</sup>

A number of barriers to the use of prenatal care have been identified, including: availability and ease of enrollment in health coverage; adequacy of advertising on the availability of Medicaid; availability of child care for pregnant women with children; language and cultural incompatibility between providers and clients; poor communication between clients and providers, exacerbated by short interactions with providers; and limited information on exactly where to get care (phone numbers and addresses). Attitudinal and personal factors also affect access to prenatal care. These factors include a lack of social supports; fear that certain health habits will be discovered or criticized (such as drugs or alcohol abuse, smoking, etc); unplanned or unwanted pregnancy; lack of understanding of value of prenatal care; fear of deportation or immigration involvement; and, for young women, fear of parental discovery.<sup>128</sup>

Regional strategies will provide information, outreach, and education supporting early and continuing prenatal care by establishing or expanding pre/post-natal outreach, support and information programs that:

- Increase access to, and awareness of, the importance of early prenatal care for pregnant women and women of child bearing age (including teenagers),
- Provide culturally appropriate support and information to at risk pregnant women, facilitating their access to prenatal care,
- Reduce unhealthy behaviors such as smoking, alcohol use during pregnancy and encourage healthy behaviors,
- Provide information through a home visiting program using nurses or paraprofessionals such as promotoras or lay health workers,
- Encourage and facilitate enrollment in public health insurance coverage for low-income pregnant women.

<sup>127</sup> Center for Disease Control and Prevention. (2001). *Strategies to Reduce Pregnancy-Related Deaths: From Identification and Review to Action*. Retrieved August 30, 2009, from [http://www.cdc.gov/reproductivehealth/ProductsPubs/PDFs/Strategies\\_tagged.pdf](http://www.cdc.gov/reproductivehealth/ProductsPubs/PDFs/Strategies_tagged.pdf)

<sup>128</sup> Center for Disease Control and Prevention. (2001). *Strategies to Reduce Pregnancy-Related Deaths: From Identification and Review to Action*. Retrieved August 30, 2009, from [http://www.cdc.gov/reproductivehealth/ProductsPubs/PDFs/Strategies\\_tagged.pdf](http://www.cdc.gov/reproductivehealth/ProductsPubs/PDFs/Strategies_tagged.pdf)

## Nutrition/Obesity/Physical Activity

Childhood obesity has become a serious problem in Arizona. About 14%<sup>129</sup> of two to four year old and about 31% of 10 to 17 year old<sup>130</sup> Arizona children are overweight or obese. Thirty percent (30%) of children two to five years old receiving WIC services were classified as at-risk for overweight or obesity.<sup>131</sup> Obesity in children has been directly linked to many serious health problems including Type 2 diabetes, metabolic syndrome, high blood pressure, and asthma.

Children from lower income families are at higher risk of being overweight or obese. Over one-third of families living under the FPL were likely to be overweight, compared to about one-fifth (19.1%) of families with an income at least three times the federal poverty level. Almost one-half (43%) of Arizonan children on public insurance compared to about one-fourth (23%) of children with private insurance were overweight or obese. Overall, Arizona ranked 25th of 50 states for the percentage of overweight or obese children in 2003.<sup>132</sup>

FTF Regional Partnership Council strategies will be implemented to:

- Develop and disseminate information to parents regarding appropriate nutrition and/or physical activity for infants and young children ages birth through five.
- Implement programs in early care and education-based settings aimed at promoting appropriate nutrition and/or physical activity for young children.



<sup>129</sup> Obesity Prevalence Among Low-Income, Preschool-Aged Children, United States, 1998–2008. *MMWR Weekly*, 58(28):769-773, July 42, 2009. Retrieved August 30, 2009, from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5828a1.htm>

<sup>130</sup> The Kaiser Family Foundation, [statehealthfacts.org](http://statehealthfacts.org). Data Source: *Child and Adolescent Health Measurement Initiative*. 2007 National Survey of Children's Health, Data Resource Center for Child and Adolescent Health website. Retrieved July 9, 2009, from [www.nschdata.org](http://www.nschdata.org).

<sup>131</sup> Arizona Department of Health Services. (2008). *Obesity and Overweight in Arizona: Fact Sheet*. Retrieved August 30, 2009, from [http://www.azdhs.gov/phs/owch/pdf/overwt\\_obesity\\_08.pdf](http://www.azdhs.gov/phs/owch/pdf/overwt_obesity_08.pdf)

<sup>132</sup> NCHS Health and E-stats (2006). *Prevalence of Overweight Among Children and Adolescents: United States, 2003-2004*. Retrieved August 30, 2009, from [http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overweight/overwght\\_child\\_03.htm](http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overweight/overwght_child_03.htm)

## Injury Prevention

Unintentional childhood injuries are a leading cause of death for Arizona's children. Sixty-six percent of preventable child deaths in Arizona in 2003 were due to unintentional injury (accidents), according to the Child Fatality Review Board. Between 2004 and 2007, there were about 184,000 nonfatal unintentional injuries resulting in visits to emergency departments or inpatient hospitalizations among children birth to five years old.<sup>133</sup>

One in five children who died in motor vehicle accidents in 2003 were using a restraint and almost half were sitting in the right front passenger seat. Over 10% of Arizona's children ride unrestrained and more than 80% of child safety seats are installed, placed, or used incorrectly. Twenty-five children (most between one and four years of age) died of preventable drowning accidents. While children ages one through four make up only 6% of the population in Arizona, they accounted for 15% of hospitalizations and 17% of emergency department visits due to fire/burn-related injuries in 2003. In 2006, there were 90 unexpected infant deaths in Arizona, which accounted for eight percent of all child deaths, 23 were caused by suffocation and 28 deaths were identified as SIDS. In 90% of unexpected infant deaths, an unsafe sleeping environment was identified as a contributing preventable factor, and an unsafe sleeping position was a factor in 50% of unexpected infant deaths.<sup>134</sup>

FTF Regional Partnership Council injury prevention strategies will provide education and support through educational activities and information provided at a variety of venues including child care and community centers, and as an integral part of community educational and home visiting strategies.



<sup>133</sup> Arizona Department of Health Services. (2009). *Arizona Child Fatality Review Program: Thirteenth Annual Report November 2006*. Retrieved August 30, 2009, from <http://www.azdhs.gov/phs/owch/pdf/cfr2006.pdf>

<sup>134</sup> Arizona Department of Health Services. (2009). *Arizona Child Fatality Review Program: Thirteenth Annual Report November 2006*. Retrieved August 30, 2009, from <http://www.azdhs.gov/phs/owch/pdf/cfr2006.pdf>

## Health Insurance Outreach

Research has shown that children without medical insurance have a difficult time obtaining primary and specialty care. They are more likely to be sick as newborns, less likely to be immunized as preschoolers, and less likely to receive medical treatment for injuries. Undiagnosed and untreated medical conditions can result in long-term health and learning problems. Families without health insurance experience high out of pocket cost when their children lack coverage. Lack of health insurance can threaten families' economic security.<sup>135</sup>



According to a 2007 report from St. Luke's Health Initiatives, outreach efforts for publicly funded health insurance can be effective in covering more children in health coverage. Successful efforts include public awareness campaigns, outreach and enrollment assistance by trusted, health or social service oriented community-based organizations. Application assistance and follow up are integral parts of such efforts.<sup>136</sup>

Health insurance outreach will promote enrollment in public health insurance such as AHCCCS or Kids Care through educational activities, parent education at child care, medical, and WIC facilities, and as an integral part of community educational and home visiting strategies.

<sup>135</sup> Ku, L., Lin, M., Broaddus, M. (2007). *Improving children's health: A chartbook about the roles of Medicaid and SCHIP*. Center on Budget and Policy Priorities. Retrieved August 30, 2009, from <http://www.cbpp.org/schip-chartbook.htm>

<sup>136</sup> St. Joseph's Hospital and Medical Center Service Area. *2007-2008 Community Health Needs Assessment for St. Joseph's Hospital and Medical Center Service Area*. Retrieved August 30, 2009, from [http://www.stjosephs-phx.org/stellent/groups/public/@xinternet\\_con\\_sjh/documents/webcontent/195544.pdf](http://www.stjosephs-phx.org/stellent/groups/public/@xinternet_con_sjh/documents/webcontent/195544.pdf)



# Appendix A

Demographic Overview

## Population Trends

Arizona is one of the fastest growing states in the nation. In fact, Maricopa County has led the nation's counties in growth since 2000.<sup>1</sup> Arizona's population, and the number of young children five and under, is increasing at a much greater rate than in the U.S. as a whole, and is already exceeding previously projected population estimates for the year 2010.

Figure 17: Population growth: All ages <sup>2</sup>

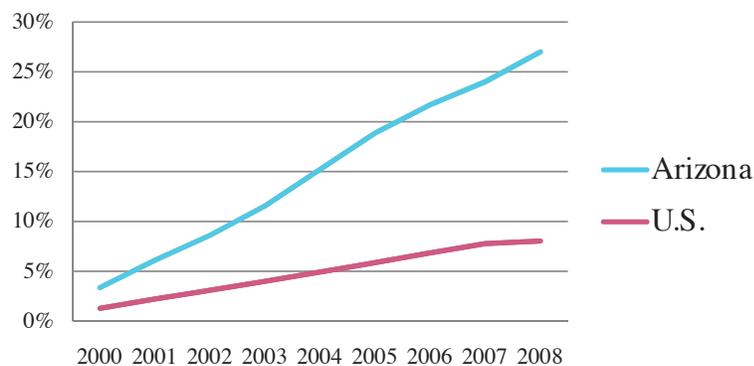
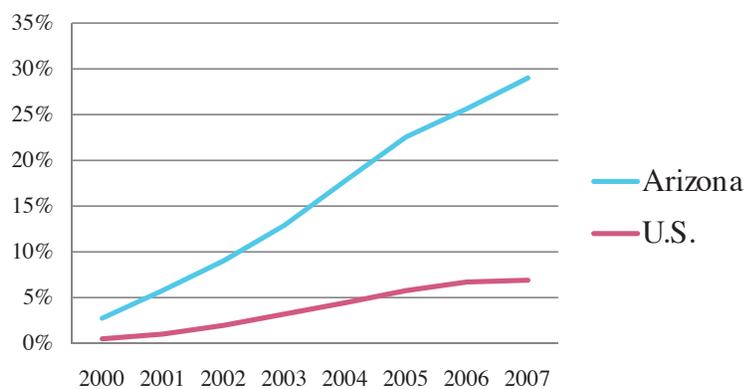


Figure 18: Population growth: Children five and under <sup>3</sup>



<sup>1</sup> Table 7. Projected Change in Population Size by Race and Hispanic Origin for the United States: 2000 to 2050 (NP2008-T7). Source: Population Division, U.S. Census Bureau. Release Date: August 14, 2008.

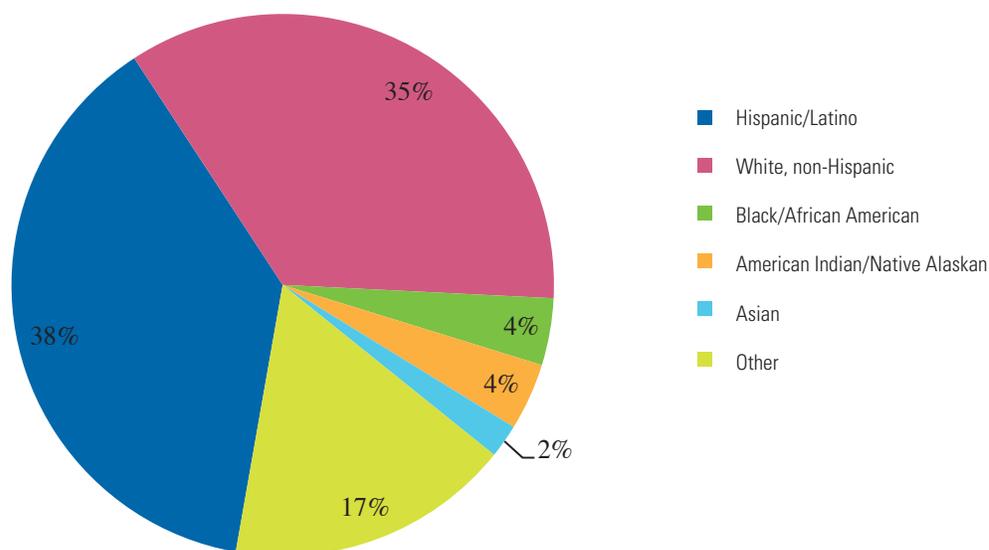
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<sup>3</sup> Table 7. Projected Change in Population Size by Race and Hispanic Origin for the United States: 2000 to 2050 (NP2008-T7). Source: Population Division, U.S. Census Bureau. Release Date: August 14, 2008.

## Race-Ethnicity

Racial and ethnic diversity is increasing in the U.S. and this trend is even more evident in Arizona. Nationwide the percent of children five and under living in Hispanic/Latino families grew from 17% in 2000 to 21% in 2007.<sup>4</sup> It is projected that, by 2020, nearly one in four children in the United States will be of Hispanic origin.<sup>5</sup> Between 2000 and 2007, the proportion of the population that is non-Hispanic white has decreased from 75% to 66% nationwide and to 59% in Arizona.<sup>6</sup> This trend is even more pronounced in some metropolitan communities, for example Phoenix and Yuma's non-Hispanic White populations were 71% and 68% respectively in 2000 and were less than 50% in 2007.

Figure 19: Race/Ethnicity of Arizona children ages five and under <sup>7</sup>



<sup>4</sup> U.S. Census Bureau 2000. (2009). *2007 American Community Survey 1 – Year Estimates*. Retrieved August 30, 2009, from U.S. Census Bureau [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS)

<sup>5</sup> Johnson, K.M., & Lichter, D.T. (2008). Natural Increase: A New Source of Population Growth in Emerging Hispanic Destinations. *Population and Development Review* 34:327-346.

<sup>6</sup> Johnson, K.M., & Lichter, D.T. (2008). Natural Increase: A New Source of Population Growth in Emerging Hispanic Destinations. *Population and Development Review* 34:327-346.

<sup>7</sup> U.S. Census Bureau 2000. (2009). *2007 American Community Survey 1 – Year Estimates*. Retrieved August 30, 2009, from U.S. Census Bureau [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS)

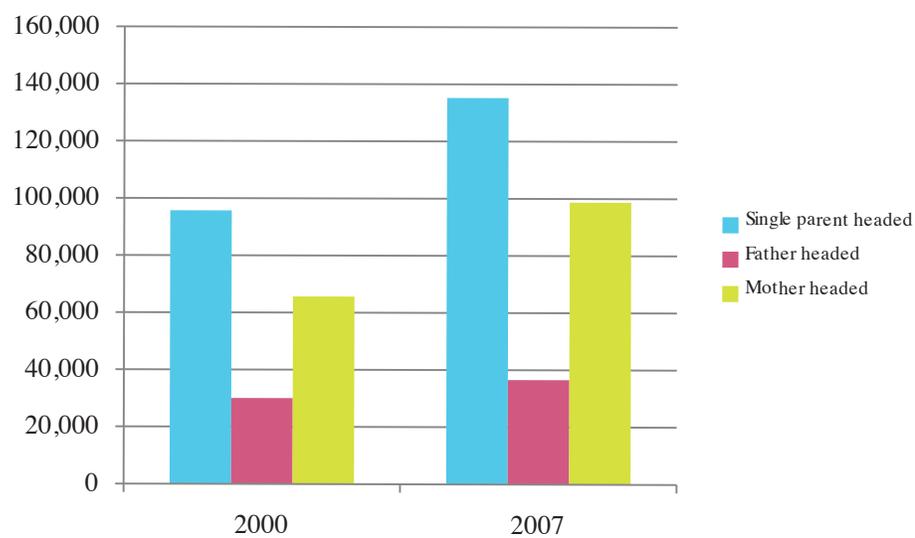
## Family Characteristics

In today's dynamic societies, children live in families with varying structures, including married couple homes, single male or female headed homes, as well as households headed by grandparents or other family.

The number of children birth through five living with a single parent has increased nationwide by about 22% since 2000 (from about 5 to 6 million); however, the number of children birth through five living in single parent headed homes in Arizona has increased by about 41% since 2000 (from about 96 to 135 thousand). Most of the increase is made up of children living with a single mother.

Children who live in single adult headed household are at higher risk of experiencing financial problems such as very low incomes and poverty; and the accompanying issues of lack of medical coverage, poor nutrition and potential homelessness.<sup>8</sup>

Figure 20: Arizona young children living in single father or single mother headed households<sup>9</sup>



<sup>8</sup> O'Neill, R. (September, 2002). *Experiments in Living: The Fatherless Family*. CIVITAS – The Institute for the Study of Civil Society. Retrieved August 30, 2009, from <http://www.civitas.org.uk/pubs/experiments.php>.

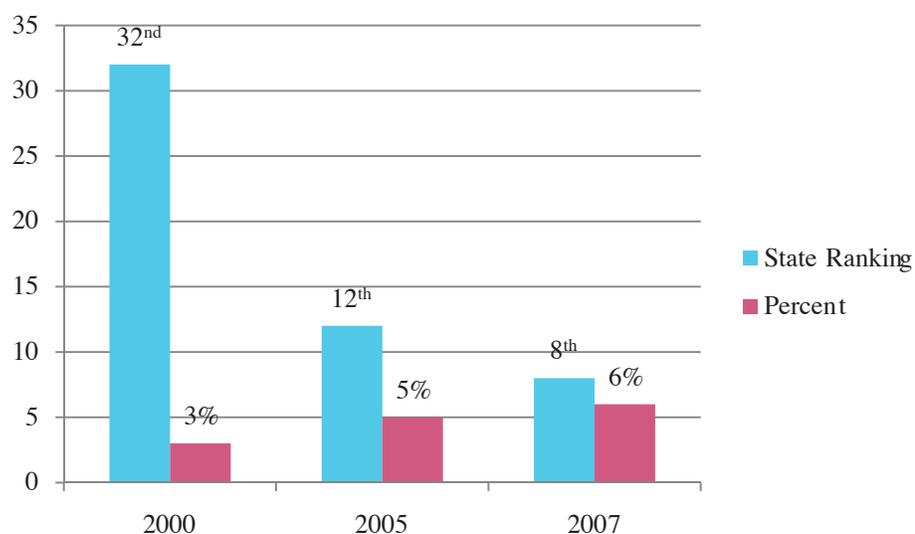
<sup>9</sup> U.S. Census Bureau 2000. (2009). *2007 American Community Survey 1 – Year Estimates*. Retrieved August 30, 2009, from U.S. Census Bureau [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS)

### BREAKING TREND! Grandparents Raising Grandchildren

Grandparents are increasingly raising their young grandchildren. In 2007, about 72,000 Arizona children lived with a grandparent-householder who was responsible for their care, and about 30% of those children did not have a parent present in the household. This number represented an 11% increase from 2006; whereas the number of grandchildren cared for by grandparents nationwide only increased by 1%.

The percent of grandparents caring for their grandchildren has been increasing in Arizona, especially in comparison to the rest of the nation. In 2000 just 3% of Arizona children were primarily cared for by grandparents, with Arizona ranking 32nd among the states. In 2005, 5% of children in Arizona were in grandparent care; the state ranked 12th. By 2007 the percent of children cared for by grandparents increased to 6%, with Arizona ranking eighth among the states in percentage of children raised by grandchildren.<sup>10</sup>

Grandparents raising grandchildren often experience a number of challenges. Of the approximately 19,000 grandparents raising grandchildren on their own in 2007, about 40% were 60 years old or older. Furthermore, a portion of grandparent caregivers have either disabilities or age-related functional limitations that affect their ability to respond to the needs of grandchildren. In 2007, 25% of grandparents responsible for their grandchildren had a disability.<sup>11</sup>



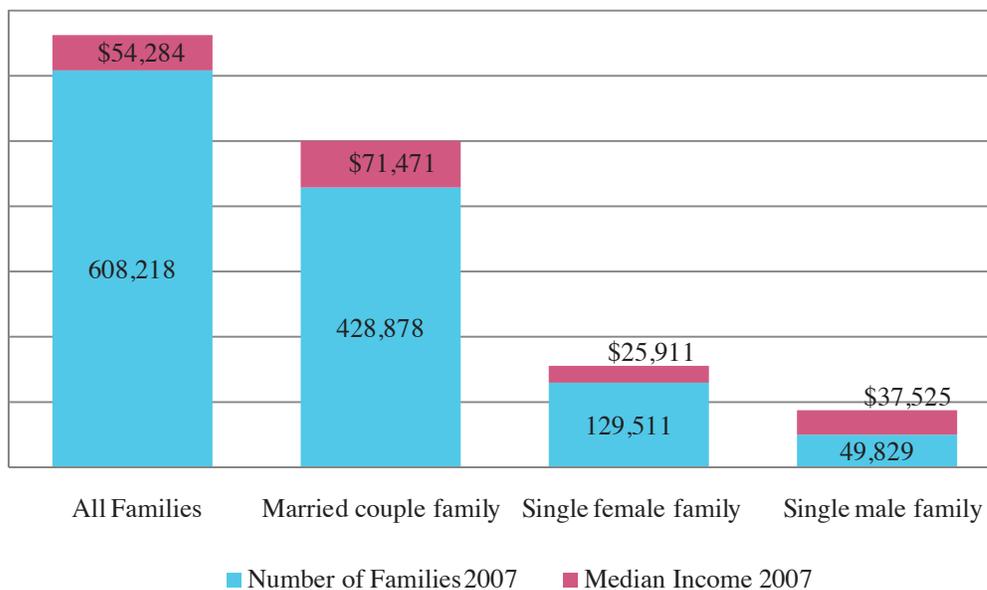
<sup>10</sup> U.S. Census 2000. (2009). *2007 American Community Survey 1 – Year Estimates*. Retrieved August 30, 2009, from U.S. Census Bureau [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS)

<sup>11</sup> U.S. Census 2000. (2009). *2007 American Community Survey 1 – Year Estimates*. Retrieved August 30, 2009, from U.S. Census Bureau [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS)

## Income and Family Composition

Many Arizona families with children are financially challenged. Throughout the U.S., families headed by a single parent are much more likely to experience financial hardship. In the U.S. as well as in Arizona, the median income for single parent headed families is from a third to a half that of married couple families.<sup>12</sup> The median income in Arizona for families with children under 18 was \$54,284 in 2007. However, the median income of families with children under 18 headed by single males was \$37,525 (Figure 21) and the median income of families with children headed by single females was just \$25,911.

Figure 21: Median income of families with children under 18<sup>13</sup>



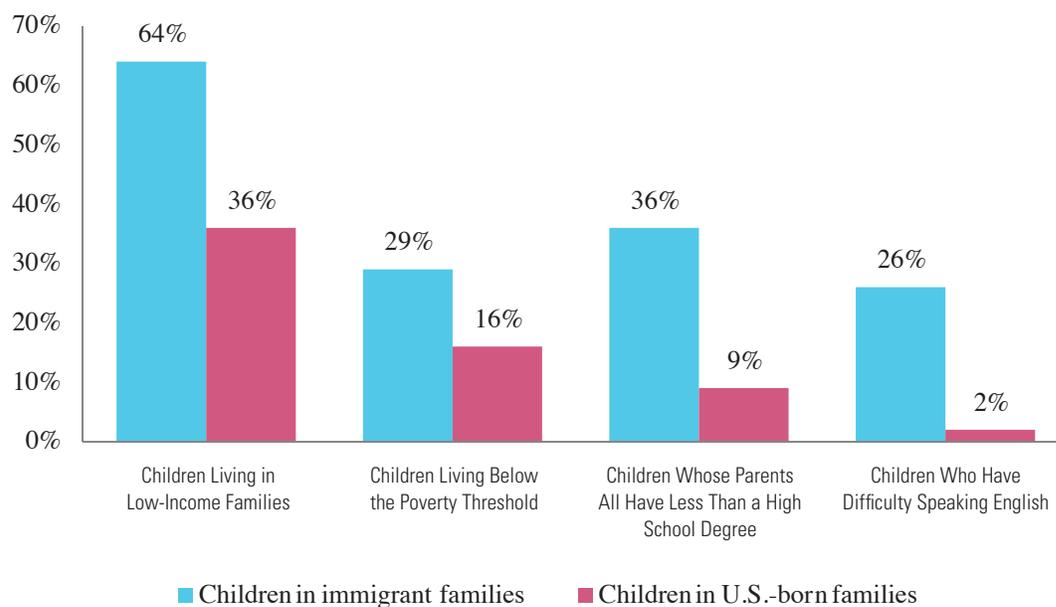
<sup>12</sup> U.S. Census Bureau 2000. (2009). *2007 American Community Survey 1 – Year Estimates*. Retrieved August 30, 2009, from U.S. Census Bureau [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS).

<sup>13</sup> U.S. Census Bureau 2000. (2009). *2007 American Community Survey 1 – Year Estimates*. Retrieved August 30, 2009, from U.S. Census Bureau [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS)

## Children Living in Immigrant Families

About 22% of U.S. children<sup>14</sup> and 31% of Arizona children<sup>15</sup> ages five and under live in immigrant families.<sup>16</sup> Children who live with immigrant parents may encounter a number of barriers to entering school healthy and ready to learn, including limited English language proficiency, low parental educational attainment, and lower incomes or poverty. One-quarter of children in immigrant families have difficulty speaking English, and more than one-third have parents with less than a high school education.<sup>17</sup> Any of these factors may pose challenges for children's preparation for school success.<sup>18</sup>

Figure 22: Issues affecting children living in immigrant families<sup>19</sup>



\* Below 200% of the Federal Poverty Threshold

Whereas it is recognized that quality early care and education can improve children's school readiness, a study of children in Head Start suggests that mothers with limited English proficiency were less aware of available assistance, and experienced language barriers to completing applications as well as decreased communication with English-speaking staff, affecting their level of participation in these valuable programs.<sup>20</sup>

<sup>14</sup> Capps, R. & Fortuny, K. (2006). Immigration and Child and Family Policy. *The Urban Institute and Child Trends Roundtable on Children in Low-Income Families*. Retrieved August 30, 2009, from [http://www.urban.org/UploadedPDF/311362\\_lowincome\\_children3.pdf](http://www.urban.org/UploadedPDF/311362_lowincome_children3.pdf)

<sup>15</sup> U.S. Census Bureau (2009). *2007 American Community Survey 1 – Year Estimates*. Retrieved August 30, 2009, from U.S. Census [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS).

<sup>16</sup> U.S. Census Bureau. *Children in immigrant families: children who are themselves foreign-born or reside with at least one foreign-born parent*.

<sup>17</sup> The Annie E. Casey Foundation, KIDS COUNT Data Center, [www.kidscount.org](http://www.kidscount.org).

<sup>18</sup> Urban Institute. (2006, May). *Children of Immigrants: Facts and Figures*. Retrieved August 30, 2009, from <http://www.urban.org/publications/900955.html>

<sup>19</sup> The Annie E. Casey Foundation, KIDS COUNT Data Center, [www.kidscount.org](http://www.kidscount.org).

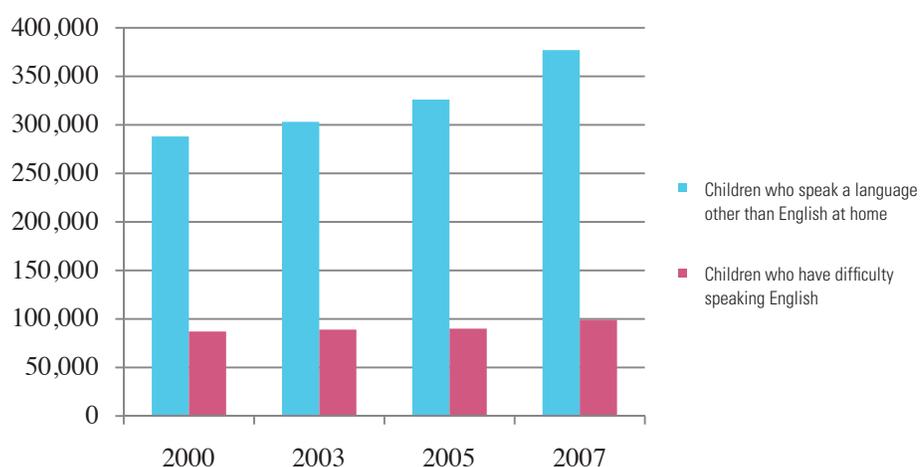
<sup>20</sup> Magnuson, K., Lahaie, C. et al. (2006). Preschool and School Readiness of Children of Immigrants. *Social Science Quarterly (Blackwell Publishing Limited)* 87: 1241-1262.

## Language

Many children experience challenges learning and using English. Children who live in families with adults who have limited English proficiency are at higher risk for a number of negative outcomes, including poverty and poorer school achievement.<sup>21</sup> In 2007, nationwide, about one-fifth of children spoke a language other than English at home and 5% of children in the U.S. had difficulty speaking English. In Arizona, 9% of five to 17 year old children spoke a language other than English at home and 32% of children had difficulty speaking English.

An increasing number of children in Arizona (ages five to 17) live in limited English proficient homes. Between 2000 and 2007, the number of Arizona children who lived in limited language proficient households increased by about 31% and there was a 25% increase in the number of children who do not speak English well.

Figure 23: Number of Arizona children experiencing difficulty speaking English<sup>22</sup>



<sup>21</sup> Capps, R. & Fortuny, K. (2006). Immigration and Child and Family Policy. *The Urban Institute and Child Trends Roundtable on Children in Low-Income Families*. Retrieved from [http://www.urban.org/UploadedPDF/311362\\_lowincome\\_children3.pdf](http://www.urban.org/UploadedPDF/311362_lowincome_children3.pdf)

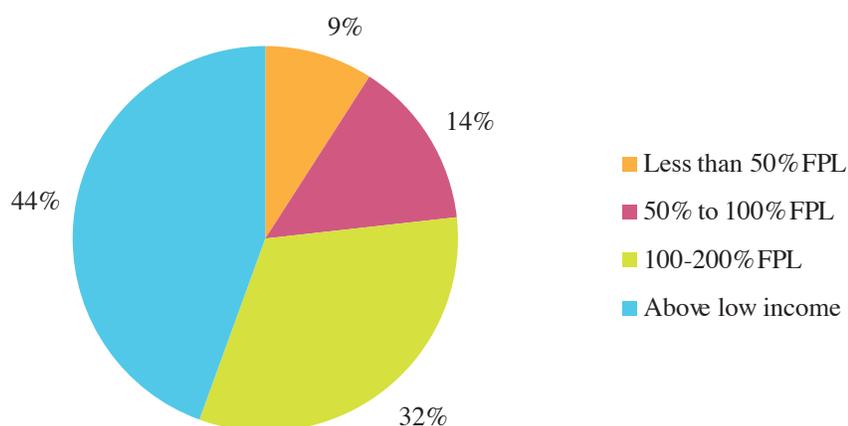
<sup>22</sup> U.S. Census Bureau 2000. (2009). *2007 American Community Survey 1 – Year Estimates*. Retrieved August 30, 2009 from U.S. Census Bureau [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS)

## Poverty

Families living in poverty have reduced access to quality early care environments, affordable health care, and support systems that ensure that children start school healthy and ready to learn. Economic instability and poverty, especially when chronic and severe, has been found to negatively affect children's physical and mental health and cognitive development. In particular, unstable, fluctuating family economic circumstances result in negative consequences.<sup>23</sup>

One-fifth of children birth through five years old in the U.S. live below 100% of the federal poverty line (FPL), and more than 40% of the nation's young children are low-income, living at or below 200% of the FPL. An even larger percentage of Arizona children are at risk for economic instability and its consequences. In 2007, almost one-fourth of children in Arizona lived at or below the federal poverty line, with 9% living in extreme poverty (50% of the federal poverty line or lower). Almost half of Arizona's children lived at or below 200% of the federal poverty level, the minimum amount of money that research has determined is necessary for a family to meet their most basic needs.<sup>24 25</sup>

Figure 24: Poverty of Arizona's young children (ages birth through five)<sup>26</sup>



<sup>23</sup> Chau, M., & Douglas-Hall, A. (2008). Basic Facts About Low-Income Children Birth to Age 18. *National Center for Children in Poverty*. Retrieved August 30, 2009 from [http://www.nccp.org/publications/pdf/text\\_845.pdf](http://www.nccp.org/publications/pdf/text_845.pdf)

<sup>24</sup> Chau, M., & Douglas-Hall, A. (2008). Basic Facts About Low-Income Children Birth to Age 18. *National Center for Children in Poverty*. Retrieved August 30, 2009 from [http://www.nccp.org/publications/pdf/text\\_845.pdf](http://www.nccp.org/publications/pdf/text_845.pdf)

<sup>25</sup> For a discussion of the Federal Poverty Line and alternative methods of determining poverty see Appendix B.

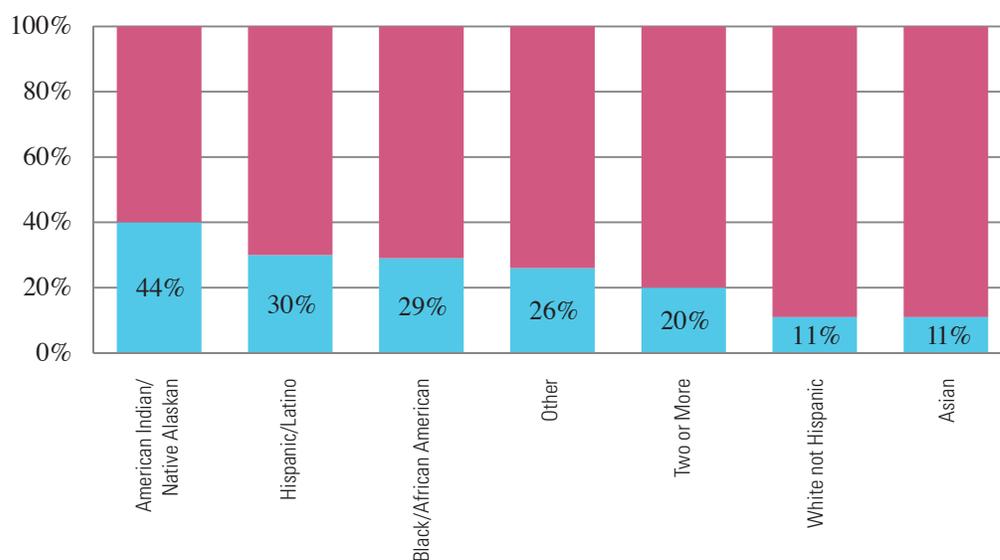
<sup>26</sup> *National Center for Children in Poverty*. (n.d.). Retrieved August 30, 2009 from <http://www.nccp.org/>

## Poverty and Family Circumstances

Low income and poverty differentially affect children in certain family situations. Families with grandparent caregivers are more likely to be poor compared to parent-headed families. In 2007, 22% of grandparent caregiver households were below the federal poverty level as compared to 19% of families led by parents. More than 40% of children in single parent families in Arizona live at or below the federal poverty line; and children in some ethnic groups are at higher risk for living in low-income or poor households.<sup>27</sup>

In Arizona, families with children five and under who live below the FPL have a different demographic profile than Arizona families as a whole. In 2007, over 40% of American Indian families lived below the federal poverty line, and about 30% of African American and Hispanic/Latino families lived in poverty. Arizona's struggling families represent a diverse array of ethnicities, races, and/or tribal affiliations.

Figure 25: Families with children five and under living below poverty level, by ethnicity<sup>28</sup>



<sup>27</sup> National Center for Children in Poverty, (n.d.). Retrieved August 30, 2009 from <http://www.nccp.org/>

<sup>28</sup> U.S. Census Bureau 2000. (2009). 2007 American Community Survey 1 – Year Estimates. Retrieved August 30, 2009 from U.S. Census Bureau [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS)

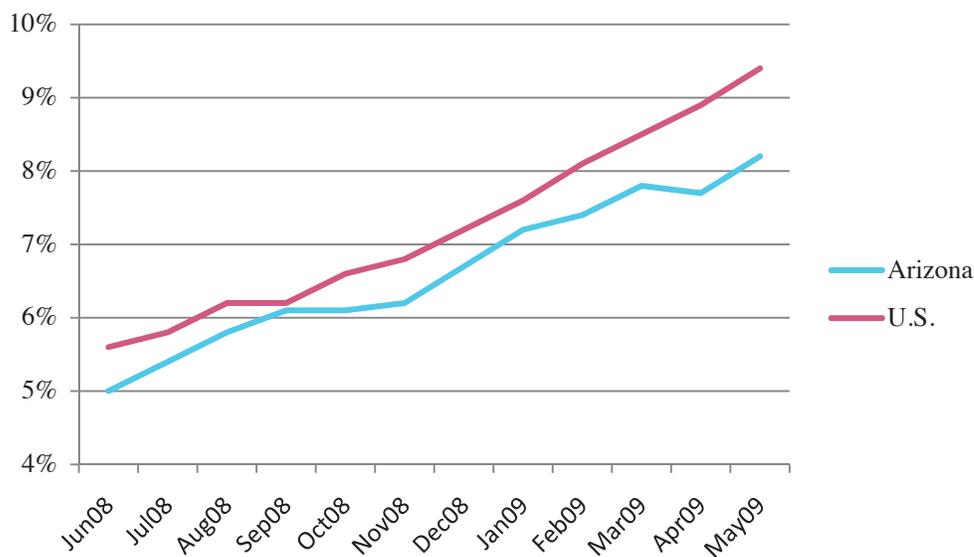
**BREAKING TREND! Increased Unemployment**

As a result of the current economic downturn, the unemployment rate is rising. In the past year, unemployment has increased by more than 3% nationwide to the highest rate since the early 1980's.

More than twenty-four million children nationwide and more than half a million children in Arizona live in families where no parent has a full-time job. Unemployment is greater in single parent headed families – almost 29% of single mothers who wish to work are unemployed, and about 17% of single fathers in the labor force do not have jobs.<sup>29</sup> In 2007, the percentage of America's children living in families where no parent had a full-time year-round job was 33% in the U.S. and 36% in Arizona. These numbers are expected to increase in 2008 and 2009 due to the continuing rise in unemployment.

Secure parental employment reduces the incidence of poverty and its related risks to children. Moreover, a secure job can also be a key factor in determining whether children have access to health care as most parents who obtain health insurance for themselves and their children do so through their employers. For example, in 2007, 57% of children in Arizona were insured through parental employment.<sup>30</sup>

Figure 26: Unemployment Rates for U.S. and Arizona 2008-2009<sup>31</sup>



<sup>29</sup> U.S. Census Bureau 2000. (2009). *2007 American Community Survey 1 – Year Estimates*. Retrieved August 30, 2009, from U.S. Census Bureau [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS)

<sup>30</sup> U.S. Census Bureau 2000. (2009). *Current Population Survey 2008*. Retrieved August 30, 2009, from U.S. Census Bureau <http://www.census.gov/cps/>

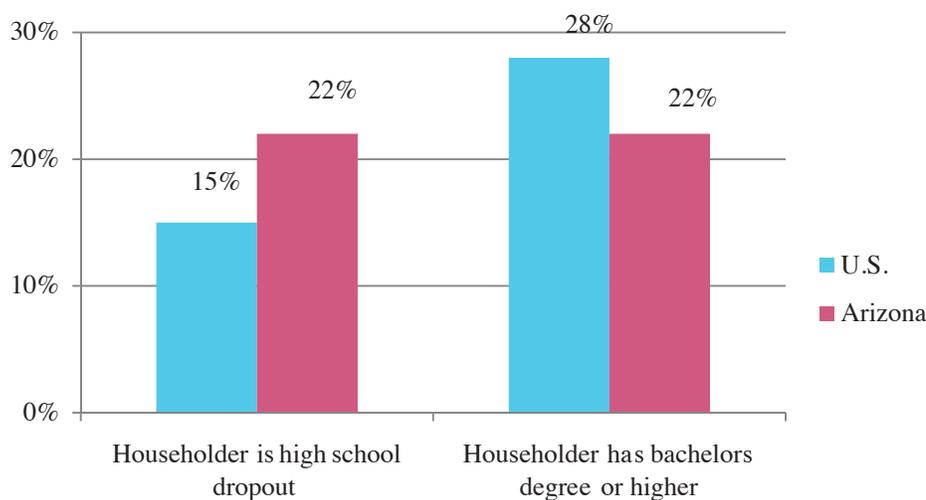
<sup>31</sup> United States Department of Labor. (2009). *Bureau of Labor Statistics*. Retrieved August 30, 2009, from Bureau of Labor Statistics <http://www.bls.gov/>

## Parental Academic Attainment

Parental education is a strong predictor of children's health, well-being, and school success. Children who live with better-educated adults demonstrate improved school readiness and academic success. The educational level of a child's mother has been found to be a strong predictor of the academic achievement, health status, and well-being of her children.<sup>32</sup> Increased maternal education is related to young children's improved school readiness; and mothers with more education report that their children have fewer academic problems.<sup>33</sup>

Compared to the U.S. as a whole, a larger percentage of Arizona's children live in households where the head of the household<sup>34</sup> has dropped out of high school. Moreover, compared to the U.S. as a whole, fewer Arizona children live in homes where the head of household has a four-year college degree or higher.<sup>35</sup>

Figure 27: Percent of children living in households by educational attainment of head of household<sup>36</sup>



<sup>32</sup> Magnuson, K., & McGroder, S. (2002). *The Effect of Increasing Welfare Mothers' Education on their Young Children's Academic Problems and School Readiness*. Retrieved August 30, 2009 from Northwestern University, Institute for Policy Research Web site: [http://www.northwestern.edu/ipr/jcpr/workingpapers/wpfiles/magnuson\\_mcgroder.pdf](http://www.northwestern.edu/ipr/jcpr/workingpapers/wpfiles/magnuson_mcgroder.pdf).

<sup>33</sup> Magnuson, K., & McGroder, S. (2002). *The Effect of Increasing Welfare Mothers' Education on their Young Children's Academic Problems and School Readiness*. Retrieved August 30, 2009 from Northwestern University, Institute for Policy Research Web site: [http://www.northwestern.edu/ipr/jcpr/workingpapers/wpfiles/magnuson\\_mcgroder.pdf](http://www.northwestern.edu/ipr/jcpr/workingpapers/wpfiles/magnuson_mcgroder.pdf).

<sup>34</sup> U.S. Census Bureau 2000. (2009). *2007 American Community Survey 1 – Year Estimates*. Retrieved August 30, 2009 from U.S. Census Bureau [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS)

<sup>35</sup> U.S. Census Bureau 2000. (2009). *2007 American Community Survey 1 – Year Estimates*. Retrieved August 30, 2009 from U.S. Census Bureau [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS)

<sup>36</sup> U.S. Census Bureau 2000. (2009). *2007 American Community Survey 1 – Year Estimates*. Retrieved August 30, 2009 from U.S. Census Bureau [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS)

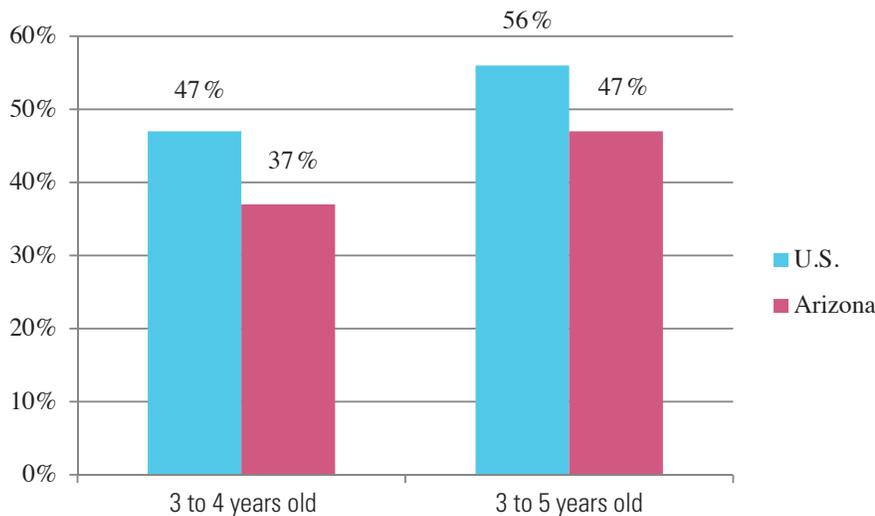
## Children's Early Educational Experiences

Participation in quality early educational experiences has benefits for children's social, emotional, and academic development.<sup>37</sup>

Young children who have a variety of opportunities to explore and learn, score better on academic tests when they enter school, are less likely to require special education services, are held back a grade less often, and are more likely to graduate from high school.<sup>38</sup>

However children in Arizona are less likely to attend early childhood education programs than preschoolers nationwide. In 2007, whereas almost 60% of three to five year olds nationwide were enrolled in an early education program, less than half of Arizona preschoolers were attending these programs.<sup>39</sup>

Figure 28: Percent of children enrolled in nursery school, preschool or kindergarten by age group<sup>40</sup>



<sup>37</sup> Rhode Island KIDS COUNT. (2005). *Getting Ready: Findings from the National School Readiness Indicators Initiative*. Retrieved August 30, 2009, from <http://www.nikidscount.org/matriarch/documents/Getting%20Ready%20-%20Full%20Report.pdf>

<sup>38</sup> Rhode Island KIDS COUNT. (2005). *Getting Ready: Findings from the National School Readiness Indicators Initiative*. Retrieved August 30, 2009, from <http://www.nikidscount.org/matriarch/documents/Getting%20Ready%20-%20Full%20Report.pdf>

<sup>39</sup> U.S. Census Bureau 2000. (2009). *2007 American Community Survey 1 – Year Estimates*. Retrieved August 30, 2009 from U.S. Census Bureau [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS)

<sup>40</sup> U.S. Census Bureau 2000. (2009). *2007 American Community Survey 1 – Year Estimates*. Retrieved August 30, 2009 from U.S. Census Bureau [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS)

## Children's Educational Attainment

Children who cannot read well by fourth grade have higher absence rates, experience behavior problems, and perform poorly on standardized tests. The performance of Arizona's children on standardized tests continually lags behind that of the nation. About 56% of Arizona's fourth graders scored "at basic" or better on the 2007 NAEP Reading Assessment, compared with a national average rate of 67%.<sup>42</sup> The percentage of Arizona fourth graders achieving "at basic" or better on the NAEP Math Assessment increased dramatically from 57% in 2000 to 74% in 2007, but Arizona's fourth graders still score 8% below the national rate of 82%.<sup>43</sup>

Figure 29: Percent of Arizona's students scoring at basic or better on the fourth Grade NAEP Reading<sup>44</sup>

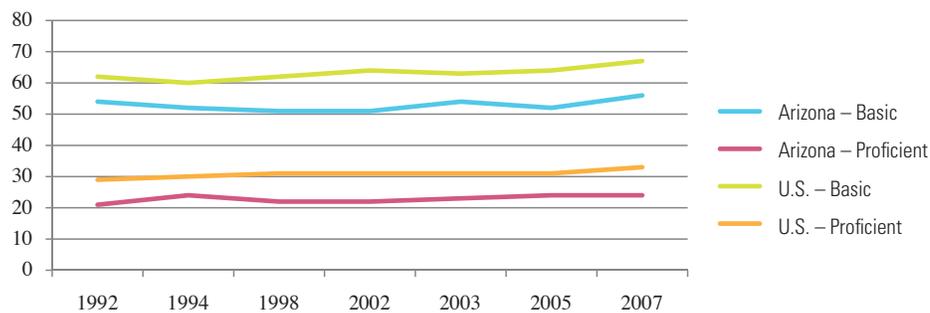
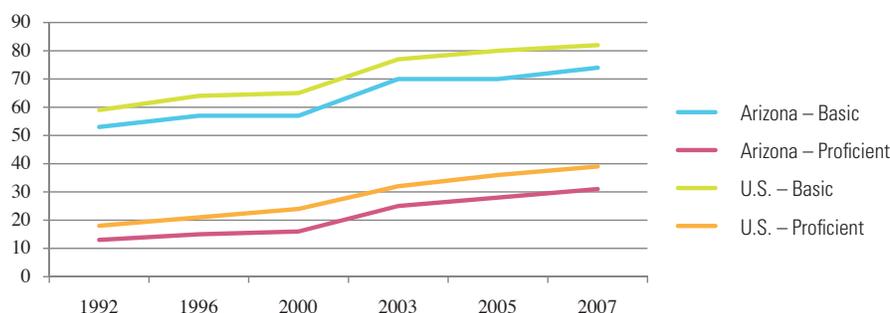


Figure 30: Percent of Arizona's students scoring at basic or better on the fourth Grade NAEP Math<sup>44</sup>



<sup>41</sup> U.S. Department of Education. (2009). *National Center for Education Statistics*. Retrieved August 30, 2009 from U.S. Department of Education <http://nces.ed.gov/nationsreportcard/states>.

<sup>42</sup> U.S. Department of Education. (2009). *National Center for Education Statistics*. Retrieved August 30, 2009 from U.S. Department of Education <http://nces.ed.gov/nationsreportcard/states>.

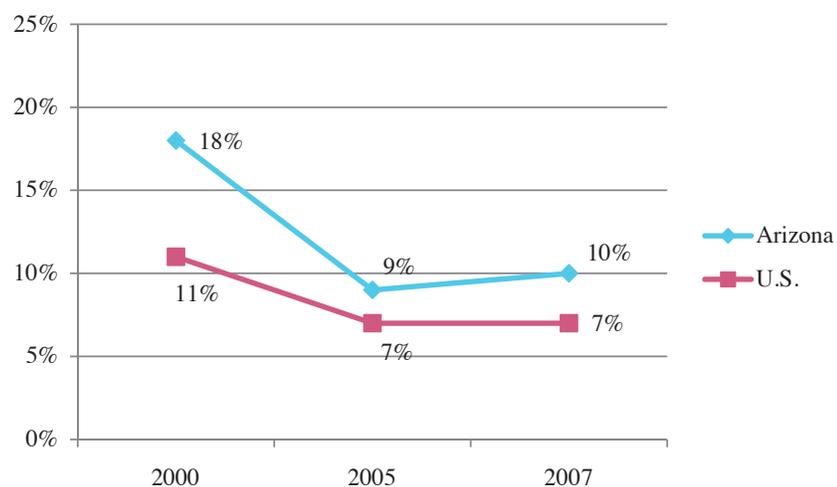
<sup>43</sup> U.S. Department of Education. (2009). *National Center for Education Statistics*. Retrieved August 30, 2009 from U.S. Department of Education <http://nces.ed.gov/nationsreportcard/states>.

<sup>44</sup> U.S. Department of Education. (2009). *National Center for Education Statistics*. Retrieved August 30, 2009 from U.S. Department of Education <http://nces.ed.gov/nationsreportcard/states>.

## High School Completion

The completion of high school is a critical juncture in a young adult's life. Students who stay in school and take challenging coursework tend to continue their education, stay out of jail, and earn significantly higher wages than their non-graduating counterparts.<sup>46</sup> The high school dropout<sup>47</sup> rates in the U.S. have decreased over the last 10 years. However, the dropout rate in Arizona remains higher than the national average. In 2007, 10% of Arizona's youth dropped out of high school, compared to 7% nationwide. Only one state has a higher high school dropout rate than Arizona.

Figure 31: Percent of high school dropouts in Arizona for 2000, 2005, and 2007



<sup>45</sup> U.S. Department of Education. (2009). *National Center for Education Statistics*. Retrieved August 30, 2009 from U.S. Department of Education <http://nces.ed.gov/nationsreportcard/states>.

<sup>46</sup> Barton, P.E. (2005). *One-third of a nation: Risking dropout rates and declining opportunities*. (pp.5). Princeton, NJ: Policy Information Center, Educational Testing Service.

<sup>47</sup> A dropout is defined as a person who did not complete High School and is not currently enrolled in High School or a High School completion program. Individuals with a GED are not included in this number.



# Appendix B

Federal Poverty Guidelines

## The Federal Poverty Guideline: An Insufficient Measure of Poverty

The Federal Poverty Guidelines (FPG) have long been considered an insufficient measure of poverty in the United States. Designed in the mid 1960s, the FPG was based on the “thrifty food plan,” the cheapest of four food plans developed by the Department of Agriculture. The cost of food was multiplied by three to account for the cost of other goods and services.<sup>137</sup> At that time, families of three or more spent about one-third of their after-tax income on food. In addition, families were typically comprised of two parents with one wage earner and a stay-at-home parent. The FPG was adopted as the official measure of poverty in 1965 and is indexed to the Consumer Price Index.<sup>138</sup>

The FPG is used to determine eligibility for certain federal programs including Head Start, the National School Lunch program, the Food Stamp program, Low-Income Home Energy Assistance and Medicaid. Arizona has adopted the measure to determine eligibility for programs such as the Arizona Health Care Cost Containment System and subsidized child care. Because it is recognized as not adequately identifying families and individuals struggling with poverty, the 200% of the FPG is widely recognized as low-income.<sup>139</sup>

The methodology used to determine the FPG that is based on the cost of food has been determined by opponents as being fundamentally flawed. Food currently comprises about one-seventh of family expenses, while housing, utilities, transportation, child care and health care have grown disproportionately.<sup>140</sup> In addition, the measure does not include earnings or in-kind benefits from interest, dividends, Social Security, Food Stamps, Medicaid, the Earned Income Tax Credit or cash assistance. Nor does it account for expenses such as taxes, the cost of health insurance and child care and the fact that many families are headed by a single parent. Finally, the FPG does not take into consideration variations in the cost of living by geographical location. The cost of basic needs in New York City and San Francisco are much higher than in Memphis or Tucson.

Alternate measures of poverty have been studied and recommended by the National Academy of Sciences and the National Center for Children in Poverty (Basic Needs Budget). However, changes to the FPG have yet to be made.

It is clear that changing the FPG to a more accurate model of measuring poverty would result in millions more people being considered officially poor. Increases in the official number of people living in poverty would have broad and expensive implications including the need to provide a range of supports and benefits to more individuals. Still, a true measure of poverty is needed for policy development that meets the social and economic needs of individuals and families in the U.S.

<sup>137</sup> Willis, J. (2000). *How We Measure Poverty: A Historical and Brief Overview*. Retrieved August 30, 2009, from <http://www.ocpp.org/poverty/how.htm>

<sup>138</sup> Willis, J. (2000). *How We Measure Poverty: A Historical and Brief Overview*. Retrieved August 30, 2009, from <http://www.ocpp.org/poverty/how.htm>

<sup>139</sup> Fass, S. (2009). *Measuring Poverty in the United States: National Center for Children in Poverty*. Retrieved August 30, 2009, from [http://www.nccp.org/publications/pub\\_876.html](http://www.nccp.org/publications/pub_876.html)

<sup>140</sup> Fass, S. (2009). *Measuring Poverty in the United States: National Center for Children in Poverty*. Retrieved August 30, 2009, from [http://www.nccp.org/publications/pub\\_876.html](http://www.nccp.org/publications/pub_876.html)



# Appendix C

Supporting Tables

## Characteristics of Quality in ECE

Indicator	High Quality	Poor Quality
<b>Staffing</b>	Low child to staff ratio – few adults caring for large numbers of children.	High child to staff ratio – many adults caring for smaller groups of children.
<b>Staff Qualifications</b>	Providers experienced and educated in early child development. Staff turnover rates low. An emphasis on continual professional development.	Providers have only high school diploma or GED with no formal training in early childhood development and little experience caring for children. High Turnover. Minimal opportunities for professional development.
<b>Quality Relationships</b>	Staff relationships with children – stable, warm and caring. Staff members – attentive and respectful of children’s individual needs. Positive discipline is used as a teaching tool. Interactions are child-centered.	Staff members are aloof and interact with children from an adult-centered perspective. Discipline is based on blaming, criticizing and punishment.
<b>The Learning Environment</b>	Stimulating learning environment with easily accessible material and activities. Well-defined curriculum. Children involved in a wide variety of activities including art and story time. Toys and equipment developmentally appropriate. Respect for children from different cultures and backgrounds. Play opportunities enhance imagination and the social, emotional, physical and cognitive development of children.	Learning environment lacks diversity – is boring for young children. Overdependence on television/video watching; the few materials present are not accessible to children. Toys and equipment do not meet children’s developmental needs to stimulate creativity and learning. Unstructured days with little or no defined curriculum. Children often engage in solitary activity.
<b>Health and Safety</b>	Health and safety emphasized with regular hand washing, clean facilities, and safe play equipment. Food is nutritious. Physical activity built into the curriculum. Staff members and parents have emergency plans documented.	Hand washing inconsistent and not readily accessible. Facilities and equipment not clean. Play equipment old or poorly maintained. Food not nutritious. Physical activity unorganized and inconsistent. Emergency plans not documented.
<b>Parental Involvement</b>	Parents involved in activities wherever possible; receive weekly curriculum plans and regular reports about a child’s progress. Providers aware of community resources available to family members and make referrals as appropriate.	Little parental involvement and lack of regular communication between parents and staff. Providers unfamiliar with community resources available for families.

## Arizona's Assets: Early Learning (Quality)

Early Learning	Assets	AZ Programs and Agency Responsible	Description
<b>Quality:</b> Ensuring Arizona's Early Care and Education (ECE) settings meet high quality standards	Regulatory Standards	<ul style="list-style-type: none"> <li>Child Care Licensing Regulations – <i>Arizona Department of Health Services (ADHS) – Office of Child Care Licensing;</i></li> <li>Child Care Home Certification Regulations – <i>Department of Economic Security (DES) – Child Care Administration</i></li> </ul>	Set of minimum health and safety requirements for center-based and regulated home-based early care and education settings.
	Quality Standards	<ul style="list-style-type: none"> <li>Comprehensive Guidelines for Early Childhood Programs – <i>Arizona Department of Education;</i></li> <li>Head Start Performance Standards – <i>Federal Department of Health and Human Services;</i></li> <li>National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care Programs – <i>National Resource Center for Health and Safety in Child Care</i></li> </ul>	Set standards for early childhood programs to assure quality environments, instruction, and administration.
	Early Learning Standards	Arizona Early Learning Standards – <i>Arizona Department of Education (ADE)</i>	Set of agreed upon goals of what children ages 3-5 can and should be able to do upon exiting preschool.
	Improving Quality of Early Child Care	<ul style="list-style-type: none"> <li>Early Childhood Quality Improvement Practices Process (ECQUIP) – <i>Arizona Department of Education (ADE);</i></li> <li>Enhanced Rate for Accredited Programs – <i>Department of Economic Security (DES) – Child Care Administration;</i></li> <li>Arizona's Early Childhood Inclusion Coalition – <i>Self-governed;</i></li> <li>Pinal County Pilot Quality Improvement Project – <i>Governor's Office for Children, Youth and Families;</i></li> <li>Arizona Self-Study Project – <i>Department of Economic Security (DES) – Child Care Administration;</i></li> <li>First Focus on Kids Five Star Quality Rating System Pilot – <i>United Way of Tucson and Southern AZ / Governor's School Readiness Board</i></li> </ul>	Set of programs (includes statewide and federal) aimed at improving quality of early child care. These programs support quality improvement in different ways. For example, increasing child care subsidy rate to nationally accredited centers and homes; assists programs in self-assessment, quality enhancement, and progress; promote inclusive options for young children with disabilities and with the goal to improve the number of preschool students who receive services in inclusive environments.

## Arizona's Assets: Early Learning (Access)

Early Learning	Assets	AZ Programs and Agency Responsible	Description
<p>Access:</p> <p>Ensuring Arizona families/children have access to and information about a choice of quality, and affordable ECE settings</p>	Families/ children have access to ECE settings	<ul style="list-style-type: none"> <li>Private Child Care Centers – <i>Independent not-for-profit agencies licensed through DHS, Office of Child Care licensure</i></li> <li>Start/Early Head Start – <i>Federal Department of Health and Human Services</i></li> <li>Early Childhood Block Grant (ECBG) Preschool Programs – <i>Arizona Department of Education (ADE)</i></li> </ul>	ECE Programs and Services that are available in Arizona
	Access to targeted intervention services/ programs	<ul style="list-style-type: none"> <li>Head Start/Early Head Start – <i>Federal Department of Health and Human Services</i></li> </ul>	Head Start Early intervention programs provide special services to children from birth through age five who are at-risk or have special needs. Examples of focus areas include cognition, speech/ language, motor skills, self-help skills, and social-emotional development.
	Information about quality of as well as availability of ECE settings is easily accessible to families	<ul style="list-style-type: none"> <li>Arizona Child Care Resources and Referral Service (CCR&amp;R) – <i>Arizona Department of Economic Security – Child Care Administration;</i></li> <li>Office of Child Care Licensing – <i>Arizona Department of Health Services (ADHS)</i></li> </ul>	<ul style="list-style-type: none"> <li>CCR&amp;R helps families find child care. CCR&amp;R also provides training and resources for child care providers and information for the community.</li> <li>Provides information and resources to AZ families about Child Care facilities- Office of Child Care Licensing regulates and monitors licensed child care facilities, public school child care programs and certified child care group homes statewide.</li> </ul>
	Access to affordable quality care for all families	<ul style="list-style-type: none"> <li>Early Childhood Block Grant (ECBG) Preschool Programs – <i>Arizona Department of Education (ADE)</i></li> <li>Head Start/Early Head Start – <i>Federal Department of Health and Human Services</i></li> </ul>	<ul style="list-style-type: none"> <li>Preschool education and support services provided to children who qualify for free or reduced lunch.</li> <li>Comprehensive early childhood education program for children pre-birth to five living at or below the federal poverty level.</li> </ul>
	Availability of financial supports and strategies	Child Care Subsidy Program – <i>Arizona Department of Economic Security</i>	Child Care subsidies for low-income Arizona families and support to improve quality of child care in Arizona.
	Access to a choice of quality ECE in different settings	<ul style="list-style-type: none"> <li>AZ Child Care Home Providers – <i>In-home provider licensed through DHS or certified through DES; or if fewer than four children served, may be unregulated.</i></li> <li>Family Friend and Neighbor care (FFN)/Arizona Kith &amp; Kin – <i>Unregulated, Association for Supportive Child Care</i></li> <li>Licensed Child Care Centers – <i>Department of Health Services (DHS)</i></li> <li>DES tiered reimbursement for accredited programs</li> </ul>	Families may choose from a variety of child care settings/ providers including Department of Health Services (DHS) licensed child care centers, DHS-certified child care group homes, DES-certified small family child care homes, and in some instances, non-certified relatives/friends who provide care for children.

## Arizona's Assets: Early Learning (Professional Development)

Early Learning	Assets	AZ Programs and Agency Responsible	Description
<p><b>Professional Development:</b></p> <p>Ensuring Arizona's ECE workforce/professionals are qualified to care for and educate young children (birth through five years) with low turnover rates</p>	<p>Educational opportunities/ programs for ECE workforce</p>	<ul style="list-style-type: none"> <li>• State and Private Universities and Colleges of Education</li> <li>• Community College System</li> <li>• Professional Career Pathways Program (PCPP) – <i>Central Arizona College</i></li> <li>• Statewide Child Care and Early Education Development System (S*CCEEDS) – <i>Association for Supportive Child Care and Child and Family Resources, Inc. (through DES)</i></li> <li>• Head Start Teacher Scholarship Program – <i>Arizona State University in cooperation with Arizona Department of Education (ADE)</i></li> <li>• Teacher Education And Compensation Helps (T.E.A.C.H.) – <i>The Association for Supportive Child Care (ASCC)</i></li> </ul>	<ul style="list-style-type: none"> <li>• Degree programs offered through universities, colleges and community colleges (E.g., Early childhood education, child development, teacher training , child and family studies)</li> <li>• PCCP provides scholarships and the development of a professional career pathway for individuals employed as child care providers in center-based programs, family child care provider homes or family group homes.</li> <li>• S*CCEEDS is designed to assist child care and early education practitioners in tracking their education and training.</li> <li>• Grant to fund bilingual Head Start teachers' pursuits of their BA in early childhood education.</li> <li>• T.E.A.C.H. is a comprehensive scholarship program that links training, compensation, and commitment to improving the quality of early childhood care and education experiences for young children and their families.</li> </ul>
	<p>Training ECE workforce (caregivers, teachers, and staff) to be skilled and qualified</p>	<ul style="list-style-type: none"> <li>• Teacher Education and Compensation Helps (T.E.A.C.H.) – <i>The Association for Supportive Child Care (ASCC)</i></li> <li>• Early Childhood Block Grant (ECBG) Preschool Programs – <i>Arizona Department of Education (ADE)</i></li> <li>• Arizona Kith and Kin Project – <i>Association for Supportive Child Care, Unregulated</i></li> <li>• Project "Me Too!" – <i>Blake Foundation through DES</i></li> <li>• Mind Matters Training Institute – <i>University of Arizona Cooperative Extension</i></li> <li>• Child Care Professional Training (CCPT) – <i>Grant funded through DES/Child Care Administration</i></li> <li>• Harris Institute – <i>Southwest Human Development</i></li> <li>• Chase Early Education Emergent Leaders Program</li> </ul>	<ul style="list-style-type: none"> <li>• T.E.A.C.H. is a comprehensive scholarship program that links training, compensation, and commitment to improving the quality of early childhood care and education experiences for young children and their families.</li> <li>• Training programs available across the state of Arizona for early child care providers, family members and teachers.</li> </ul>

## Arizona's Assets: Family Support

Early Learning	Assets	AZ Programs and Agency Responsible	Description
<p><b>Family Support:</b> Ensuring Arizona's children have nurturing and stable relationships with caring adults by providing economic and family supports</p>	<p>Access to information to promote optimal child development, stable families, and healthy parent-child interactions</p>	<p>Promoting Safe and Stable Families – <i>Department of Economic Security (DES)</i></p>	<p>Program to stabilize families through family-centered, comprehensive, coordinated and community-based services.</p>
		<p>Healthy Families – <i>Department of Economic Security (DES)</i></p>	<p>Program to enhance parent-child interaction, promote child health and development, prevent child abuse &amp; neglect, and strengthen family relations.</p>
		<p>Grandparent Kinship Care – <i>Department of Economic Security (DES)</i></p>	<p>Financial support for grandparents who are caring for their grandchildren.</p>
		<p>Child Care Resource and Referral Programs (CCR&amp;R) – <i>The Association for Supportive Child Care and the Arizona Child Care Association</i></p>	<p>Information and support to families seeking child care services.</p>
		<p>The Emily Center – <i>Phoenix Children's Hospital</i></p>	<p>Pediatric information and recourse center (with a link to public libraries) with free, accurate, and easy to understand information on children's health and safety.</p>
	<p>Birth to Five/Fussy Baby Helpline – <i>Southwest Human Development</i></p>	<p>A statewide parent helpline that provides a trained professional to respond to the concerns and question of parents with children birth to age five.</p>	
	<p>Access to economic supports</p>	<p>Grandparent Kinship Care – <i>Department of Economic Security (DES)</i></p>	<p>Financial support for grandparents who are caring for their grandchildren.</p>

## Arizona's Assets: Early Literacy

Early Learning	Assets	AZ Programs and Agency Responsible	Description
Early Literacy: Ensuring Arizona's families/children are provided with literacy development supports and services	Family Literacy Programs	Arizona Family Literacy Programs – <i>Arizona Department of Education (ADE)</i>	Program providing support for the whole family through adult education classes, early childhood education and education on supporting children's literacy development.
	Libraries	Community Libraries – <i>Tribal and Local Governments</i>	159 public libraries located in every county and on several tribal reservations and serve as partners in parent education and providers of literacy programs children and their parents.
	Pediatric Early Literacy Program	Reach Out and Read (ROR) Arizona Coalition – <i>Reach Out and Read</i>	ROR is a national nonprofit organization that promotes literacy as a standard part of pediatric care, with the goal of helping all children grow up with books and a love for reading. ROR gives new books to children and advice to parents about the importance of reading aloud in pediatric exam rooms across the nation.

## Arizona's Assets: Health

Early Learning	Assets	AZ Programs and Agency Responsible	Description
<p><b>Health:</b></p> <p>Ensuring Arizona's children are healthy: Ready to learn; ready to engage in the developmental tasks of early childhood and to achieve the physical, cognitive, and social-emotional well-being necessary for success in school and life.</p>	Health Services	Arizona Health Care Cost Containment System (AHCCCS)	State Medicaid agency for acute and long-term health care services through contracted managed care organizations in Arizona.
		Community Primary Care Program – <i>Various federal, state, and private funding sources</i>	Health services delivered through 19 public and non-profit entities; 14 federally qualified health centers (11 in rural AZ); 101 clinics in 13 counties; 41 school based clinics.
	Behavioral Health Services	Children's Behavioral Health Services – <i>Arizona Department of Health Services (ADHS)</i>	Arizona's publicly funded behavioral health system for individuals, families, and communities. ADHS manages the delivery of services through 4 Regional Behavioral Health Authorities (RHBA) and 5 Tribal RHBA's.
	Public Health Insurance and Immunization Program	Kids Care – <i>Arizona Health Care Cost Containment System (AHCCCS)</i>	Arizona's public health insurance program for children and their parents with incomes up to 200% of federal poverty level.
		Arizona State Immunization Program – <i>Arizona Department of Health Services (ADHS)</i>	Immunization services provided by public and private organizations and practitioners who are enrolled in the ADHS immunization program.
	Medical, dental and behavioral services for all expectant mothers, newborns, and developing children	Health Start – <i>Bureau of Women's and Children's Health (ADHS)</i>	Through the use of lay health workers, provide education, support, and advocacy services to pregnant/postpartum women and their families in targeted communities across the state.
		Healthy Families – <i>Department of Economic Security (DES)</i>	Prenatal and from birth home visiting program of health and social services to ensure the health and wellbeing of children at risk for abuse and neglect. Families may participate in this program until their children are age five.
		Arizona WIC Program – <i>Office of Women, Infants and Children (WIC), ADHS</i>	Federally funded program which provides Arizona residents with nourishing supplemental foods, nutrition education, and referrals.
		Children's Rehabilitative Program – <i>Arizona Department of Health Services (ADHS)</i>	Coordination, treatment and follow-up care for children with special health care needs located in the Phoenix, Tucson, Flagstaff and Yuma areas.
	Tribal Health Care Services	Indian Health Service (IHS) – <i>U.S. Department of Health and Human Services</i>	The Indian Health Service (IHS) is responsible for providing federal health services to American Indians and Alaska Natives.
		American Indian Health – <i>AHCCCS</i>	The American Indian Health section provides information and resources for use by American Indians, Arizona Indian tribes, health care providers, and AHCCCS Tribal Relations partners.

## Arizona's Assets: Early Screening and Identification

Early Learning	Assets	AZ Programs and Agency Responsible	Description
<p>Early Screening and Identification:</p> <p>Ensuring Arizona's children have developmental and health screenings available to them for the early identification of possible physical or developmental concerns.</p>	<p>Early Screening and Identification for Infants</p>	<p>Arizona Early Intervention Program (AzEIP) – <i>Division of Developmental Disabilities (DDD)</i> <i>Department of Economic Security (DES)</i></p>	<p>Statewide system of supports and services for families of children, birth to three, with disabilities or developmental delays.</p>
		<p>Parents Evaluation of Developmental Status (PEDS) Project – <i>Arizona Academy of Pediatrics, AHCCCS, and ADHS</i></p>	<p>Developmental screening at well-child visits using the PEDS screening tool at 9, 18, and 24 months for children enrolled in the Arizona Health Care Cost Containment System (AHCCCS).</p>
	<p>Newborn/ Neonatal Screening and Identification</p>	<p>Newborn Screening Program – <i>Arizona Department of Health Services (ADHS)</i></p>	<p>Program providing contracts with the State Health Laboratory for conducting congenital disorder tests and provide follow up services by newborn health specialists.</p>
		<p>High Risk Prenatal Program – <i>Arizona Department of Health Services (ADHS)</i></p>	<p>Through contracts with NICUs, provides developmental specialists who evaluate neonates' developmental status and assists in directing appropriate care. Also provides a community health nurse to homes for periodic screening of developmental delays.</p>



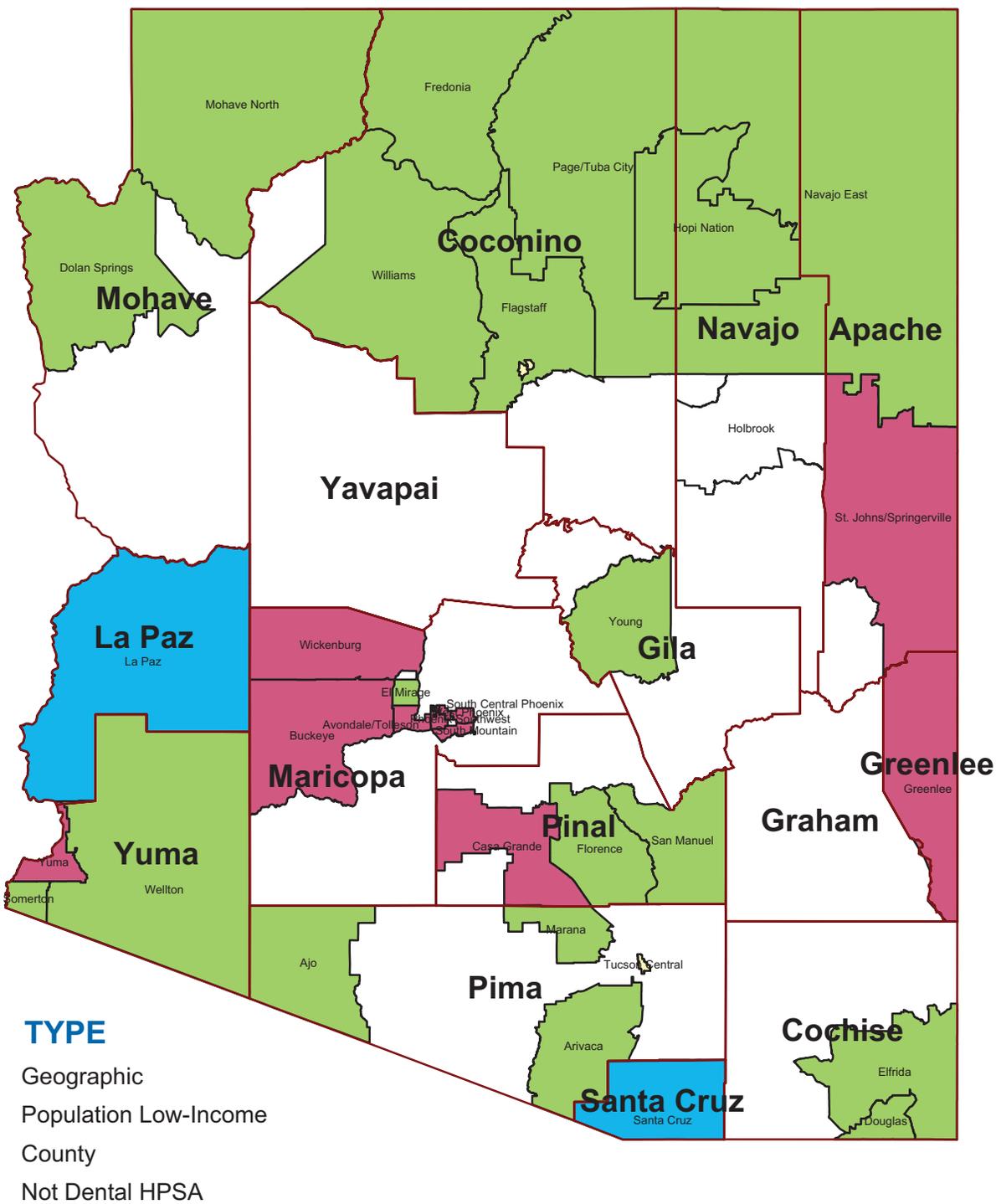
# Appendix D

Maps of Arizona's Health Provider Shortage Areas (HPSAs)  
and Federal Medically Underserved Areas (MUAs)

# Arizona

## Dental HPSA Designations

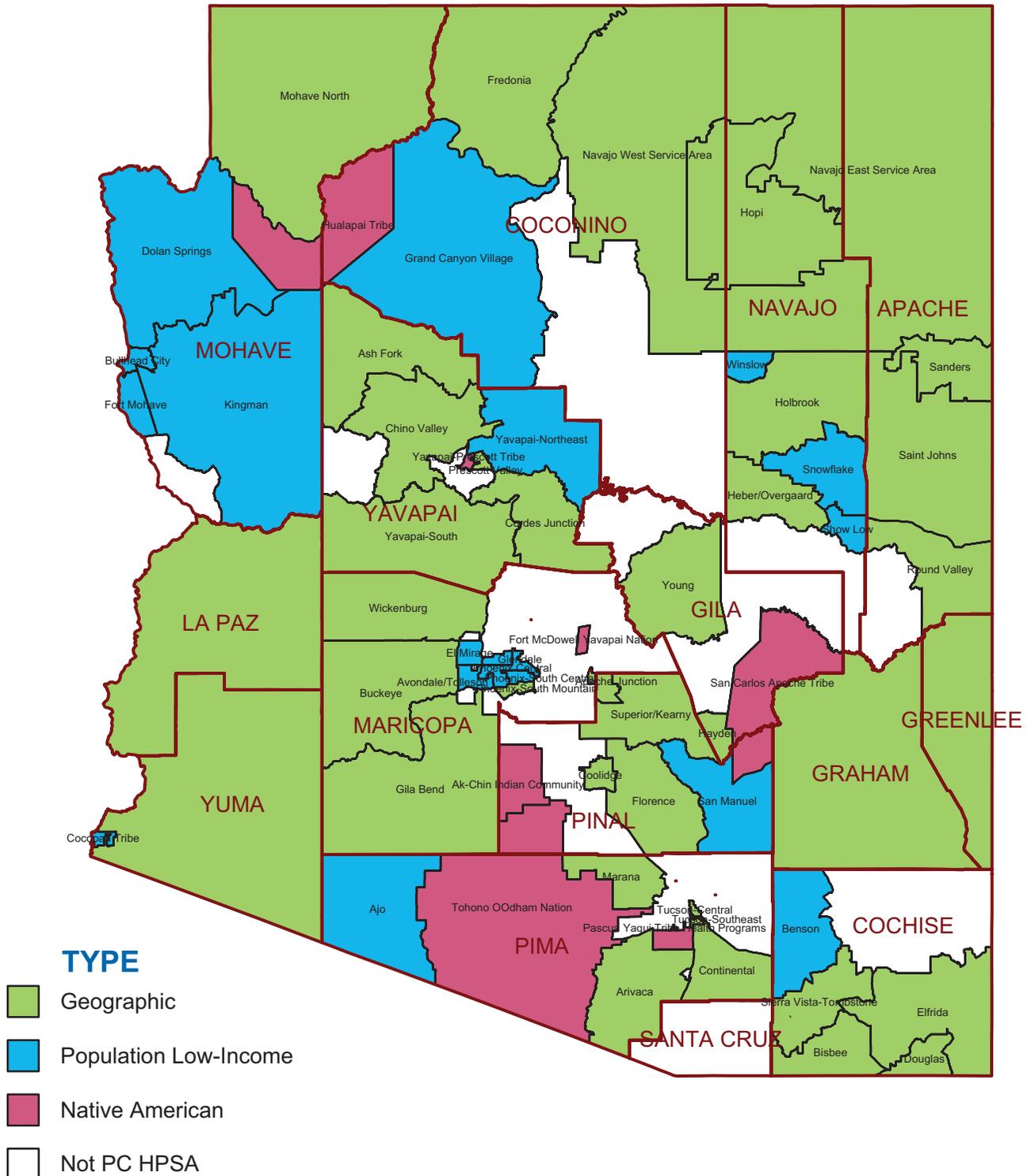
### April 2009



# Arizona

## Primary Care Health Professional Shortage Areas

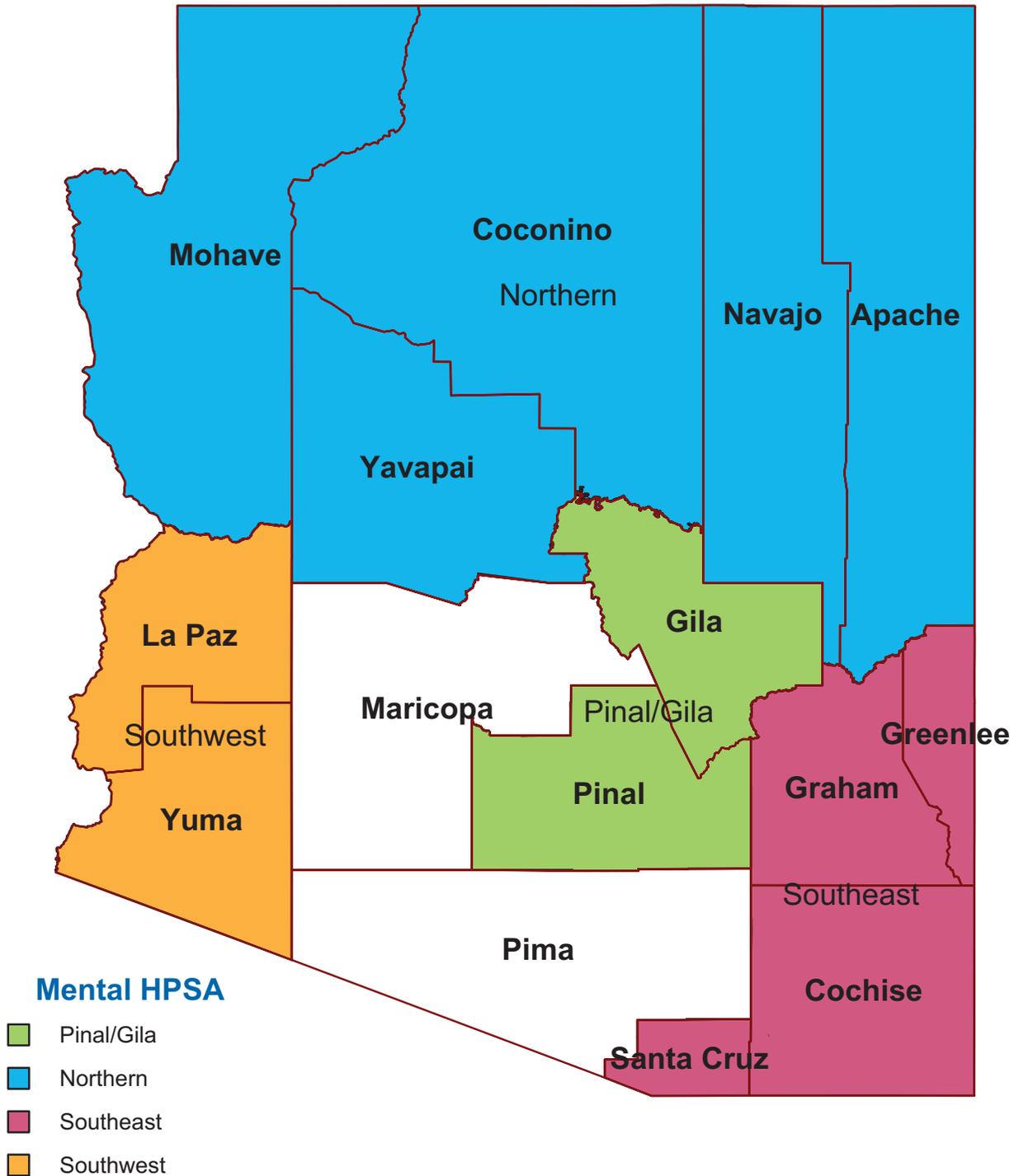
### October 2009



# Arizona

## Mental Health HPSAs

### 2009



# Arizona

## Federal Medically Underserved Areas & Populations

April 2009

