

NEEDS AND ASSETS REPORT

2008



 **FIRST THINGS FIRST**

North Pima

Regional Partnership Council



North Pima

Regional Partnership Council

Council

Naomi Karp, *Chair*
Alia Sweis, *Vice Chair*
Esther Capin
Nicola Finley, MD
Dorothy Johnson, MD
Lorraine Morales, EdD
Pam Moseley
Arlene Nehls
Annabel Ratley
Carroll Rinehart, LHD
Jill Rosenzweig, EdD

Erin Lyons, *Regional Coordinator*

2008 Needs and Assets Report

Submitted in accordance with ARS 8-1161. Each regional partnership council shall submit a report detailing assets, coordination opportunities and unmet needs to the board biannually. The regional partnership council's needs and assets assessment shall be forwarded to the board for final approval no later than September 1 of each even-numbered year, beginning in 2008. The board shall have discretion to approve or reject a council's assessment in whole or in part or to require revisions. The board shall act on all needs and assets assessments no later than October 1 of each even-numbered year, beginning in 2008.

First Things First is an equal employment opportunity agency. ©2008

www.azftf.gov/northpima

Contents

Executive Summary	1
North Pima Regional Overview	2
First Things First – A Statewide Overview	5
The North Pima Regional Partnership Council	7
Overview of Region: North Pima	8
Regional Child and Family Indicators	11
Young Children and Families in the North Pima Region.....	11
Regional Population.....	11
Race and Ethnicity Characteristics	12
Immigration Status.....	13
Language Characteristics for Children.....	15
Family Composition.....	15
Teen Parent Households	16
Grandparent Households.....	17
Employment, Income and Poverty	17
Unemployment	17
Annual Income	18
Families in Poverty	19
Parent Educational Attainment.....	22
Healthy Births.....	23
Prenatal Care.....	23
Low Birth-Weight Babies.....	25
Pre-term Births	25
Births to Teen Mothers	26
Health Insurance Coverage and Utilization	26
Uninsured Children	26
Access to Medical Care	27
Oral Health Access and Utilization	29
Child Safety.....	29
Child Abuse and Neglect	30
Foster Care Placements.....	33
Child Mortality	34
Children’s Educational Attainment.....	35

School Readiness	35
Elementary Education.....	37
Current Regional Early Childhood Development and Health System	39
<hr/>	
Summary of Regional Findings on Early Childhood System.....	39
Quality	39
Accredited Early Care and Education Centers	40
Ratios and Group Sizes	41
Access.....	42
Number of Early Care and Education Programs.....	43
Small Group Homes in North Pima	44
Child Care Centers in North Pima	45
Child Care Public School Programs	46
Costs of Care	47
Health	48
Developmental Screening	49
Healthy Weight, Nutrition, and Physical Activity.....	52
Immunizations.....	53
Oral Health.....	53
Breast-feeding Support	54
Services for Children with Special Needs	55
Family Support	56
Parent Knowledge About Early Education Issues	58
Family Literacy	59
Professional Development	59
Child Care Professionals’ Certification and Education	60
Professional Development Opportunities.....	62
Employee Retention	62
Compensation and Benefits.....	64
Public Information and Awareness.....	65
System Coordination	67
Conclusion	69
<hr/>	
Appendices	70
<hr/>	
Chart of Regional Assets – North Pima	70
B. Citations for resources used and extant data referenced.....	71
Description of Methodologies Employed for Data Collection	75

Executive Summary



First Things First presents Arizona with the unprecedented opportunity to create an early childhood system that affords all children an equal chance to reach their fullest potential, gives families real choices about their children's educational and developmental experiences, and involves every community throughout the state in sharing the responsibility for the development of children into safe, healthy, and productive citizens.

In January 2007, First Things First released *Building Bright Futures*, Arizona's first statewide needs and assets assessment of the current state of early childhood in Arizona. The report provided data on the need to improve early childhood education practice and capacity, highlighted existing resources or assets currently available to support early childhood efforts, and identified opportunities for creating a comprehensive early childhood improvement plan for the state of Arizona.

As part of the First Things First initiative, thirty-one Regional Partnership Councils (RPC) were also created to represent early childhood interests at the local level and, among other responsibilities, conduct a community-level needs and assets assessment every two years. Each eleven-seat volunteer council is comprised of key community stakeholders with vested interests in the process of early childhood education and its outcomes (i.e. educators, parents, business leaders, physicians, etc.). This report presents findings from the first needs and assets assessment completed in 2008 for the North Pima RPC. Each assessment will be used to help guide strategic planning and funding decisions at the local level on behalf of the First Things First state initiative.

North Pima Regional Overview

The North Pima region is composed of metropolitan, retirement, suburban, and rural areas. It includes two towns experiencing expansive population growth, Oro Valley and Marana, as well as other growing communities: Avra Valley, Catalina, Mount Lemmon, Picture Rocks, Rillito, and the Northern Foothills section of Tucson. The town of Marana also contains a Pascua Yaqui Tribe community. The region contrasts relatively affluent suburbs with low-income and rural communities, as well as unique areas such as the somewhat removed Mount Lemmon community. The North Pima region includes 12 zip codes and spans more than 1300 square miles.

In addition, the North Pima region contains many resources to support its communities, including three school districts, seven libraries, two major medical facilities, numerous faith-based organizations, several large corporations, and many prominent tourist attractions. Despite these assets, however, children and families within the region experience diverse and significant needs.

Approximately 17,000 children five years of age and younger reside within the North Pima region. Since 2000, this age group has grown at a rate of 21 percent, compared to a rate of 30 percent across Arizona. Roughly 15 percent of children in the region live in single parent households. Financial well-being of families in North Pima varies significantly across the region; median incomes in Oro Valley and the foothills communities exceed the state average, while nearly half of the zip code areas in the region have median incomes that fall below the statewide and national averages. Between five and 10 percent of children in the North Pima region live in poverty.

Even though the region is home to various organizations and several affluent communities, North Pima does not appear to be rich in early childhood education and care resources. Only eight accredited early care centers are located within the region. With only 35 percent of children age five and younger in all types of care and education programs, it is clear there is an inadequate number of programs of any type for working parents or those who want or need a developmental program for their children. Specifically, few licensed or regulated early care and education providers serve infants and toddlers. In addition, the costs associated with high quality early care and education services are often prohibitive for many families; annual child care costs represent roughly 12 percent of a couple's income and between 22 and 30 percent of a single mother's annual income.

Further, the early childhood workforce in North Pima faces several critical challenges. There is a significant shortage of early childhood specialists such as speech/language and occupational therapists and other professionals to meet the special needs of children in the region. Additionally, fewer than half of the early childhood educators in the region have education beyond a high school diploma, which is well below the national average. Attracting educated and well-qualified professionals to early childhood education is challenging when the average annual salaries for this workforce are well below the median salary in the region. Specifically, a teacher in a private child care center earns, on average, only \$1,000 more annually than the federal poverty level of \$21,200 for a family of four.

Much of the health information reported for the North Pima Region is reflective of the state in general, as reliable data are typically unavailable at the regional level as defined by each Regional Council's geographic boundaries. However, based on the data that were available and on key informant interviews, several key health issues are evident within the region. Children in the North Pima region have critical oral health needs, with more than half experiencing tooth decay and nearly 12 percent requiring urgent treatment for dental

problems. Further compounding this problem is the shortage of pediatric dentists within the region, as well as the significant number of children without health insurance. Additionally, the Arizona Department of Health Services reports that only one-third of two-year olds in the towns of Marana and Oro Valley received the recommended number of immunizations in 2003.

Many families in North Pima seek support and information to meet their children's educational and health needs. Interviews with parents and early childhood professionals in the region indicate the need for additional information about high quality child care and education programs, child development, and available parent education resources. Although there is a loose network of support in North Pima through schools, faith-based organizations, and other community settings, few social service agencies are physically located within the region. The lack of services throughout the region poses a challenge for families who are located within the rural areas that are far from metropolitan centers, or who have limited Internet access to assist in finding resources.

According to the 2007 *Bright Futures* report, Arizonans surveyed indicated that only one in three is well informed on issues related to early childhood. At the local level, no surveys have yet been conducted to measure public support and awareness around the issues related to early care and education in the North Pima region. The fall 2008 survey that First Things First will administer will provide some additional information regarding public awareness of issues related to early childhood development. As the North Pima Regional Partnership Council seeks to improve public awareness, it can collaborate with other Regional Partnership Councils in the region and throughout the state, as well as existing community organizations that are located within the region and in the nearby Tucson metropolitan area.

Although there are organizations providing services within the North Pima region including health, child care, education, and social services, many of these services provide no information specifically pertinent to families with children age five and younger. Even less frequently do service providers collaborate together to provide age-appropriate services along the entire spectrum of care for a family with young children. This lack of early childhood system coordination is not only indicative of the North Pima region, but is one that has typified conditions across the state. Parents frequently have no other option but to assume the responsibility as conduits for gathering and connecting information they need between multiple service systems. Many opportunities exist for increased collaboration and involvement throughout the North Pima Region.

The First Things First North Pima Regional Partnership Council and its community partners will work to create a system that builds and sustains a coordinated network of early childhood programs and services for the young children of the region. This first Regional Needs and Assets report highlights child and family indicators that illustrate children's health and readiness for school and life, and provides an introductory assessment of the current early childhood development and health system. While providing a valid and complete baseline of data about young children and their families in the region was the ultimate goal, there were many challenges around the collection and analysis of data for the region. Although numerous sources for data exist in the state, the information can be difficult to analyze and often is not available at the regional level. In future years, the North Pima Regional Partnership Council will focus its efforts on improving data collection so that more regionally specific data are available for the Regional Council to make well-informed decisions regarding services and programs for the children of the region. 🇺🇸

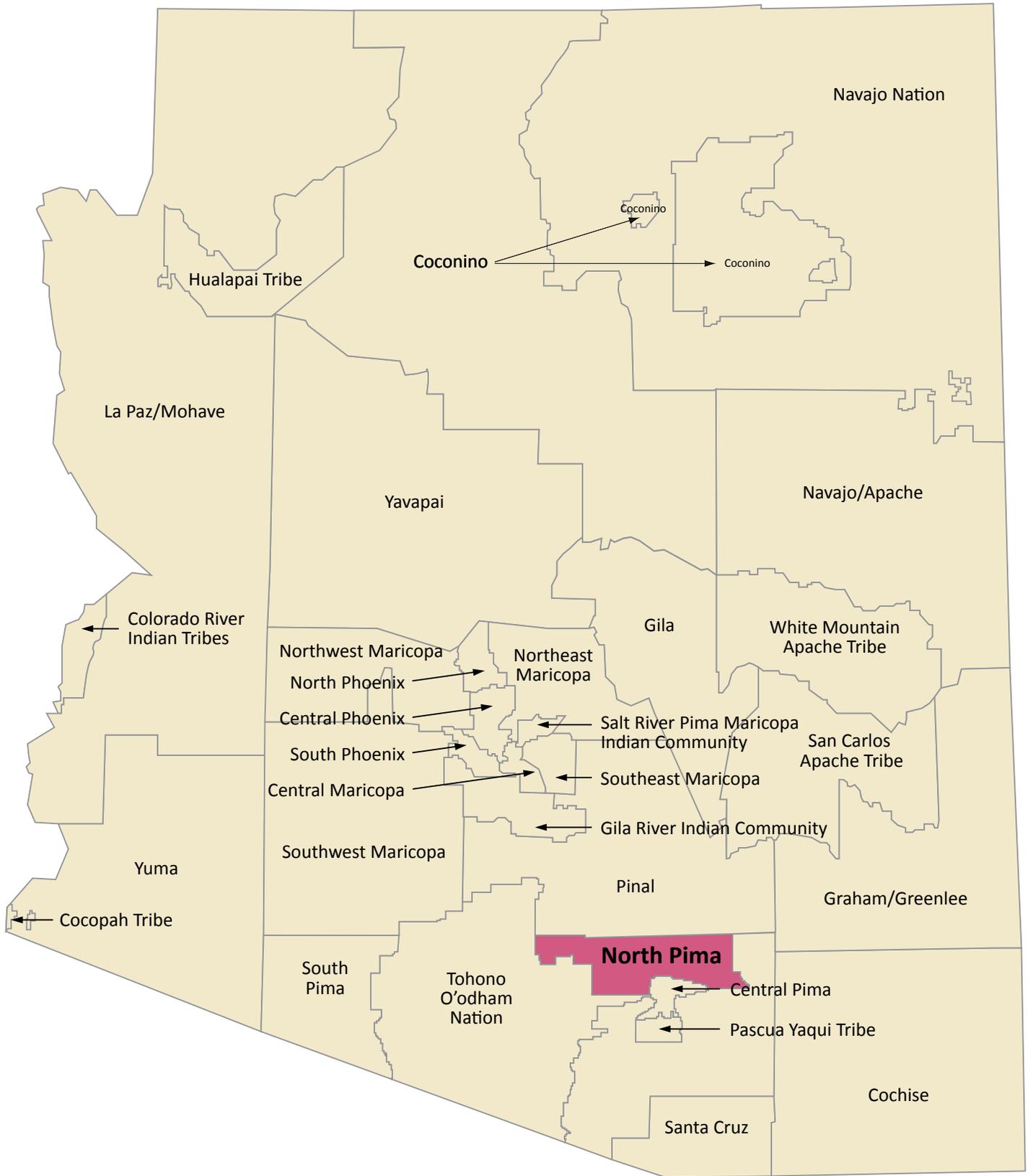


First Things First – A Statewide Overview

The mission of First Things First (FTF) is to increase the quality of, and access to, early childhood programs that will ensure that a child entering school arrives healthy and ready to succeed. The governance model of First Things First includes a State-level Board (twelve members in total, of whom nine are appointed by the Governor) and Regional Partnership Councils, each comprised of eleven members appointed by the State Board (Board). The model combines consistent state infrastructure and oversight with strong local community involvement in the planning and delivery of services.

First Things First has responsibility for planning and implementing actions that will result in an improved system of early childhood development and health statewide. The Regional Partnership Councils, thirty-one in total, represent a voluntary governance body responsible for planning and implementing actions to improve early childhood development and health outcomes within a defined geographic area (“region”) of the state. The Board and Regional Partnership Councils will work together with the entire community – all sectors – and the Arizona Tribes to ensure that a comprehensive, high quality, culturally sensitive early childhood development and health system is put in place for children and families to accomplish the following:

- Improve the quality of early childhood development and health programs
- Increase access to quality early childhood development and health programs
- Increase access to preventive health care and health screenings for children through age five
- Offer parent and family support and education concerning early child development and literacy
- Provide professional development and training for early childhood development and health providers
- Increase coordination of early childhood development and health programs and public information about the importance of early childhood development and health.



The North Pima Regional Partnership Council

The First Things First North Pima Regional Partnership Council (Regional Council) works to ensure that all children in the region are afforded an equal chance to reach their fullest potential. The Regional Council is charged with partnering with the community to provide families with opportunities to improve their children's educational and developmental outcomes. By investing in young children, the Regional Council and its partners will help build brighter futures for the region's next generation of leaders, ultimately contributing to economic growth and the region's overall well being.

To achieve this goal, the North Pima Regional Partnership Council, with its community partners, will work to create a system that builds and sustains a coordinated network of early childhood programs and services for the young children of the region. This report, *Building Bright Futures: A Community Profile*, begins that process. First, the report provides a glimpse of several indicators that reflect child well being in the region and begins the process of assessing needs and establishing priorities. Next, the report reviews the status of the programs and services serving children and their families, highlighting the challenges confronting children, their families, and the community. The report also captures opportunities that exist to improve the health, well-being and school readiness of young children.

In the fall of 2008, the North Pima Regional Partnership Council completed a strategic planning process and set a three-year strategic direction that will define the Regional Council's initial focus in achieving positive outcomes for young children and their families. The Regional Council's strategic plan complements the Statewide Strategic Direction approved by the FTF Board in March 2008.

To effectively plan and make programming decisions, the Regional Council must first be fully informed of the current status of children in the North Pima Region. This report serves as a planning tool for Regional Council members as they design their strategic roadmap to improve the early childhood development and health outcomes for young children. Through the identification of regional needs and assets and the synthesis of community input, this initial report begins to outline possible priority areas on which the Regional Council may focus its efforts and resources.

It is important to note the challenges in writing this report. While numerous sources for data exist in the state and region, the information was often difficult to analyze and not all state data could be analyzed at a regional level. In many sections of the report, data are available only for Pima County as a whole and are not specific to the North Pima communities. Data are typically unavailable for the unincorporated areas of the region, so much of the specific information focuses on the towns of Marana and Oro Valley, which together comprise one-third of the total population of the North Pima region. Lack of a coordinated data collection system among the various state agencies and early childhood organizations often produced statistical inaccuracies and duplication of numbers. Additionally, many indicators that could effectively assess children's healthy growth and development are not currently or consistently measured.

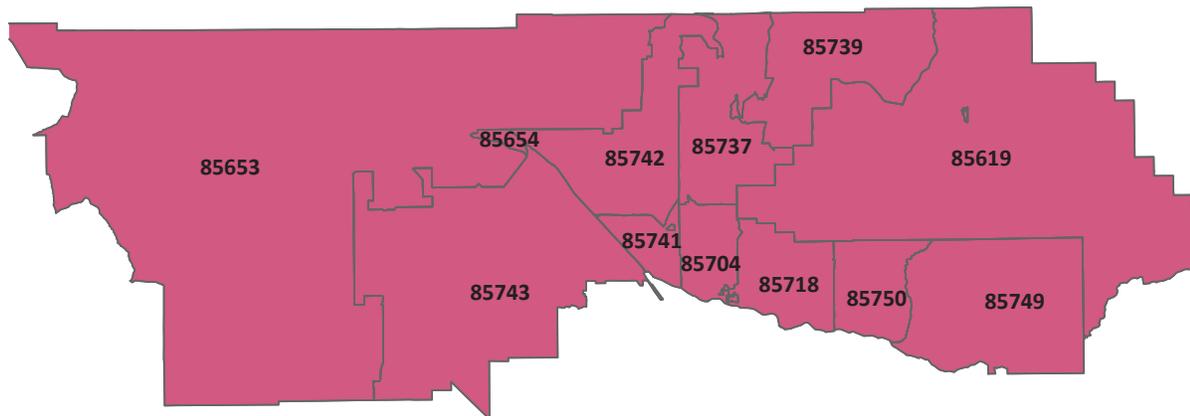
Nonetheless, FTF was successful in many instances in obtaining data from other state agencies, Tribes, and a broad array of community-based organizations. In their effort to develop regional needs and assets reports, FTF has begun the process of

pulling together information that traditionally exists in silos to create a picture of the well being of children and families in various parts of our state.

The First Things First model is for the Regional Council to work with the FTF Board to improve data collection at the regional level so that the Regional Council has reliable and consistent data in order to make sound decisions to advance the services and supports available to young children and their families. In the fall of 2008, FTF conducted a family and community survey that will provide information on parent knowledge related to early childhood development and health and their perception of access to services and the coordination of existing services. The survey results will be available in early 2009 and will include a statewide and regional analysis.

Overview of Region: North Pima

The North Pima Region is one of five First Things First designated regions in Pima County. The other Regional Partnership Council regions in Pima County include Central Pima, South Pima, the Pascua Yaqui Tribe, and the Tohono O’Odham Nation. North Pima communities include metropolitan, retirement, suburban, and rural areas, in addition to the Mount Lemmon community and a Pascua Yaqui neighborhood in Marana. The North Pima region covers more than 1300 square miles and has a total population of nearly 225,000 residents. Almost one-third of the total population resides in the incorporated towns of Marana and Oro Valley. The North Pima Region includes the following zip codes: 85619, 85653, 85654, 85704, 85718, 85737, 85739, 85741, 85742, 85743, 85749, and 85750.



The North Pima communities are primarily served by three school districts: Catalina Foothills, Marana Unified, and Tanque Verde. Just over half of the elementary schools in the Amphitheater School District are located in the North Pima region, and the Flowing Wells and Tucson Unified school districts each have two elementary schools in the region. The Redington District in the Mt. Lemmon area does not have any schools and there are no children under five in the community. Seven public libraries also serve the region.

Many prominent attractions exist within the North Pima region, including the Arizona –Sonora Desert Museum; Tohono Chul Park; Catalina State Park; the Uni-

versity of Arizona's Biosphere 2; Mt. Lemmon hiking and skiing facilities; and the De Grazia Gallery in the Sun. The Northern area also boasts several large retirement communities; numerous golf courses that have hosted professional tournaments; and vacation and conference destinations such as The Westin La Paloma Resort and Spa; Loews Ventana Canyon Resort; Hilton El Conquistador Golf and Tennis Resort; and the Omni Tucson National Golf Resort and Spa. In addition, the largest employers within the region are: Wal-Mart stores, Marana Unified School District, University Physicians Healthcare, Northwest Medical Center, Honeywell, Ventana Medical Systems, and Canyon Ranch.¹

The major medical facility in the North Pima region is Northwest Medical Center, which features an Oro Valley location as well as the Women's Center, Arizona's first free-standing, self-contained hospital serving women and their particular health-related needs. The Women's Center is located on the main campus of the Northwest Medical Center. In addition, Marana Health Center is a health care clinic and community services center that operates in eight locations throughout Northern Pima County and Metro Tucson. 🏥



¹ www.thepepper.com/top10_employer.html



Regional Child and Family Indicators

Young Children and Families in the North Pima Region

Indicators or factors that describe early childhood health and development can illustrate the well-being of children and families within the region. Needs assessment data for these indicators provide policy makers, service providers, and the community with an objective way to understand factors that may influence a child's healthy development and readiness for school and life. The indicators included in this section are similar to those highlighted in the statewide needs and assets report. Data in this report examine the following:

- **Early childhood population** – Race, ethnicity, language, and family composition
- **Economic status of families** – Employment, income, poverty and parents' educational attainment
- **Trends in births**
- **Health insurance coverage and utilization**
- **Child safety** – Abuse and neglect and child deaths
- **Educational achievement** – Elementary school performance

Regional data are compared with state and national data wherever possible. Every attempt was made to collect data for multiple years at each level of reporting (regional through national). However, there are some items for which no reliable or comparable data currently exist.

While the North Pima Regional Partnership Council may have a limited direct impact on the more general indicators listed above, they are important measures to track because they directly influence children's chances for success in all aspects of life. In addition, some indicators such as child abuse, child neglect, and poverty are tracked because they provide pertinent information on how children are faring, or factors to consider when designing strategies to improve child outcomes in the region.

Regional Population

From 2000 to 2006, the overall population of Pima County increased by 15 percent. The overall population increase for the same time period across Arizona was 19 percent. While the County's growth was less than that of the state, cities within North Pima (e.g., Oro Valley, Marana, and Catalina) experienced tremendous growth through 2000 and in recent years. Between 1990 and 2000, Marana and Oro Valley were the fourth and fifth fastest growing cities, respectively, in Arizona.²

With this overall increase in population came additional growth in the number of children aged birth through five. While less than the state's rate of 30 percent growth in this age range, the North Pima region still experienced growth within this young population.

² www.wikipedia.org

Population Growth (all ages)

	2000	2006	Percent Change
Pima County*	843,746	946,362	+15%
Arizona	5,130,632	6,338,755	+19%
U.S.	281,421,906	301,621,157	+7%

*Only county data available for this region.
 Source: US Census 2000, Summary File SF2 and US Census Population Estimates Program (PEP), 2007 estimates.

Population Growth for Children Ages Birth Through Five Years

	2000	2007	percent Change
Pima County*	55,829	65,986	18%
Arizona	459,141	594,110	29%
U.S.	23,140,901	24,755,834	7%

*Only county data available for this region.
 Source: US Census 2000, Summary File SF2 and US Census Population Estimates Program (PEP), 2007 estimates.
 Regional Race, Ethnicity and Language

Race and Ethnicity Characteristics

Residents in the North Pima region are ethnically and racially diverse, although less so than in some other regions in the state. According to the U.S. Census data from 2006, Arizona’s racial make-up included 29 percent Hispanic/Latino; 59 percent Caucasian; 4 percent African American; 5 percent American Indian; and 2 percent Asian American. Overall, North Pima families are primarily Caucasian, although the breakdown by zip code and ethnicity reveals sharp difference between areas. For example, in the 85654 zip code, which includes a triangulated area between Interstate 10, Tangerine Road and just south of Avra Valley Road on the northwest side of the region, the African American population is 31 percent; but in the 85739 zip code area, the African American population is less than 1 percent, while 91 percent of residents are Caucasian.

Data about births in 2006 in Arizona reflect a changing demographic both state-wide and in North Pima. The following table shows births by racial/ethnic group for the Tucson Metropolitan Area south of the North Pima region. These data are available only for the Tucson metropolitan area. The largest percentage of births in 2006 occurred among Hispanic or Latino families (52 percent) followed by Caucasian Non-Hispanic families (37 percent). Tucson had approximately 8 percent more births to Hispanic or Latino mothers than the state rate (44 percent).

Births By Mother’s Race/Ethnic Group (2006)

	Caucasian Non-Hispanic	Hispanic or Latino	African American	American Indian or Alaska Native	Asian or Pacific Islander	Unknown
Tucson Metro Area*	37% (4,674)	52% (6,482)	4% (495)	3% (410)	3% (402)	1% (123)
Arizona	42% (43,013)	44% (44,862)	4% (3,864)	6% (6,364)	3% (3,136)	<1% (803)

* Data only available for the Tucson Metro Area: Source: ADHS Vital Statistics, 2006.

As a point of comparison, the following table highlights the racial composition throughout the state.

Racial Composition of Selected Arizona Cities

City	African American	American Indian	Asian American	Hispanic/Latino (of any race)	White, not-Hispanic
Avondale	N/A	N/A	N/A	N/A	44%
Chandler	4%	1%	6%	23%	64%
Gilbert	3%	1%	5%	15%	74%
Glendale	4%	2%	4%	35%	55%
Mesa	3%	2%	2%	27%	65%
Peoria	2%	<1%	3%	N/A	72%
Phoenix	6%	2%	2%	41%	48%
Scottsdale	2%	<1%	3%	9%	N/A
Surprise	5%	1%	2%	21%	N/A
Tempe	4%	3%	7%	23%	62%
Tucson	4%	4%	3%	39%	50%
Yuma	3%	1%	2%	N/A	39%
Arizona	4%	5%	2%	29%	60%
County	African American	American Indian	Asian American	Hispanic/Latino	White, not-Hispanic
Apache	1%	74%	<1%	5%	20%
Cochise	4%	1%	2%	32%	60%
Coconino	1%	29%	1%	12%	56%
Gila	1%	14%	1%	16%	68%
Graham	2%	15%	1%	28%	55%
Greenlee	1%	2%	<1%	45%	51%
La Paz	1%	13%	1%	23%	64%
Maricopa	5%	2%	3%	30%	60%
Mojave	1%	2%	1%	13%	81%
Navajo	1%	46%	<1%	9%	43%
Pima	3%	3%	2%	33%	58%
Pinal	4%	6%	1%	30%	59%
Santa Cruz	1%	1%	1%	81%	18%
Yavapai	1%	2%	1%	12%	84%
Yuma	3%	2%	1%	56%	40%

Source: American Community Survey (2006)

Immigration Status

Data reveal that the immigration status of Pima county residents mirrors that of the rest of Arizona. Statewide, 30 percent of all children have at least one foreign-born parent. Although the specific number of children born to immigrant families is unknown for North Pima, those children born to immigrant families are themselves likely to be citizens. Citizenship status allows children to qualify for public benefits such as AHCCCS and KidsCare (publicly financed health insurance for low-income children) that are generally inaccessible for non-citizens. Nonetheless, citizenship status does not guarantee that young children are able to access services. Even though

more young children in the region are likely to be citizens, the citizenship status of their parents may affect their access to services. National studies suggest that many eligible “citizen children” with non-citizen parents are unaware of services or afraid of the consequences of participating in public programs because of their legal status and citizenship.³

Regional Immigration Characteristics (2006)

	Native Citizens	Foreign Born Naturalized Citizens	Non-US Citizens	Foreign-born
Pima County*	(87%) 821,683	(4%) 42,967	(9%) 81,712	(13%) 124,679
Arizona	(85%) 5,237,235	(4%) 273,700	(11%) 655,383	(15%) 929,083
U.S.	(87%) 261,850,696	(5%) 15,767,731	(7%) 21,780,050	(12%) 37,547,789

*Census data not available at the sub-county level. Only county level is provided.
Source: American Community Survey (2006)

Children In Immigrant Families (2006)

Tucson, AZ	Arizona	U.S.
30%	30%	22%

Source: Annie E. Casey Foundation. KidsCount. Children in Immigrant Families, Phoenix, AZ, as determined by the 2000 and 2001 Supplementary Survey and the 2002 through 2006 American Community Survey (ACS).

Despite the large numbers of immigrants to the state, Arizona does not rank in the top ten for naturalizing citizens or providing permanent legal residency to individuals, leading some to speculate that many of the immigrants living in Arizona do not have legal status in the state. As a result, many individuals of foreign origin may not seek the services they need for themselves or their children for fear of having their status questioned, even if they do have legal status to be living in the United States. Consequently, finding data to accurately describe the ethnic and language characteristics of these families is very difficult in the North Pima region, as well as the United States as a whole.

There is some information available to help clarify the issue: the Annie E. Casey Foundation estimated in 2004 that Arizona ranked 5th in the nation for births to foreign-born mothers, at 32 percent. Two years later, in 2006, the National Center for Children in Poverty projected that 78 percent of Arizona children born to low-income families had immigrant parents, consistent with recent surges in immigration trends from Mexico being reported by federal agencies.

Children of immigrants face challenges that many children of native-born parents do not. Educational attainment of immigrant parents is often quite limited. Nationally, 40 percent of children in immigrant families live with a mother or father who has not graduated from high school, compared to 12 percent of children in non-

3 Capps, R., Hagan, J. and Rodriguez, N. “Border Residents Manage the U.S. Immigration and Welfare Reforms.” In *Immigrants, Welfare Reform, and the Poverty of Policy*. Westport, CT: Praeger, 2004.

immigrant families. Parents who have completed fewer years of schooling may be less able to help their children learn to read. In addition, children of immigrants may be less prepared than their counterparts to start kindergarten. Nationally, three – and four-year old children in immigrant families are less likely to participate in preschool programs than their peers,⁴ possibly because their families wish to retain the use of their primary language and because relatives who live with the family are sharing in the primary care of young children until they enter primary school.

Language Characteristics for Children

Language characteristics, in terms of language primacy or fluency, are generally not measured in children until they reach their fifth year. As a result, data on these characteristics are usually limited to children over the age of five. Data from the most recent Kids Count and American Community Survey estimate that up to 32 percent of Arizona children ages five to eighteen speak a language other than English. An examination of Pima County data shows that eight percent of families with young children speak primarily Spanish and, consequently, may be isolated. Many of the children who reside in linguistically isolated families enter school with limited English proficiency.

Children** Living In Linguistically-Isolated Households

	Percent Speak only English	Percent Speak primarily Spanish	Speak primarily Other Languages
2000	72	8	1
2006	72	8	1

*Census tract data not available for 2006. Data available at the county level only.

**Children defined as five years and older.

Sources: U.S. Census (2000); American Community Survey (2006)

Family Composition

In Pima County, the majority of children live in households with two parents, with 84 percent of households headed by a married couple. The proportion of single-parent households in Pima County is similar to that of Arizona overall, as illustrated in the table below:

Child Population, by Household Type, (2006)

	Married-couple household	Father-only household	Mother-only household
Tucson	55%	10%	33%
Pima	62%	10%	27%
Arizona	65%	9%	24%

Source: American Community Survey, 2006.

Children growing up in single-parent families typically do not have the same economic or human resources available as those growing up in two-parent families. Nationally, 33 percent of single-parent families with related children had incomes

4 (Children's Action Alliance. "Going Beyond the Immigration Hype: Children and Our Shared Destiny" Fact Sheet, 2006).

below the poverty line, compared to 6 percent of married-couple families with children. Only about one-third of female-headed families reported receiving any child support or alimony payments in 2006.⁵ One-parent families often face overwhelming demands of work, housework, and parenting.

Teen Parent Households

The North Pima region is consistently several points below the state average in terms of births to teenage parents, with less than one out of ten children born to parents aged 19 years or younger in any given year since 2002. However, the North Pima Regional Partnership Council may seek additional information in future assessments regarding specific communities within the region that contain higher rates of teen pregnancies and parenting in order to ensure that appropriate services are reaching those areas.

Percentage of Children Born To Teen* Mothers

	2002	2003	2004	2005	2006
North Pima***	9%	8%	9%	9%	8%
Tucson***	14%	14%	13%	12%	13%
Arizona	13%	12%	12%	12%	12%
U.S.	11%	10%	10%	10%	10**

*Teen defined as 19 years and under.

***Includes data on Catalina, Marana, Oro Valley, and Rillito (data not available on Mount Lemmon or Northern Foothills). Data on Tucson metro area noted separately.

Sources: American Community Survey; National Center for Health Statistics; ADHS Vital Statistics **Preliminary Data for 2006, 12/5/2006.

Babies born to teen mothers are more likely than other children to be born at a low birth weight, experience health problems and developmental delays, experience abuse or neglect, and perform poorly in school. As they grow older, these children are more likely to drop out of school, get into trouble, and end up as teen parents themselves.⁶

The state average for teenage births has remained relatively constant at around 12 percent for more than five years, but little progress has been made in reducing the prevalence of Arizona teen mothers giving birth to a second child. From 2000 to 2006, approximately 22 percent⁷ of births to teen mothers were the mother's second child. In 2008, Arizona ranked 41st out of the 50 states for the highest high school drop-out rates, so many teen mothers are also challenged in the workforce to provide for their children because they lack a high school diploma. Ironically, dropout prevention studies consistently identify the need for high-quality early childhood education to *prevent* the high school drop-out problem, which in turn is cited in the early childhood literature as one reason why children of teenage mothers often have poor early childhood outcomes themselves.

5 Kids Count.

6 Annie E. Casey Foundation. KidsCount Indicator Brief: Preventing Teen Births, 2003.

7 Ibid.

Grandparent Households

Of the grandparents who live with their grandchildren in Pima County, 53 percent report that they have primary caretaking responsibilities, a percentage that is higher than both the state and the national averages. Put another way, out of the 371,370 households in Pima County, there were 18,255 households with grandparents living with their own grandchildren under 18 years. Of those households, 53 percent (n=9,732) had grandparents who were primarily responsible for their grandchildren. Also, for many grandparent caregivers, this responsibility is a long-term commitment.⁸

Percentage of Grandparents Responsible for Grandchildren

	2006
Pima County	53%
Arizona	41%
U.S.	41%

* Percentage was calculated taking the total number of households in the county, dividing that by the total number of grandparents living with their grandchildren, then dividing that by the total number of grandparents responsible for their grandchildren. Indicator not measured as grandparent as primary caregiver prior to 2006. Source: American Community Survey.

Grandparent caregivers are more likely to be poor compared to their parent-maintained families. The 2000 census showed that 19 percent of grandparent caregiver households live below the poverty line, as compared to 14 percent of households with parents.⁹ 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 2006, 37 percent of grandparents (60 years old or older) living with grandchildren had a disability.¹⁰

Employment, Income and Poverty

Unemployment

Joblessness can impact the home and family environment. In Arizona, recent unemployment rates have ranged from a high of 6 percent in 2002 to a low of 3.3 percent in May of 2007. During the most recent twelve-month reporting period, unemployment in Arizona has mirrored the national trend where an economic downturn has led to higher joblessness rates. Data are presented in monthly increments because economic indicators such as joblessness are measured over much smaller periods of time than are static social indicators (i.e., gender, ethnicity, etc.). In growth-prone areas of Arizona such as Phoenix or Tucson, unemployment rates have been slower to creep up toward the state and national averages.

Although there are no region-specific unemployment data available for the North Pima region, communities that continue to experience large population growth are often fueled by a growing employment sector as well, so the Pima County rates reported here may resemble the regional data. During the period reflected in the

⁸ Ibid.

⁹ Census 2000. Grandparents Living with Grandchildren, 2000, Census Brief.

¹⁰ 2006 American Community Survey.

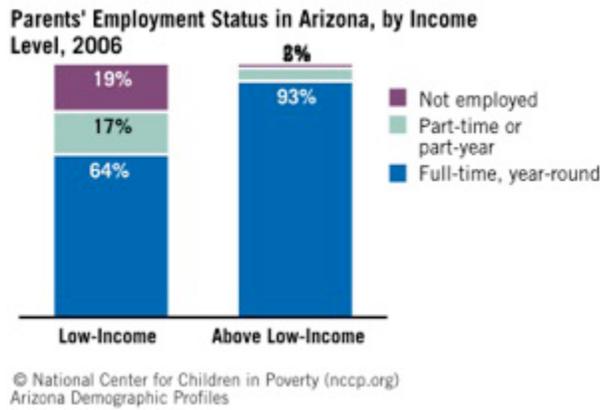
table below, Pima County unemployment rates consistently fell below both the state and national rates.

Average Unemployment Rates

	May 2007	April 2008	May 2008
Pima County*	3.0%	3.6%	3.8%
Arizona	3.6%	3.9%	4.4%
U.S.	4.5%	5.0%	5.5%

*Data only available at the county level.
 Source: Arizona Dept. of Commerce, Research Administration (June, 2008)

Even Arizona parents who are employed may be struggling to “make ends meet.” Research suggests that, on average, families need an income of about twice the federal poverty level to meet their most basic needs. Children living in families with incomes below this level—\$42,400 for a family of four in 2008—are referred to as low income. According to the National Center for Children in Poverty, 63 percent of children in low income families have at least one parent who is employed full-time, year-round. The following graph shows the relationship between low income and types of employment.



Annual Income

As illustrated in the table below, the North Pima region has a wide variation in median income. For example, in zip code 85749, the median income in 2000 was \$78,026 compared to zip code 85654 where the median income was \$19,375. Overall, as the following charts reveal, even using 2000 US Census data, many of the median incomes in the North Pima region are higher than the statewide average median annual income of \$47,000. However, nearly half of the zip code areas in North Pima have median incomes that fall below the statewide and national averages, indicating a potential impact on family and child well-being in these areas.

North Pima Median Income by Zip Code (2000)*

Zip code	Median Household Income
85619	\$32,604
85653	\$41,504
85654	\$45,465
85704	\$19,375
85718	\$63,756
85737	\$61,390
85739	\$47,001
85741	\$45,370
85742	\$59,888
85743	\$50,961
85749	\$78,026
85750	\$66,411

*Household median income was only available from the 2000 US Census.

In contrast to the North Pima regional numbers, median annual incomes in Pima County as a whole are, on average, lower than both the state and national numbers. In Arizona, during 2006, the median household income was reported at just over \$47,000 per year, very close to the national average of \$48,000 per year. However, during that same year, the median income for Pima County was approximately \$43,000.

Median¹¹ Annual Income (per year – pretax)

	2002	2003	2004	2005	2006
Pima County	\$37,638	\$37,818	\$38,800	\$41,521	\$42,984
Arizona	\$41,172	\$40,762	\$41,995	\$44,282	\$47,265
U.S.	\$43,057	\$43,564	\$44,694	\$46,242	\$48,451

Source: American Community Survey

Both women and men are more likely to have higher incomes if they have greater educational success. For example, according to 2004 statistics, a woman with less than a 9th grade education could expect to earn less than \$18,000 per year. In contrast, with a high school diploma, that income expectation rose to more than \$26,000 per year. With a bachelor's degree in 2004, women were reporting an income of \$41,000 per year.¹²

Families in Poverty

According to the National Center for Children in Poverty, “poverty is the single greatest threat to children’s well-being” because of its widespread effects on academic performance, social and emotional development, nutrition, and mental health.¹³

¹¹ The median, or mid-point, is used to measure income rather than taking the average, because the high income households would skew the average income and artificially inflate the estimate. Instead, the median is used to identify income in the middle of the range, where there are an equal number of incomes above and below that point so the entire range can be represented more reliably.

¹² *US Census Bureau, Income by education and sex*.

¹³ <http://www.nccp.org/topics/childpoverty.html>

In Pima County, many areas contain households where the median annual income is at or below federal poverty guidelines. For a family of four, the Federal Poverty level is \$21,200 a year (for the 48 contiguous states and Washington, D.C.).¹⁴ As the following chart shows, Pima County matches the state and national numbers with its percent of families living at or below the Federal Poverty level.

Families Living at or Below the Federal Poverty Level (2006)

	Percent of Households Living At or Below 100 Percent of the Federal Poverty Level
Pima County*	10**
Arizona	10
US	10

*Data not available at the sub-county level. Source: US Census, American Community Survey

**Six percent of these families are single headed households with children under 18 years of age.

When considering what defines a livable wage and the required income it takes to meet a family's basic needs, many systems use the 200 percent of poverty as a significant marker. The Quality Counts State Report Cards discuss 200 percent of poverty as the point at which a child's chances for success in school and life become improved.

Notably, 57 percent of children in the Tucson area live at or below 200% of the federal poverty level, a figure significantly higher than both the Arizona and the national rates.

Children Living at or Below the Federal Poverty Level (2007)

	Living At or Below 50 Percent of the Federal Poverty Level	Living At or Below 100 Percent of the Federal Poverty Level	Living At or Below 200 Percent of the Federal Poverty Level
Tucson*	13%	26%	57%
Arizona	9%	20%	45%
US	8%	8%	39%

Source: KidsCount (2007)

*Data only available at the city level.

Poverty data are not available for every community in the North Pima region. However, the incorporated towns of Marana and Oro Valley, which represent one-third of the total population in the region, do have more specific information available. According to the Arizona Department of Health Services, data for the 100% and 200% Federal Poverty levels reveal that the Marana area experienced greater levels of poverty than Oro Valley in 2003.

Children Living at or Below Federal Poverty Level—by City (2003) – North Pima Region

FPL Level For Region	Marana	Oro Valley
100% FPL	5%	3%
200% FPL	17%	11%

Arizona Department of Health Services, Community Health Profile, 2003.

¹⁴ Federal Register, Volume 73, No. 15, January 23, 2008, pp. 3971-3972.

Families living at or below 200 percent of the Federal Poverty Level generally qualify for services such as food stamps or the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). The charts below show the number of food stamps and WIC recipients in Pima County in 2007.

Food Stamp Program, Individuals Participating by County, July 2007

County	Persons Receiving Food Stamps	Percent Receiving Food Stamps
Maricopa	273,034	7%
Pima	93,077	9.7%
Apache	19,480	24%
Coconino	15,230	12.7%
Navajo	26,208	21.7%
Yavapai	12,399	5.6%
La Paz	2,749	12.7%
Mojave	21,497	11%
Yuma	26,994	13.6%
Gila	7,969	15.2%
Pinal	28,934	10.4%
Cochise	14,770	11.6%
Graham	4,838	14.4%
Greenlee	549	7.2%
Santa Cruz	6661	14.4%
Arizona	554389	8.7%

Source: Arizona Department of Economic Security Statistical Bulletin, July 2008, and July 1, 2007 population estimates, US Census.

Nearly ten percent of the population in Pima County received food stamps in 2007, a rate higher than the state average.

Opportunities also appear to exist for many more infants, children, and women to receive WIC nutritional services. In 2007, 6,615 children received WIC services in Pima County. In 2009, 34,064 children will be potentially eligible.

WIC Participation by County, 2007

County	Number Enrolled, 2007			Potential Eligible, FY 2009		
	Infants	Children	Women	Infants	Children	Women
Apache	67	167	133	651	2,602	813
Cochise	693	1413	1290	1083	4,333	1,354
Coconino	515	834	719	1217	4,870	1,522
Gila	165	329	313	464	1,855	580
Graham	197	420	353	348	1,393	435
Greenlee	63	99	79	63	251	79
La Paz	NA	NA	NA	186	742	232
Maricopa	19,283	34,493	35,046	39,920	159,679	49,899
Mojave	968	2006	1791	1738	6,954	2,173
Navajo	303	747	596	1279	5115	1599
Pima	4065	6615	5561	8516	34,064	10,645
Pinal	950	1790	1568	2348	9,393	2,935
Santa Cruz	267	503	426	538	2,152	673
Yavapai	739	1255	1324	1,773	7,093	2,216
Yuma	1392	2650	2500	2500	10,002	3,215

Source: Arizona Department of Health Services. Enrolled refers to women, infants and children certified for WIC in 2007. 2007 numbers do not include WIC data from Intertribal Council and Navajo Nation.

Parent Educational Attainment

Studies have found consistent positive effects of parent education on different aspects of parenting such as parenting approaches, attitudes, and childrearing philosophy. Parent education can potentially impact child outcomes by providing an enhanced home environment that reinforces cognitive stimulation and increased use of language.¹⁵ Past research has demonstrated an intergenerational effect of parental educational attainment on a child's own educational success later in life and some studies have surmised that up to 17% of a child's future earnings may be linked (through their own educational achievement) to whether or not their parents or primary caregivers also had successful educational outcomes.

Approximately 22% of births nationally are to mothers who do not possess a high school degree. While data for the North Pima region are not available, in Pima County that percent is higher than the national average. According to data reported from 2002 to 2006, approximately 25 percent of mothers who gave birth in Pima County had less than a high school diploma, which is notably higher than the state average of 20 percent over the same period of time. The state rate for births to mothers with no high school degree has remained fixed at 20 percent for the past three years.

¹⁵ Hoff, E., Laursen, B., & Tardiff, T. (2002). Socioeconomic status and parenting. In M.H. Bornstein (Eds.), *Handbook of parenting, Volume II: Ecology & biology of parenting* (pp.161-188). Mahwah, NJ: Lawrence Erlbaum Associates.

Percentage of Live Births by Educational Attainment of Mother

		2002	2003	2004	2005	2006
Pima County	No H.S. Degree	26%	26%	25%	24%	25%
	H.S. Degree	30%	30%	32%	31%	31%
	1-4 yrs. College	32%	33%	33%	35%	34%
Arizona	No H.S. Degree	20%	21%	20%	20%	20%
	H.S. Degree	29%	29%	29%	29%	30%
	1-4 yrs. College	32%	32%	32%	33%	33%
U.S.	No H.S. Degree	15%	22%	22%	Data not available	Data not available
	H.S. Degree	31%	Data not Available	Data not available	Data not available	Data not available
	1-4 yrs. College	21%	27%	27%	27%	27%

*Data for Pima County only. Arizona Dept. of Health Services, Vital Statistics, American Community Survey.

Numbers do not add up to 100% since any education beyond 17 years and unknowns were excluded.

While data on educational attainment of the mother is not available by zip code, educational attainment of adults in general in the North Pima Region shows considerable variation by zip code.

Educational Attainment by Adults in Selected Zip Code Areas (2000)

Zip Code	High School Graduate or Higher	BA Degree or higher
85619	70%	0%
85653	77.3%	11.6%
85654	36%	6.4%
85704	92.3%	39.9%
85718	96.7%	61.4%
85737	95.9%	43.8%
85739	88.6%	31.8%
85741	91%	25.2%
85742	93%	32.9%
85743	90.3%	32.9%
85749	96%	47.5%
85750	98%	58.3%
Arizona	81%	23.5%
US	80.4%	24.4%

Source: Factfinder.census.gov – US Census Bureau.

Healthy Births**Prenatal Care**

Women who receive prenatal care in the first trimester of a pregnancy are more likely to give birth to healthy babies. The American College of Obstetricians and Gynecologists recommends that prenatal care begin in the first three months of pregnancy and continue throughout the pregnancy with at least 13 visits. For the

last three years, approximately one quarter of all Arizona women giving birth had the recommended thirteen+ prenatal visits and the trend for this indicator appears to be heading in the right direction. The percentage of Arizona women who had no care has remained constant at about three percent and is somewhat lower than the percentage of all U.S. women delivering with no care. There are many barriers that pregnant women experience that result in delayed or inconsistent prenatal care. Some of these include low income, lack of health care coverage, and distance from prenatal care providers, lack of knowledge and experience with the health care system, stress and domestic violence¹⁶.

A healthy pregnancy leading to a healthy birth sets the stage for a healthy infancy during which a baby develops physically, mentally and emotionally into a curious and energetic young child.

Late or no prenatal care is associated with many negative outcomes for mother and child, including:

- Postpartum complications for mothers
- A 40 percent increase in the risk of neonatal death overall
- Low birth weight babies, and
- Future health complications for infants and children.

In the North Pima towns of Marana and Oro Valley, approximately 99 percent of mothers received prenatal care. Pregnant women in these two cities often receive five or more prenatal visits, with Marana reporting 90 percent and Oro Valley reporting 91 percent in 2003. Approximately 75 percent of pregnant women in Marana and Oro Valley received early prenatal care within the first trimester, which is comparable to the statewide average. According to national statistics, 83 percent of pregnant women receive prenatal care in their first trimester, compared to 77 percent in Arizona.¹⁷

One prominent indicator of whether prenatal care is obtained in the first trimester is ethnicity. In Arizona, Native American women are least likely to start prenatal care in the first trimester. According to 2005 data, 32 percent of Native American women did not start prenatal care in the first trimester, followed by Hispanic women at 30 percent, Black women at 24 percent and White women at 12 percent.¹⁸ Any effort to increase prenatal care should consider these large ethnic differences. There are many barriers to the use of early prenatal care, including: lack of general health care, transportation, poverty, teenage motherhood, stress, and domestic violence.¹⁹ An example of these barriers that prevent access to prenatal service is the location of the regions' two complete maternity care facilities: Marana Health Center and the Women's Center at Northwest Medical Center. While they provide maternity care, these two facilities are located close to one another and their location is problematic for pregnant women from rural parts of the region with limited transportation means.

16 <http://www.cdc.gov/reproductivehealth/products&-pubs/dataoaction/pdf/rhow8.pdf>

17 Child Health USA 2003, U. S. Department of Health and Human Services, Health Research and Services Administration.

18 Arizona Department of Health Services, Health disparities report, 2005.

19 <http://www.cdc.gov/reproductivehealth/products&-pubs/dataoaction/pdf/rhow8.pdf>

Selected Characteristics of Newborns and Mothers, North Pima (2006)

Community	Total	Teen Mother (<=19yr)	Prenatal Care 1 st Trimester	No Prenatal Care	Public \$	Low birth weight <2500 grams	Unwed Mothers
Mt. Lemmon	No Data Available						
Marana	271	29	204	4	97	14	89
Rillito	2	1	2	0	2	1	2
Oro Valley	163	6	131	1	18	8	21
Catalina	No Data Available						
TOTAL	436	36	337	5	117	23	112

* First trimester prenatal care serves as a proxy for births by number of prenatal visits and births by trimester of entry to prenatal care. Low Birth Weight (LBW) serves as a proxy for preterm births (<37 weeks). Source: Arizona Department of Health Services/Division of Public Health Services, Arizona Vital Statistics.

Low Birth-Weight Babies

Low birth weight and very low birth weight (defined as less than 3 lbs., 4 oz.) are leading causes of infant health problems and death. Many factors contribute to low birth weight. Among the most prominent are: drug use during pregnancy, smoking during pregnancy, poor health and nutrition, and multiple births. Based on the communities for which data are available, including Marana, Oro Valley, and Rillito, the North Pima Region had low birth-weight rates of approximately 5 percent of all births.

The Centers for Disease Control reports that low birth-weight births across the nation have been rising over the past several years. However, Arizona is producing fewer low birth-weight babies each year. Studies have suggested that Arizona's lower than average incidence of pregnant women who smoke cigarettes accounts for better outcomes regarding birth-weight than is seen in other cities in the United States. In 2004, the national incidence of pregnant women who smoked cigarettes was over 10 percent, while the Arizona rate was only 5.9 percent. For those women who do smoke during their pregnancies, Caucasian teenagers seem to have the highest prevalence for this behavior, at 30 percent nationally.

Pre-term Births

Pre-term births, defined as birth before 37 weeks gestation, account for nearly one-half of all congenital neurological defects such as cerebral palsy, and more than two thirds of infant deaths.²⁰ The previous chart presents data regarding low birth-weight rates in North Pima. Because the indicators are closely linked, low birth weight can be considered as a proxy for pre-term births. Low birth weight has a direct link to the gestational age at which the child is born. Overall, the rates of premature birth have been rising in the U.S. over the past twenty years, with some studies pointing to advances in neonatal care capabilities, as well as a higher incidence of caesarian sections that are not medically necessary, as contributing to these rates. The rate of pre-term births in the United States has increased 30 percent in the past two decades.²¹ One half of all pre-term births have no known cause. One factor to con-

20 Johnson, R. B., Williams, M. A., Hogue, C.J.R., & Mattison, D. R. Overview: New perspectives on the subborn

21 Mayo Clinic. Premature births, November, 2006.

sider is that, since 1996, the caesarean section rate has risen to 30 percent, with the latest studies showing that 92 percent of babies delivered by C-section from 1996 to 2004 were judged after birth to be “late preterm”, meaning they were born after thirty-four to thirty-seven weeks of pregnancy as opposed to the typical thirty-eight to forty-two weeks.²²

Births to Teen Mothers

About 10 percent of American teen girls between the ages of 15 and 19 become pregnant each year. It is startling to consider that one in five 14-year-old girls become pregnant before reaching the age of 18.²³ Once a young woman becomes pregnant, the risk of a second pregnancy increases. About one-third of adolescent mothers have a repeat pregnancy within two years.²⁴ A repeat teen birth comes with a significant cost to the teenage mothers themselves and to society at large. Teen mothers who have repeat births, especially closely spaced births, are less likely to graduate from high school and more likely to live in poverty and receive welfare when compared with teen parents who have only one child.²⁵ In spite of a declining teen birth rate, teenage parenthood is a significant social issue in this country. Teen parents face significant obstacles in being able to rear healthy children. Teen parents are generally unprepared for the financial responsibilities and the emotional and psychological challenges of rearing children.

As reported earlier, the North Pima region has lower rates of teen pregnancy than the Tucson metropolitan area, Arizona, and the nation (9% compared to 14%, 13% and 11%, respectively). However, according to 2006 data from the Arizona Department of Health Services, the number of mothers aged 19 years or younger, as well as the number of unwed mothers, is higher in Marana (11 percent) than in Oro Valley (4).

Health Insurance Coverage and Utilization

Uninsured Children

Health insurance significantly improves children’s access to health care services and reduces the risk that illness or injury will go untreated or create economic hardships for families. Having a regular provider of health care promotes children’s engagement with appropriate care as needed. Research shows that children receiving health care insurance.²⁶

- Are more likely to have well-child visits and childhood vaccinations than uninsured children
- Are less likely to receive their care in the emergency room
- Do better in school

22 Preliminary births for 2005: Infant and Maternal Health National center for Health Statistics.

23 Center for Disease Control, fact sheet, 2001.

24 Kaplan, P. S., *Adolescence*, Boston, MA, 2004.

25 Manlove, J., Mariner, C., & Romano, A. (1998). *Positive educational outcomes among school-age mothers*. Washington DC: Child Trends.

26 Johnson, W. & Rimaz, M. Reducing the SCHIP coverage: Saving money or shifting costs. Unpublished paper, 2005. Dubay, L., & Kenney, G. M., Health care access and use among low-income children: Who fares best? *Health Affairs*, 20, 2001, 112-121. Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau’s March 2006 and 2007 Current Population Survey. Arizona Department of Health Services, Community Health Profile, Phoenix, 2003.

When parents cannot access health care services for preventive care such as immunizations, there may be delayed diagnosis of health problems, failure to prevent health problems, or the worsening of existing conditions.²⁷ Furthermore, good health promotes the academic and social development of children because healthy children engage in the learning process more effectively.²⁸

As illustrated in the table below, between 2001 and 2005, Arizona had a higher percentage of children without health insurance coverage compared to the nation. A full fifteen percent of children ages five and under in Arizona do not have health insurance. One reason that Arizona children may be less likely than their national counterparts to be insured is that they may be less likely to be covered by health insurance through their families' employer. In Arizona, 48 percent of children (ages 0-18) received employer-based coverage, compared to 56 percent of children nationally.²⁹

Percentage of Children (Birth Through Five Years) Without Health Insurance Coverage

	2001	2002	2003	2004	2005	2006
Arizona	14%	14%	14%	13%	15%	15%
U.S.	10%	10%	10%	10%	10%	11%

Source: Kids Count

Access to Medical Care

Lack of health coverage and other factors combine to limit children's access to health services. For example, according to a 2007 report by the Commonwealth Fund, only 36 percent of Arizona children under the age of 17 had a regular doctor and at least one well check visit in the last year. According to the same study, only 55 percent of children who needed behavioral health services received some type of mental health care in 2003.³⁰

The chart below shows the number of children enrolled in AHCCCS (Arizona Health Care Cost Containment System) or KidsCare – Arizona's publicly funded low cost health insurance programs for children in low income families. As the chart shows, 16,833, or nearly 26 percent, of children between the ages of birth and five years were enrolled in AHCCCS or KidsCare in Pima County in 2007.

Children Under Six Enrolled in KidsCare or AHCCCS Health Coverage (2004-2007)

	AHCCCS				KidsCare				Total Children Under Six Enrolled in AHCCCS or KidsCare			
	'04	'05	'06	'07	'04	'05	'06	'07	'04	'05	'06	'07
Pima County	13,680	16,269	15,444	15,711	807	942	969	1,122	14,487	17,211	16,413	16,833
Arizona	87,751	102,379	95,776	96,600	6,029	7,397	8,699	9,794	93,780	109,776	104,475	106,394

Source: AHCCCS, Enrollment data is for calendar year, representing children enrolled at any time during the calendar year in AHCCCS or KidsCare. The child is counted under the last program in which the child was enrolled.

27 Chen, E., Matthews, K. A., & Boyce, W. T. , Socioeconomic differences in children's health: How and why do these relationships change with age? *Psychological Bulletin*, 128, 2002, 295-329.

28 National Education Goals Panel. *Reconsidering children's early developmental and learning: Toward common views and vocabulary*. Washington DC.

29 . Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2006 and 2007 Current Population Survey. Arizona Department of Health Services, Community Health Profile, Phoenix, 2003.

30 Commonwealth Fund. State Scorecard on Health Care System Performance, 2007.

While a variety of factors ultimately influence access to health care, health coverage does play an important role in ensuring that children get routine access to a doctor or dentist's office. For example, the chart below shows that for children under age five enrolled continuously in AHCCCS in Pima County, 80 percent received at least one visit to a primary care practitioner (such as a family practice physician, a general pediatrician, a physician's assistant, or a nurse practitioner) during 2007. Data for these visits are available only at the county level.

Percent of Children (Ages 12 Months – 5 Years) Continuously Enrolled In AHCCCS Receiving One or More Visits to a Primary Care Practitioner

	Pima County*	Arizona
2005	81%	78%
2006	80%	78%
2007	80%	78%

*Data only available at the county level. Source: AHCCCS. Note: Continuously enrolled refers to children enrolled with an AHCCCS health plan (acute or ALTCS) 11 months or more during the federal fiscal years 2005, 2006, 2007.

Although many children do receive public health coverage, many others who likely qualify are not enrolled and are uninsured. In 2002, the Urban Institute's National Survey of America's Families estimated that one-half of uninsured children in the United States are eligible for publicly funded health insurance programs (like AHCCCS or KidsCare in Arizona), but are not enrolled.³¹ Indeed, the percentages of families who fall below 200 percent of the Federal Poverty Level in the North Pima region suggest that many children are likely to qualify for public coverage. Data from the Arizona Department of Health Services are available only for the Marana and Oro Valley communities within the region; these numbers indicate that 17% of children in Marana and 11% of children in Oro Valley live at 200% below the Federal Poverty level. National studies suggest that these same children are unlikely to live in families who have access to employer-based coverage.³²

Health coverage is not the only factor that affects whether or not children receive the care that they need to grow up healthy. Other factors include: the scope and availability of services that are privately or publicly funded; the number of health care providers including primary care providers and specialists; the geographic proximity of needed services; and the linguistic and cultural accessibility of services.

While no specific evidence exists to illustrate that linguistic and cultural aspects pose barriers to health care in the North Pima region, such evidence does exist state-wide. For example, thirty-seven percent of 788 AHCCCS providers surveyed in 2005 (representing 98 percent of all AHCCCS providers) had *no means* of understanding their Spanish-speaking patients unless the patient's family member could translate for their relative and the medical provider.³³ Similarly, a 2007 Commonwealth Fund study found low rates of patient satisfaction among Arizonans, who cited lack of cultural competency as one contributing factor.³⁴

31 Genevieve Kenney, et al, "Snapshots of America's Families, Children's Insurance Coverage and Service Use Improve," Urban Institute, July 31, 2003.

32 Long, Sharon K and John A. Graves. "What Happens When Public Coverage is No Longer Available?" Kaiser

33 Commission on Medicaid and the Uninsured, January 2006.

34 Commonwealth Fund. State Scorecard on Health Care System Performance, 2007.

Oral Health Access and Utilization

Access to dental care is also limited for young children in both the state and the region. As the chart below shows, in 2003, oral health varies among the North Pima communities for which data are available. For example, Marana reports a higher level of urgent treatment needs (12 percent) compared to the state rate of 9 percent. It should be noted that the chart reflects oral health information for children between the ages of six and eight since these are the youngest ages for which data are available.

Oral Health—North Pima—Children Six-Eight Years Old

North Pima Communities (2003)	Untreated tooth decay	Tooth decay experience	Urgent Treatment needs	Sealants present
Marana	40%	58%	12%	33%
Tucson	44%	65%	7%	26%
Arizona	40%	62%	9%	28%

Source: Arizona Department of Health Services, Community Health Profile 2003.

Enrollment in Early Head Start/Head Start also helps ensure access to medical and dental care. Head Start requires children enrolled in its program to receive well child and oral health visits.

According to the American Academy of Pediatrics and American Academy of Pediatric Dentists online directories (non-exhaustive), there are approximately 30 pediatricians and four pediatric dentists in North Pima County, which appears to limit access to dental care based on the population of children birth to age five.

Access to oral health care is even more challenging for families with special needs children. According to a statewide Health Provider Survey report released in 2007, a large majority (78 percent) of Arizona dental providers surveyed in 2006 (N =729 or 98 percent of all AHCCCS providers) said they did not provide dental services to special needs children because they did not have adequate training (40 percent), did not feel it was compatible with the environment of their practices (38 percent), or did not receive enough reimbursement to treat these patients (19 percent). The Provider survey report recommended more training for providers to work with Special Needs Plans (SNP), collaborating with ADA and ADHS to increase the number of providers who accept young children.

Child Safety

All children deserve to grow up in a safe environment. Unfortunately not all children are born into a home where they are well-nurtured and free from parental harm. Additionally, some children are exposed to conditions that can lead to preventable injury or death, such as excessive drug/alcohol use by a family member, accessible firearms, or unfenced pools. This section provides information on child abuse and neglect and child fatalities in Pima County. Most data in this section are available only for the full county and not at the regional level.

Child Abuse and Neglect

Child abuse and neglect can result in both short-term and long-term negative outcomes. A wide variety of difficulties has been documented for victims of abuse and neglect, including mental health challenges such as depression, aggression, and stress. Direct negative academic outcomes (such as low academic achievement, lower grades, lower test scores, learning difficulties, language deficits, poor schoolwork, and impaired verbal and motor skills) have also been documented. Furthermore, child abuse and neglect have a direct relationship to physical outcomes such as ill health, injuries, failure to thrive, and somatic complaints.³⁵

The following data illustrate the problem of abuse and neglect in Arizona and the significant number of children who are placed at greater risk for poor school performance, frequent grade retention, juvenile delinquency and teenage pregnancy, as child abuse and neglect are strongly linked with these negative outcomes for children. The data provided in this section include state and county level data for children under age eighteen.

It is important to note that the child abuse report is not an indicator of risk and is not tied to the removal of a child. There are many cases where the specific allegation in the report cannot be proven but it is nonetheless determined that the child is at imminent risk of harm and services and supports are put in place to keep the child safely at home, or the child is removed. The number of reports that are considered substantiated are a subset of the total number of reports that were received, investigated, and closed during the reporting period.

The chart below shows the child abuse reports and fatalities for 2005 and 2006 for Arizona and nationally.

Child Abuse and Neglect

	2005		2006	
Arizona	Reports	37,546	Reports	34,178
	Fatalities	50	Fatalities	60
U.S.	Reports	44* (3M)	Reports	48* (3.6M)
	Fatalities	1.86** (1,460)	Fatalities	2.04** (1,530)

*Calculated as the rate for every 1,000 children in the population to account for population growth with actual numbers of incidents in parentheses.

**Calculated as the rate for every 100,000 children in the population to account for population growth with actual numbers of incidents in parentheses

Sources: Department of Health and Human Services; Arizona Child Fatality Review Board, Children's Action Alliance

The chart below provides a history of child abuse reports received and the outcome for Pima County.

35 References for this section: Augoustios, M. Developmental effects of child abuse: A number of recent findings. *Child Abuse and Neglect*, 11, 15-27; Eckenrode, J., Laird, M., & Doris, J. *Maltreatment and social adjustment of school children*. Washington DC, U. S. Department of Health and Human Services; English, D. J. The extent and consequences of child maltreatment. *The Future of Children, Protecting Children from abuse and neglect*, 8, 39-53.; Lindsey, D. *The welfare of children*, New York, Oxford University Press, 2004; National Research Council, *Understanding child abuse and neglect*. Washington DC: National Academy Press; Osofsky, J. D. The impact of violence on children. *The Future of children*, 9, 33-49.

Child Abuse Reports, Substantiations, Removals, and Placements for Pima County*

	Oct 2003 through Mar 2004	Apr 2004 through Sep 2004	Oct 2004 through Mar 2005	Apr 2005 through Sep 2005	Oct 2005 through Mar 2006	Apr 2006 through Sep 2006	Oct 2006 through Mar 2007	Apr 2007 through Sep 2007
Number of reports received	3,415	3,159	3,506	3,471	3,413	3,022	2,981	3,200
Number of reports Substantiated	NA	NA	NA	NA	429	408	353	296
Substantiation rate	NA	NA	NA	NA	13%	14%	12%	9%
Number of new removals	878	775	828	904	899	853	804	951

*All data taken from Arizona Department of Economic Security Child Welfare Reports. Discrete data for “number of reports substantiated” not available prior to Oct. 2005-Mar. 2006. Child Welfare Reports do not provide county-level data for number of child in out-of-home care on the last day of reporting period. Data for number of reports received drawn from Child Welfare Report tables labeled “Number of Reports Responded to by Type of Maltreatment and County.”

The table below provides a breakdown of reports received by each county in Arizona. Almost a fifth (17.7 percent) of the reports received were in Pima County. Of those reports made in Pima County, 1,924 were reports of neglect, followed by 1,045 reports of physical abuse, 181 reports of sexual abuse, and 50 reports of emotional abuse. Of the total reports, between 9 and 13 percent resulted in substantiation; a much higher rate than other counties except for Maricopa County. Future data collection efforts could highlight more specific geographic locations of substantiated reports in order to target support services to communities with higher concentrations of abuse and neglect.

Number of Reports Received by Type of Maltreatment and County, April 1, 2007 – September 30, 2007

County	Emotional Abuse	Neglect	Physical Abuse	Sexual Abuse	Total	% of Total
Apache	1	47	33	6	87	0.5%
Cochise	6	312	154	22	494	2.7%
Coconino	3	248	124	27	402	2.2%
Gila	2	148	59	14	223	1.2%
Graham	1	61	36	12	110	0.6%
Greenlee	0	16	8	2	26	0.1%
La Paz	2	35	17	8	62	0.3%
Maricopa	117	6,098	3,424	645	10,284	57.0%
Mohave	4	417	197	34	652	3.6%
Navajo	3	234	101	9	347	1.9%
Pima	50	1,924	1,045	181	3,200	17.7%
Pinal	14	648	315	80	1,057	5.9%
Santa Cruz	2	63	38	5	108	0.6%
Yavapai	4	381	181	35	601	3.3%
Yuma	3	290	104	28	425	2.4%
Statewide	212	10,922	5,836	1,108	18,078	100.0%
% of Total	1.2%	60.4%	32.3%	6.1%	100.0%	

*All data taken from Arizona Department of Economic Security Child Welfare Reports, April 1, 2007 – September 30, 2007.

In any given year, more than three million child abuse and neglect reports are made across the United States, but most child welfare experts believe the actual incidence of child abuse and neglect is almost three times greater, making the number closer to 10 million incidents each year. In 2006, 3.6 million referrals were made to Child Protective Service agencies (CPS) nationally, involving more than 6 million children. While 60 percent of these referrals were determined to be “unsubstantiated” according to CPS criteria and only 25 percent of cases resulted in a substantiated finding of neglect or abuse, research continues to show that the line between a substantiated or unsubstantiated case of abuse or neglect is too often determined by: A lack of resources to investigate all cases thoroughly; lack of training for CPS staff, where employee turnover rates remain high; and a strained foster care system that is already beyond its capacity and would be completely overwhelmed by an increase in child removals from families.

The youngest children suffer from the highest rates of neglect and abuse, as shown below:

- Birth to 1 year 24 incidents for every 1,000 children
- 1-3 years 14 incidents for every 1,000 children
- 4-7 years 14 incidents for every 1,000 children
- 8-11 years 11 incidents for every 1,000 children

According to the 2005 Kids Count Data Book, Arizona ranked 36th out of the 50 states in overall child well-being indicators, with child abuse and neglect a leading reason for the state’s poor ranking. In the following year, Arizona’s Child Fatality Review Board

issued its annual report for 2005, which showed that 50 Arizona children died from abuse or neglect. Contributing factors in these deaths included caretaker drug/alcohol use (31 percent), lack of parenting skills (31 percent), lack of supervision (27 percent), a history of maltreatment (20 percent) and domestic violence (15 percent). Only 11 percent of the children who died had previous Child Protective Services involvement.

In response to growing concerns over abused and neglected children in the state, Arizona governor Janet Napolitano commissioned the 2004 Prevention System Subcommittee's "Action Plan for Reform of Arizona's Child Protection System". As part of the Action Plan it was recommended that pregnant women receive better access to comprehensive prenatal care by fast-tracking health insurance processes for prenatal care, helping teenage mothers, and providing home visitation services using the existing Healthy Families model. For children up to age 4, the subcommittee recommended more parent education and support especially for teenage parents and for parents of children with special needs. The committee also recommended that these parents take advantage of early childhood education opportunities through Early Head Start and Head Start and access to quality child care. However, access to these programs may be limited due to eligibility requirements, financial barriers, and unavailability of high quality programs in the areas where families reside.

Foster Care Placements

Foster care placement is directed toward children whose parents are perceived as unable to properly care for them. Foster care has increasingly become an important aspect of the child welfare system. The extent to which foster care is being used in different communities reflects the resources available to provide needed care to vulnerable children. In Pima County there were 2,227 child placements in 2004 and that number increased to almost 2,400 in 2005 (See chart below). The majority of children in out-of-home care across the state of Arizona are either Caucasian (42 percent) or Hispanic (35 percent), followed by African American (13 percent).

Child Placements in Foster Care

	2002	2003	2004	2005	2006
North Pima	2004 Pima County: 2,227* 2005 Pima County: 2,386*				
Arizona	5,049**	6,208**	7,173**	7,546**	7,388**
U.S.	29%*** (154,000)	30%*** (155,000)	31%*** (158,000)	32%*** (164,000)	44%*** (131,000)

*All children in out-of-home care (such as foster care)

**Includes all children under the age of 18 years

***Based on total number of children removed from the home ages birth through five years

Sources: Kids Count (data provided by Children's Action Alliance); The AFCARS Report; Children's Bureau, Arizona Department of Economic Security

Problems with the foster care system have led to efforts at reform. Strategies have included new methods for keeping children safe in their own homes, provision of kinship care, and family foster care.³⁶ The Department of Economic Security is

working to embed the Casey Foundation's Family to Family initiative into Arizona's child welfare practice. This is a nationwide child welfare initiative, and one of the core strategies in the recruitment, development and support of resource families that focuses on finding and maintaining kinship and foster families who can support children and families in their own neighborhoods.

With increasing numbers of young children in out-of-home placements in Pima County, resources to support the foster parents caring for these children must be readily available. Sufficient quality early education and health resources are as much of a serious need for foster parents as biological parents. Foster parents have the additional difficult task of understanding the possible effects of trauma on a child's developing brain. They must be adequately supported in their work to implement strategies to counteract it. Foster parents also must have ready access to quality, affordable child care for these young children.

Child Mortality

The infant mortality rate can be an important indicator of the health of communities. Infant mortality is higher for children whose mothers began prenatal care late or had none at all, those who did not complete high school, those who were unmarried, those who smoked during pregnancy, and those who were teenagers.³⁷ Furthermore, children living in poverty are more likely to die in the first year of life. For example, children living in poverty are more likely to die from health conditions such as asthma, cancer, congenital anomalies, and heart disease.³⁸ In Arizona as well as the rest of the nation, many factors that lead to a young child's death are related to health status, such as a pre-existing health condition, inadequate prenatal care, or even the lifestyle choices of the parent. Another area of concern includes factors such as injury – unfortunately, in many circumstances, preventable injury. The table below provides information on the total number of child deaths in Pima County for children under the age of four, followed by the leading causes of death for children 0-18 in Pima County in 2006.

Child Deaths Among the 0-4 Years Population

	2003	2004	2005	2006
Pima County*	2% (109)	2% (115)	2% (130)	2% (110)
Arizona	2% (872)	2% (870)	2% (938)	2% (920)
U.S.	1% (32,721)	Not available	1% (33,196)	Not available

*Data only available at city level. **Data only available for children 0-18 years of age. Sources: Arizona Department of Health Services

37 Mathews, T. J., MacDorman, M. F., & Menacker, F. Infant mortality statistics from the 1999 period linked birth/infant death data set. In *National vital statistics report* (Vol. 50), National Center for Health Statistics.

38 Chen, E., Matthews, K. A., & Boyce, W. T. Socioeconomic differences in children's health: How and why do these relationships change with age? *Psychological Bulletin*, 129, 2002, 29-329; Petridou, E., Kosmidis, H., Haidas, S., Tong, D., Revinthi, K., & Flytzani, V. Survival from childhood leukemia depending on socioeconomic status in Athens. *Oncology*, 51, 1994, 391-395; Vagero, D., & Ostberg, V. Mortality among children and young persons in Sweden in relation to childhood socioeconomic group. *Journal of Epidemiology and Community Health*, 43, 1989, 280-284; Weiss, K. B., Gergen, P. J., Wagener, D. K., Breathing better or wheezing worse? The changing epidemiology of asthma morbidity and mortality. *Annual Review of Public Health*, 1993, 491-513.

Leading causes of death among children 0-18 (n = 248) in Pima County during 2006³⁹

1. Natural causes (69 percent, n=101)
 - b. Medical causes (n=48)
 - c. Prematurity (n=52)
 - d. Sudden Infant Death Syndrome (n=1)
2. Accidents (22 percent, n=32)
3. Undetermined (7 percent, n=11)
4. Homicide (1 percent, n=2)
5. Suicide (1 percent, n=1)

The majority of accidental deaths (18 out of 32) were the result of motor vehicle crashes. There were four deaths each in the categories of suffocation/strangulation and drowning. The remaining accidental deaths included incidents related to fire-arms, poisoning, and other injuries.

According to the Arizona Department of Health Services, child fatalities were over-represented among African American, Caucasian, and Native American children in Pima County in comparison to their percentage of the general population. In addition, males accounted for 60 percent of child deaths. In comparison to the rest of the state, Pima County had a higher rate of natural deaths (69 percent compared to 65 percent), but a larger percentage of undetermined deaths (seven percent compared to three percent).

Children's Educational Attainment

School Readiness

Early childhood programs can promote successful school readiness especially for children in low-income families. Research studies on early care and education programs for low-income children have found that participation in educational programs prior to kindergarten is related to improved school performance in the early years.⁴⁰ Long-term studies have documented early childhood programs with positive impact evident in the adolescent and adult years.⁴¹ Lastly, research has confirmed that early childhood education enhances young children's social developmental outcomes such as peer relationships.⁴²

Generally, child development experts agree that school readiness encompasses more than acquiring a set of simple skills such as counting to ten by memory or identifying the letters of the alphabet. Preparedness for school includes the ability to problem solve, demonstrate self confidence, and the willingness to persist at a task.

³⁹ 2006 Child Fatality Review for Pima County. Available at: <http://www.azdhs.gov/phs/owch/pdf/pimao6.pdf>.

⁴⁰ Lee, V. E., Brooks-Gunn, J., Shnur, E., & Liaw, F. R. Are Head Start effects sustained? A longitudinal follow-up comparison of disadvantaged children attending Head Start, no preschool, and other preschool programs. *Child Development*, 61, 1990, 495-507; National Research Council and Institute Medicine, *From neurons to neighborhoods: The science of early childhood development*; Reynolds, A. J. Effects of a preschool plus follow up intervention for children at risk. *Developmental Psychology*, 30, 1994, 787-804.

⁴¹ Campbell, F. A., Pungello, E. P., Miller-Johnson, S., Burchinal, M., & Ramey, C. T. The development of cognitive and academic abilities: Growth curves from an early childhood educational experiment. *Developmental Psychology*, 37, 2001, 231-242

⁴² Peisner-Feinberg, E. S., Burchinal, M. R., Clifford, R. M., Culkin, M. L., Howes, C., Kagan, S. L., et al *The children of the cost, quality, and outcomes study go to school: Technical report*, 2000, University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center.

While experts identify such skills as being essential to school readiness, the difficulty comes in attempting to quantify and measure these more comprehensive ideas of school readiness. In addition, most scholarly definitions about school readiness also address the need for the school to be ready to meet the needs – instructional, social, and personal – of every child who enters kindergarten.

Currently no instrument exists across Arizona that sufficiently identifies a child's readiness for school entry. Although Arizona has a set of Early Learning Standards (an agreed upon set of concepts and skills that children can and should be ready to do at the start of kindergarten), current assessments of those learning standards have not been validated nor have the standards been applied consistently throughout the state.

One component of children's readiness for school consists of their language and literacy development. Alphabet knowledge, phonological awareness, vocabulary development, and awareness that words have meaning in print are all pieces of children's knowledge related to language and literacy. One assessment that is used frequently across Arizona schools is the Dynamic Indicators of Basic Early Literacy Skills (DIBELS). The DIBELS is used to identify children's reading skills upon entry to school and to measure their reading progress throughout the year. The DIBELS often tests only a small set of skills around letter knowledge without assessing other areas of children's language and literacy development such as vocabulary or print awareness.

The results of the DIBELS assessment should not be used to assess children's full range of skills and understanding in the area of language and literacy. Nor is it a full measure of a child's readiness for school. Instead, it provides a snapshot of children's learning as they enter and exit kindergarten. Since all schools do not administer the assessment in the same manner, comparisons across communities are limited.

The data in the following table indicate that in the specific area of language and literacy development assessed, a large percentage of children entering kindergarten in the North Pima region met the benchmark standard and significant progress was made by the end of the year, particularly in the Amphitheater District. In the beginning of the 2006-2007 school year, only 29 percent of kindergarten students in the Amphitheater District met the benchmark, or desired, standard in the assessment areas for language and literacy development. In comparison, the Catalina and Marana districts had larger percentages of children meeting this benchmark. At the end of the year, each of the districts showed improvement in meeting the benchmark level. In addition, children scoring at the "intensive" and "strategic" levels who required focused strategies to improve their skills, did score higher by the end of the year. This improvement is revealed in the decrease in the "intensive" and "strategic" scores by the end of the year, and the increase in "benchmark" scores.

As a point of comparison, scores for the Tucson Unified and Flowing Wells School Districts are included since many North Pima communities are adjacent to the boundaries of these districts.

Basic Early Literacy as Measured by DIBELS

SFY 2006-2007 Kindergarten DIBELS AZ Reading First Schools*						
	Beginning of the Year			End of the Year		
	Percent Intensive	Percent Strategic	Percent Benchmark	Percent Intensive	Percent Strategic	Percent Benchmark
AZ Reading First Schools	52	35	13	10	12	78
Amphitheater District	39	32	29	11	12	77
Catalina Foothills District	10	29	60	8	27	65
Marana District	24	39	37	14	14	71
Tanque Verde District	Not available	Not available	Not available	8	20	72
Tucson Unified District	48	42	10	8	10	83
Flowing Wells District	45	33	22	20	19	61

*DIBELS data retrieved from school districts by FTF in June 2008.

Elementary Education

Children who cannot read well by fourth grade are more likely to miss school, 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.

Data are available for the North Pima region on the Arizona's Instrument to Measure Standards Dual Purpose Assessment (AIMS DPA). The AIMS DPA is used to test Arizona students in Grades 3 through 8. This assessment measures the student's level of proficiency in Writing, Reading, and Mathematics and provides each student's national percentile rankings in Reading/Language and Mathematics. In addition, Arizona students in Grades 4 and 8 are given a Science assessment.⁴³ The chart below shows a complex picture of how each school district in the North Pima region performs. For example, Marana Unified reports 5 percent of students falling below the standard in Mathematics but 23 percent exceeding the standard in the same category.

North Pima AIMS DPA 3rd Grade Score Achievement Levels in Mathematics, Reading, and Writing (percent)

School District	Mathematics				Reading				Writing			
	FFB	A	M	E	FFB	A	M	E	FFB	A	M	E
Amphitheater Unified	4	12	56	28	4	17	60	19	3	8	65	24
Catalina Foothills Unified	1	5	39	55	0	3	49	48	1	3	47	49
Marana Unified	5	14	58	23	3	18	61	18	3	12	73	13
Tanque Verde Unified	1	8	40	51	0	7	58	35	0	5	65	30
Tucson Unified	11	20	54	16	6	25	59	10	4	14	68	14
Flowing Wells Unified	8	17	60	15	7	25	56	11	7	12	65	16
Statewide	9	17	54	20	6	23	59	13	5	13	66	16

Arizona Department of Education AIMS Spring 2007 Grade 03 Summary

FFB = Falls Far Below the Standard, A = Approaches the Standard, M = Meets the Standard, and E = Exceeds the Standard



Current Regional Early Childhood Development and Health System

Summary of Regional Findings on Early Childhood System

For the more than 17,000 children ages birth through five years living in the North Pima Region, there are several types of early care and education options. However, there is currently no single source or list identifying all of the various types of regulated and unregulated (neither licensed nor certified) early care and education options in the state, which makes counting the number and types of centers a challenge. Some of the categories of centers listed below overlap. There are 76 facilities licensed by the Arizona Department of Health Services (ADHS) in the North Pima region, including fee paying and non-fee paying: 47 licensed centers, three Head Start sites, 24 school district preschools and extended care centers, and two small group homes. Additionally, there are 28 alternately approved family child care homes according to the Department of Economic Security (DES). ADHS licensed *small group homes* have a maximum capacity of 10 children, whereas DES certified *family child care homes* have a maximum capacity of four children and adhere to a different set of regulatory standards.

Of these facilities in North Pima, there are only eight accredited child care centers in which children can receive services. Nearly 6,100 children (36 percent) in the region are in some type of fee-paying care and education program. Based on a phone survey of accredited centers in North Pima, the total number of children served in 2007-2008 in accredited settings was 730, or just 4 percent, of children ages birth through five in the region. Furthermore, the majority of care for working families still takes place in informal or unregulated settings.

The costs of care across group homes, licensed centers, and in-home care vary from approximately \$21 per day to \$36 per day, depending on the setting and age of the child. Costs for infant care are generally higher than that for toddlers and preschoolers. In-home care facilities are generally less expensive than licensed child care sites.

In terms of developing system-level support for families and educators, there are no data that quantitatively reflect the developing network of support and information sharing in the North Pima region.

In May 2007, the Tucson Regional Town Hall gathered community members for three days to discuss critical issues facing the greater Tucson area. High quality early childhood education was identified as a community priority. The highest priority areas were identified as: parent education, collaborations, family support, professional support, quality, and public awareness. The following sections of this report address the North Pima region's existing assets and challenges in these key priority areas.

Quality

A number of states have become increasingly involved in creating statewide systems for high quality early care and education. This concern makes sense for a number of reasons. First, child care needs are growing. A majority of children ages 0-6 years participate in regular, non-parental child care settings; nationally, 61 percent of young

children participate in some form of child care. Further, 34 percent participate in some type of center-based program.⁴⁴ Increasing maternal employment rates and policies from welfare reform have also increased demand. Research has also found that high quality child care can be associated with many positive outcomes, including language development and cognitive school readiness.⁴⁵

In recognition of the importance of high quality early childhood programs, the Board of First Things First approved funding in March 2008 for the development and implementation of a statewide quality improvement and rating system. Named *Quality First!*, this system sets standards of quality for Arizona, which will take effect in 2010. *Quality First!*'s star rating system, when implemented, will assist families and community members, as well as providers, in identifying what high quality child care looks like and which providers offer quality care. This system will be a clear asset upon which regions can build as they consider whether or not improving quality is a regional priority.

Quality care is often associated with licensed care, with one study indicating that the single best indicator of quality care was the provider's regulatory status.⁴⁶ Licensure or regulation by the Departments of Economic Security or Health Services ensures completion of background checks of all staff or child care providers, and monitors staff training hours related to early care and education, as well as basic first aid and CPR. Additionally, periodic inspections and monitoring ensure that facilities conform to basic safety standards. While licensure and regulation by the Departments of Economic Security and Health Services are a critical foundation for the provision of quality care for young children, these processes do not address curricula, interaction of staff with children, processes for identification of early developmental delays, or professional development of staff beyond minimal requirements. Professionals in early childhood agree that many other factors contribute to a high quality program. Additional considerations should include, but are not limited to, higher qualifications of staff; number of children within a setting as well as the ratio of teachers to children; nurturing and responsive relationships among staff, children, and families; a stimulating learning environment; family involvement; and a well-defined curriculum that addresses all aspects of children's development.

Accredited Early Care and Education Centers

Accreditation by a national organization is another method for identifying quality in early care and education. State licensure or regulation provides a minimum set of requirements that providers must meet in order to serve children, whereas accreditation is a voluntary process that ensures providers adhere to rigorous standards of quality as noted above. These additional factors, provided with national accreditation, assist parents in making critical child care decisions, and will be included in the forthcoming First Things First Quality Improvement and Rating System, *Quality First!*.

The challenge in using accreditation as a standard of quality lies in the fact that not all accrediting bodies measure the same indicators of quality in the same way. Nonetheless, reviewing accreditation status allows the region to develop a baseline

44 Federal interagency forum on child and family statistics. *America's children: Key national indicators of well-being, 2002*. Washington DC.

45 NICHD Early Child Care Research Network, The relation of child care to cognitive and language development, *Child Development*, 2000, 71, 960-980.

46 Pence, A. R., & Goelman, H. The relationship of regulation, training, and motivation to quality care in family day care. *Child and Youth Care Forum*, 20, 1991, 83-101.

reflection of the availability of quality care in the area. This report presents for the North Pima Regional Partnership Council an initial snapshot of quality in the Region through the nationally accredited organizations approved by the Arizona State Board of Education:

- Association Montessori International/USA (AMI)
- American Montessori Society (AMS)
- Association of Christian Schools International (ACSI)
- National Accreditation Commission for Early Care and Education (NAC)
- National Association for the Education of Young Children (NAEYC)
- National Association for Family Child Care (NAFCC)
- National Early Childhood Program Accreditation (NECPA)

The tables below present the number of accredited early care and education centers in North Pima, along with a snapshot of staff-to-student ratios in the centers. In this first Needs and Assets Report for the North Pima Regional Partnership Council, some data related to centers was not available.

The North Pima region has eight accredited early care and education programs. In addition, there are three Head Start programs in the region, which adhere to a separate set of rigorous standards that address many of the same high quality indicators that national accrediting bodies examine. Overall, there are few options for accredited child care for working parents in the region.

Number of Accredited Early Care and Education Centers

	AMI/AMS	ACSI	NAC	NAEYC	NECPA	NAFCC Homes	Head Start
Number of Accredited Centers			2	5	1		3

Sources: NAEYC, AMI, AMS, ACSI , NAC, NECPA, NAFCC, lists of accredited providers.
 AMI Recognition Schools List <http://www.montessori-ami.org/amiusa/schools.lasso>
 AMS Accredited Montessori Schools List <http://www.amshq.org/schoolExtras/accredited.htm>
 ADHS Licensed Child Care List <http://www.azdhs.gov/als/childcare/>
 ACSI Schools and Accredited Schools <http://www.acsi.org/web2003/default.aspx?ID=1630&>
 NAC Accredited Centers <http://www.naccp.org/displaycommon.cfm?an=1&subarticlenbr=78>
http://www.naeyc.org/academy/search/Search_Result.asp
 NAFCC Accr. Providers <http://nafcc.fmdatabase.com/fmi/iwp/cgi?-db=accreditationsearch.fp7&-loadframes>
 NECPA <http://www.necpa.net/AccreditedPrograms.htm>

Ratios and Group Sizes

Low staff-to-child ratios are one example of how accreditation translates into quality. The National Association for the Education of Young Children (NAEYC) offers accreditation to centers throughout the U.S., including centers in Arizona. As part of the accreditation designation, NAEYC has published standards for staff to child ratios based on the size of the program and according to age group.⁴⁷ According to the

⁴⁷ NAEYC standards here are used to provide a context for high standards. It is not presumed that all centers should become NAEYC accredited

NAEYC standards, the staff-to-child ratios among accredited providers in the North Pima region are greater than recommended for the infant group. For the toddler and preschool groups, the local ratios are within the recommended range suggested by NAEYC, as shown in the following table.

NAEYC Staff to Child Ratio Recommendations	Group Size									
	6	8	10	12	14	16	18	20	22	24
Infants (0-15 months)	1:3	1:4								
Toddlers (12-28 months)	1:3	1:4	1:4	1:4						
Toddlers (21-36 months)		1:4	1:5	1:6						
Pre-school (2.5 to 3 years)				1:6	1:7	1:8	1:9			
Pre-school (4 years)						1:8	1:9	1:10		
Pre-school (5 years)								1:10	1:11	1:12

Source: NAEYC Accreditation Criteria.

To obtain regional information on accredited program enrollment and ratios, telephone interviews were conducted with eight accredited programs within the region, with a total enrollment of 730 children. Ratios of teachers to children tended to be above NAEYC standards across all age groups.

Ratios in Accredited Centers in North Pima Region

Infants	1:5
Toddlers	1:6
Two Year Olds	1:6
Three Year Olds	1:8 to 1:13
Four – Five Year Olds	1:8 to 1:13

Source: Telephone survey of 7 accredited providers, June 2008

In Head Start programs, the ratio for three year olds is 1:10 with a maximum group size of 17, and for four year olds, the ratio is 1:10 with a maximum group size of 20.

Access

Family demand and access to early care and education is a complex issue. Availability and access are influenced by, but not limited to factors such as: number of early care and education centers or homes that have the capacity to accommodate young learners; eligibility criteria for enrollment; time that families have to wait for an available opening (waiting lists); ease of transportation to the location; and the cost of the care. Data related to waiting lists are not currently available but will be a goal for future data acquisition. For the current Needs and Assets report for the North Pima Region, available data include: number of early care and education programs by type; number of children enrolled in early care and education by type; and average cost of early care and education to families by type. This information is available only for those child care and early education programs which are regulated (licensed or certified) by the state.

The region has a developing network of programs for young children including: school district preschool programs for children ages three to five years, and preschool programs to support children with special needs; Head Start programs for children

meeting the federal income guidelines and age requirements (these programs provide developmental as well as health and social services); and regulated (licensed or certified) center-based and home-based programs. In addition, there are unregulated programs that provide home-based care.

Number of Early Care and Education Programs

There are numerous types of early care and education centers in the North Pima Region. These numbers indicate that working parents have choices between types of care providers. However, these data do not indicate whether parents in the North Pima Region have *quality* choices for care for their children. Currently in Arizona, center or home based programs have few options to designate their quality of operation – some form of accreditation by a nationally recognized accrediting body is a way to show a level of quality that has been measured and acknowledged.

The North Pima region’s fee-paying child care facilities in 2006 include 47 licensed centers, 2 small group homes, 28 approved family child care homes, and 6 other family child care homes registered with the child care resource and referral service. There are 24 licensed public school programs, including before and after school care for school-aged children. Some areas within the region have a significant lack of early care and education programs. For instance, there are no licensed child care centers serving infants in the zip codes of 85653, 85654, and 85742. These three zip code areas contain over 16% of children age five and younger within the North Pima region.

A key informant interview with employees at the Marana School District also noted a critical shortage in infant and toddler care in the Marana area, with waiting lists for the Marana Unified School District preschools. They noted that while the region’s districts have preschools, they all require fees from parents unless the children require special education services. The majority of the programs offer part-time and full-time care, but many do not operate during hours that are compatible with the schedules of working parents.

The Department of Economic Security’s (DES) 2006 Child Care Market survey provides information on a range of child care settings statewide. For this report, data were analyzed by zip code to identify which early care and education providers were accessible in each *First Things First* Region. Only providers in the geographical boundaries of the North Pima Region are included in the chart below. These data do not include all providers that are accessible to families in the North Pima Region.

Number of Early Care and Education Programs by Type*

Licensed centers	Small group homes	Approved family child care homes	Providers registered with the Child Care Resource and Referral**
47	2	28	6

Source: DES Child Care Market Rate Data, 2006

*Licensed centers include only DHS licensed program providing fee-paying child care: full-day and part-day child care programs, Head Start centers with wraparound childcare programs, and school district fee-based part-and full-day fee-paying care only. DHS licensed small group homes have a 10 child maximum; DES certified family child care homes, homes approved for the child care food program, and CCR&R registered homes have a 4 child maximum.

** Providers counted under CCR&R are not listed under previous columns.

There are four types of providers designated in the chart above: licensed centers; small group homes; certified family child care homes; and providers registered with

the Child Care Resource and Referral service. Licensed centers have been granted the ability to operate a safe and healthy child care center by the Arizona Department of Health Services (ADHS). Small group homes are also licensed by the ADHS to operate safe and healthy child care homes, and have a maximum capacity of 10 children. Certified family child care homes, with a maximum capacity of four children, are either certified or regulated by DES to provide care, or are approved by agencies to participate in the Arizona Department of Education Child and Adult Care Food Programs (CCAFP).

The Department of Economic Security’s 2006 Child Care Market Rate Survey provides information on a range of fee-paying child care settings, including licensed centers that provide fee-paying child care, Head Start programs and district programs with fee-paying wraparound care, small group homes, family child care providers certified by DES and those approved by agencies for the Child and Adult Care Food Program (CACFP), as well as otherwise unregulated providers who register to be listed with the resource and referral agency as available child care. This source is particularly useful for understanding approved and unregulated family child care and child care for working parents. It does not, however, provide information about Head Start and district programs that *do not* charge fees.

Statewide data from the Market Rate Survey can be supplemented with data from Child Care Resource and Referral data. Not only does Child Care Resource and Referral provide additional data on providers, but these data are also more frequently updated than that of the Market Rate Survey. Data in the Child Care Resource and Referral database are most commonly related to child care centers and family child care homes. Registration with Child Care Resource and Referral is voluntary; however, those centers and homes receiving Department of Economic Security subsidy or regulation are required to register.

Information provided by the Child Care Resource and Referral includes, but is not limited to: type of care provider, license or regulation information, total capacity, total vacancies, days of care, and rates for care. Because registration is voluntary, not all care providers report all information.

Small Group Homes in North Pima

As illustrated in the table below, there are a total of two licensed small group homes in the North Pima region. One is located in zip code 85741, and the other is in zip code 85743. There are no licensed small group child care homes within the majority of zip codes in North Pima.

One home serves children ages 0 to 5, and the other serves children ages 0 to 12. Both homes reported being at capacity in terms of enrollment. Neither home is currently providing services for children with special needs, with one provider willing to enroll such children if requested. Both providers reported consistently receiving calls for placements, stating that there is a great need for more licensed group homes in the North Pima region.

Small DHS Group Homes in North Pima

Zip Code	Community	# Homes	Capacity per Home	Cost
85619	Mt. Lemmon	0		

Zip Code	Community	# Homes	Capacity per Home	Cost
85653	Marana – Avra Valley	0		
85654	Marana – Rillito	0		
85704	Tucson – Casas Adobes	0		
85718	Tucson – Catalina Foothills	0		
85737, 85755	Oro Valley	0		
85739	Catalina	0		
85741	NW Tucson	1	6	\$520 month for all ages
85742	NW Tucson	0		
85743	NW Tucson	1	15	Infants: \$700/month Toddlers: \$600/month Preschoolers: \$380/month
85749	Northeast Tucson	0		
85750	Northeast Tucson	0		

Child Care Centers in North Pima

Ten child care centers located in the North Pima region were interviewed in June 2008 to obtain information regarding the monthly cost of child care by age and zip code location; adult to child ratios in each center; and information regarding the enrollment of children with special needs. It should be noted that there are no child care centers in zip codes 85619, 85654, and 85750. However, a national child care corporation is opening three new centers in the region in 2008 and 2009. These centers will serve infants through school-age children and will be in the 85704, 85737, and 85743 zip codes.

In terms of the types of care provided, all but one of the child care centers (90 percent) reported that they have enrolled children with special needs, though no children with special needs are currently enrolled at this time. Two centers indicated enrollment would be contingent on the degree and severity of the disability, especially because resources to meet extreme needs are low according to survey respondents. Three centers reported that they had access to appropriate training for their staff.

Private Child Care Centers – Monthly Cost and Location by Zip Code

Child Care Centers in the North Pima Region Monthly Cost and Location					
# of Centers Contacted	Infants	1 year	Toddler	Pre-K	Zip Code
1	n/a	n/a	n/a	\$500	85653
2	n/a	n/a	n/a	\$290 for ½ day	85704
3	n/a	n/a	n/a	\$423	85718
4	\$828	\$720	\$720	\$665	85737
5	\$840	\$620	\$620	\$520	85739
6	\$780	\$660	\$640	\$604	85741
7	n/a	\$758	\$717	\$630	85742
8	n/a	n/a	n/a	\$350	85743
9	n/a	n/a	n/a	\$648	85750
10	\$780	\$700	\$660	\$610	85749

Child Care Public School Programs

As the table below illustrates, there are four school districts in the North Pima region that operate a total of 11 preschools: Marana – six; Amphi – three; Catalina Foothills – one; and Tanque Verde – one. Survey data obtained from a random sampling of 10 public child care school programs reflects responses from all districts. Note that while the Redington District is in the Mt. Lemmon area (zip code 85619) it is an unorganized district without schools.

Location of Public School Child Care Programs and Ages Served

Location of Public School Child Care Programs and Ages Served in the North Pima Region *				
District	Infants	Toddler	Pre-K	Zip code
Amphi	No	Yes – 2 ½ years	Yes Part Day Full Day Spec Ed	85737 85739 85704 85755
Catalina Foothills	No	Yes – 2 ½ years	Yes Part Day Full Day Spec Ed	85718
Marana	No	no	Yes Part day Full day Spec Ed	85653 85654 85742 85743
Tanque Verde	No	no	Yes Part day Full day-fee Spec Ed	85749

*Data compiled for this table was obtained through key informant interviews with public school child care program providers throughout the North Pima region in June 2008. Note that preschool data for the 85741 zip code is in the Flowing Wells District in Central Pima. Preschool data for the 85750 zip code is in the Tucson Unified School District, also in Central Pima. Each district has two elementary schools in its corresponding zip code.

With respect to monthly costs, all of these preschools are fee-based. They are housed on school property, but are listed as child care centers. As illustrated in the table below, the cost ranges widely depending on the zip code location, ranging from \$350 to \$790 per month. Programs within Marana are listed as public schools, but they do not receive district funding. Children with special needs can attend without a cost to the family. Marana and Tanque Verde accept DES subsidies, while the Catalina Foothills and Amphitheater School districts do not accept subsidies. The preschools generally run at full capacity, and Marana in particular, has a significant need for more programs.

Monthly Cost of Public School Child Care Programs by School District

Public School Child Care Programs in the North Pima Region Monthly Cost by School District*		
School District	Full-Time Cost	Part-Time Offered
Amphitheater	\$510/month	Yes
Catalina Foothills	\$790/month	Yes – \$240/month
Marana	\$480/month	Yes – \$240/month
Tanque Verde	\$350/month (no extended p.m. hours available)	Yes – \$150/month for two mornings a week

(Source: Data compiled for this table was obtained through key informant interviews with public school child care program providers throughout the North Pima region in July 2008.)

Costs of Care

As with many other services, the cost of early care and education is often directly related to the quality of care. Providers of early care and education struggle with the balance of providing a service for the market rate and affordability level for families. Increased quality often requires more employees, higher qualifications, increased training, and better employee compensation. These are expensive business practices and demand increased compensation to the child care or program provider – costs that are typically a heavy burden for families with young children.

In comparison to total family income, the cost of child care can be a considerable burden for Arizona families. Yearly fees for child care in the state of Arizona range from almost \$8000 for an infant in a licensed center to about \$5900 for before and after school care in a family child care home. This amount represents about 12% of the median family income of an Arizona married couple with children under 18. It represents 22-30% of the median income of a single parent female headed household in Arizona.

Child Care Costs and Family Incomes

	AZ	U.S.
Average, annual fees paid for full-time center care for an infant	\$7,974	\$4,542-\$14,591
Average, annual fees paid for full-time center care for 4-year-old	\$6,390	\$3,380-\$10,787
Average, annual fees paid for full-time care for an infant in a family child-care home	\$6,249	\$3,900-\$9,630
Average, annual fees paid for full-time care for a 4-year-old in a family child-care home	\$6,046	\$3,380-\$9,164
Average, annual fees paid for before and after school care for a school age child in a center	\$6,240	\$2,500-\$8,600
Average, annual fees paid for before and after school care for a school age child in a family child care home	\$5,884	\$2,080-\$7,648
Median annual family income of married-couple families with children under 18	\$66,624	\$72,948
Cost of full-time care for an infant in a center, as percent of median income for married-couple families with children under 18	12%	7.5%-16.9%
Median annual family income of single parent (female headed) families with children under 18	\$26,201	\$23,008
Cost of full-time care for an infant in a center, as percent of median income for single parent (female headed) families with children under 18	30%	25%-57%

NACCRRRA fact sheet: 2008 Child Care in the State of Arizona. <http://www.naccrra.org/randd/data/docs/AZ.pdf>

The table below presents the average monthly cost for families, by type, of early care and education. In general, it is evident that care is more expensive for younger children. Infant care is more costly for parents, because ratios of staff to children should be lower for very young children and the care of very young children demands unique skill sets from providers. Clearly these costs present challenges for families, especially those at the lowest income levels. These costs begin to paint a picture of how family choices in early care are determined almost exclusively by financial concerns rather than concerns about quality.

In the North Pima Region, child care rates are most expensive for licensed centers when compared with other settings. Costs for infants show the greatest difference by type, at over \$10.00 more per day for a licensed center compared with group or certified homes.

As noted above, key informant interviews were conducted in June 2008 to gain further insight into small group homes, child care centers, and child care public school programs. The following table provides a summary of related costs associated with these types of programs in the North Pima region.

Average Monthly Costs 2007-2008

Type of Facility	Infants	Toddlers	Preschool (3-5 years)
Child Care Centers	\$780 – \$840	\$620 – 758	\$350 – \$665
Small Group Homes	\$520 – \$700	\$520 – \$600	\$380 – \$520
Public Preschools	N/A	N/A	\$350 – \$790

* Figures in the table represent full-time monthly costs except for public preschools, which reflect part-time/part-year costs. Figures were obtained from key informant interviews with random child care providers, including child care centers, small group homes, and public school programs within the North Pima region, conducted in June 2008.

Overall, families face many barriers in their attempts to access high-quality child care. There are inadequate numbers of licensed or regulated facilities to serve infants, particularly in certain North Pima communities. In addition, existing providers may not have hours of operation that meet the needs of working parents, specifically those facilities that close mid-afternoon, during holidays, and over the summer. Further, the costs associated with early care and education represent a significant proportion of families' annual incomes and often influence the decision to choose less expensive care that may not be high quality care. During an interview in July 2008, a health care provider in the region noted that the greatest challenge facing both her staff and patients is locating child care: "Families who must work find it difficult to find safe, educationally stimulating facilities which are capable of positively contributing to the emotional and social development of our children."

Health

For families and their children, good health, beginning with a healthy birth, is an essential element integrally related to their learning, social adjustment, and safety. Healthy children are ready to engage in the developmental tasks of early childhood and to achieve the physical, mental, intellectual, social, and emotional well being necessary for them to succeed when they reach school age. Children's healthy development benefits from access to preventive, primary, and comprehensive health services that include screening and early identification for developmental milestones, vision, hearing, oral health, nutrition and exercise, and social-emotional

health. Access to health insurance is also an essential element to support the health of children. Research shows that children who are covered by health insurance are more likely to receive the range of health care services that will support their healthy growth and development.

The section of this report that addressed Regional Child and Family Indicators presented data on healthy births, including prenatal care, low birth-weight babies, pre-term births, and births to teen mothers. In addition, that section addressed health insurance coverage and utilization in the region. The current section focuses on developmental screening; healthy weight, nutrition, and physical activity; immunizations; oral health; breast-feeding; and services for children with special needs.

Developmental Screening

Early identification of developmental or health delays is crucial to ensuring children's optimal growth and development. The Arizona Chapter of the American Academy of Pediatrics recommends that all children receive a developmental screening at 9, 18, and 24 months with a valid and reliable screening instrument. Providing special needs children with supports and services early in life leads to better health, better outcomes in school, and greater opportunities for success and self-sufficiency into adulthood. Research has documented that early identification and subsequent intervention for children with special needs can lead to enhance developmental outcomes and reduced developmental problems.⁴⁸ For example, children with autism, identified early and enrolled in early intervention programs, show significant improvements in their language, cognitive, social, and motor skills, as well as in their future educational placement.⁴⁹

Parents' access to services is a significant issue, as parents may experience barriers to obtaining referrals for young children with special needs. This can be an issue if, for example, an early child care provider cannot identify children with special needs correctly.⁵⁰

Although recommended by the American Academy of Pediatrics (AAP), physicians do not all use a standardized instrument to routinely screen children for developmental delays. Limited use of developmental screening is of particular concern, especially considering nearly half of all parents nationally have concerns about their young child's behavior (48 percent), speech (45 percent), or social development (42 percent).⁵¹ Children most likely to be screened include those who need neonatal intensive care at birth. These babies are all referred for screening and families receive follow-up services through Arizona's High Risk Perinatal Program administered through the Arizona Department of Health Services. Parents' access to specialized services becomes a significant issue when children go unidentified. The opportunity

48 Garland, C., Stone, N. W., Swanson, J., & Woodruff, G. (eds.). *Early intervention for children with special needs and their families: Findings and recommendations*. 1981, Westat Series Paper 11, University of Washington; Maisto, A. A., German, M. L. Variables related to progress in a parent-infant training program for high-risk infants. 1979. *Journal of Pediatric Psychology*, 4, 409-419.; Zeanah, C. H. *Handbook of infant mental health*, 2000, New York: The Guildford Press.

49 National Research Council, Committee on Educational Interventions for Children with Autism, Division of Behavioral and Social Sciences and Education. *Educating children with autism*. Washington, DC: National Academy Press; 2001.

50 Hendrickson, S., Baldwin, J. H., & Allred, K. W. Factors perceived by mothers as preventing families from obtaining early intervention services for their children with special needs, *Children's Health Care*, 2000, 29, 1-17.

51 Inkelas, M., Regalado, M., Halfon, N. Strategies for Integrating Developmental Services and Promoting Medical Homes. Building State Early Childhood Comprehensive Systems Series, No. 10. National Center for Infant and Early Childhood Health Policy. July 2005.

to identify children early is further complicated when parents and other early care and education professionals lack the information and skills necessary to recognize children who may be experiencing delayed growth or development. Children who do not have access to continuous, ongoing medical care face the additional challenge of not receiving well-child checks and therefore, also not receiving early screening.

Every state is required to have a system in place to find and refer children with developmental delays to intervention and treatment services. The federal Individuals with Disabilities Education Act (IDEA) governs how states and public agencies provide early intervention (services to infants and toddlers, birth to age three), special education (services to children ages 3-21), and related services. Infants and toddlers with disabilities and their families may receive early intervention services under IDEA Part C. Children and youth (ages 3-21) may receive special education and related services under IDEA Part B. Medically necessary intervention services may be provided through AHCCCS or the Division for Developmental Delays (DDD) within the Department of Economic Security.

In Arizona, the system that serves infants and toddlers is the Arizona Early Intervention Program (AzEIP). Eligible children are those who have not reached fifty percent of the developmental milestones expected at their chronological age in one or more of the following areas of childhood development: physical, cognitive, language/communication, social/emotional, and adaptive self-help. Part B of IDEA outlines service delivery requirements for children ages three to 21. Educationally-based intervention services for children in this age group are provided through a child's local school district. Identifying the number of children who are currently being served through an early intervention or special education system indicates what portion of the population is determined to be in need of special services (such as speech or physical therapy). Comparing that number to other states with similar eligibility criteria provides a basis for understanding how effective the child find process is.

When conducted effectively, screening activities assist in identifying children who may be outside the range of typical development. Based on screening results, a child may be further referred for an evaluation (by AzEIP if birth – three; or school districts if three – to –five years) to determine eligibility for services. Accurate identification through appropriate screening most often leads to a referral of a child who then qualifies to receive early intervention or special education services. One consideration of the effectiveness of screening activities is the percent of children deemed eligible compared to the total number of children referred. The higher the percent of children eligible, the more accurate and appropriate the referral.

The following chart shows the number of children who received referrals and were determined eligible for early intervention or special education services in the North Pima region. All of these children received a formal screening and evaluation to determine eligibility.

**AZEIP Initial Planning Process (IPP) and Referral Data for North Pima
July 1, 2007 – June 30, 2008**

Zip Code	Total Referrals	Referrals for age 0-12 mos.	Referrals for age 13-36 mos.	# Children determined eligible	# Children determined not eligible	Case Closed in IPP
85619	0	0	0	0	0	0
85653	25	4	21	21	3	1
85654	0	0	0	0	0	0
85704	20	3	17	18	2	0
85737	8	3	5	8	0	0
85739	11	2	9	8	3	0
85741	26	6	20	23	3	0
85742	36	10	26	31	4	1
85743	24	8	16	22	2	0
85748	17	6	11	16	1	0
85750	7	0	7	7	0	0
TOTAL	174	42	132	154	18	2

Source: Easter Seals Blake Foundation, Arizona Early Intervention Program, October 2008

The *Case Closed in IPP* (Initial Planning Process) category refers to children who were screened and/or evaluated for services, but whose cases were closed for the following reasons: unable to contact the family; parent declined services; family moved; child screened out; and other.

The average number of referrals per month in all of Pima County during the time period of July 1, 2007 and June 30th 2008 was 175 referrals. The North Pima zip codes averaged 14.5 referrals per month, or approximately 8% of the monthly referrals for Pima County.

The data in the chart above indicate that 89% of children referred in North Pima were determined eligible for early intervention or special education services. This number indicates a high rate of appropriate screening services since the vast majority of referrals led to eligibility for services.

Another indicator of need regarding early intervention special education is the number of children who are served through preschool special education. By way of comparison, the Catalina Foothills and Tanque Verde districts have more preschools combined than the Flowing Wells district, but serve fewer students in special education services. Similarly, the Marana and Amphitheater districts have the same number of elementary schools, but fewer children in Marana preschools receive special education services.

Number of Children Receiving Special Education Services in Preschool

School District	Preschool Severely Delayed (PSD)	Preschool Moderately Delayed (PMD)	Preschool Speech & Language Delayed (PSL)	Total Number
Amphitheater Unified	15	58	73	146
Catalina Foothills	0	<10	<10	16
Flowing Wells	23	36	15	74
Marana Unified	18	44	48	118
Tanque Verde	<10	<10	15	21
Tucson Unified	177	246	156	583

Source: Arizona Department of Education. Preschool Special Education Counts [Data file]. Available from Arizona Department of Education, Early Childhood Education Section.

Note: Exact numbers for categories with fewer than 10 children are unavailable; only totals are reflected

There are many challenges for Arizona's families due to varying eligibility requirements within the agencies and systems, therapeutic specialist shortages, and lack of understanding how to navigate the complex system of care and intervention. Of particular concern are national shortages in Speech, Physical, and Occupational Therapists, especially those with specific knowledge in service delivery to young children and their families. Designing solutions to the varying challenges surrounding early intervention, special health care and special education will require the combined efforts of state and regional stakeholders.

Parents are key in creating change for the system. They can begin by being a primary advocate for their children to ensure that they receive appropriate and timely developmental screenings according to the schedule recommended by the Academy of Pediatrics. Outreach, information, and education for parents on developmental milestones for their children, how to bring concerns to their health care provider, and the early intervention/special education systems and how they work, are parent support services that each region can provide. These measures, while not fully addressing the system, will give parents some of the resources they need to increase the odds for their child's receipt of timely screening, referrals, and services.

Healthy Weight, Nutrition, and Physical Activity

Healthy weight and physical activity are important to children's wellness and their long term health. Overweight children now tend to have health problems more commonly found in adults like diabetes, high cholesterol, and high blood pressure. The percent of young children overweight for their height has become a concern to pediatricians and families. A recent national report of children's wellbeing provided data that show that 18 percent of children 6-17 in the nation are overweight.⁵² According to National Pediatric Nutrition data (PedNSS) a growing percent of our nation's children younger than age five are overweight.

Attention to healthy weight supported by good nutrition and daily physical activity during early childhood is a key for parents and all of their care givers to support healthy development. More detailed and region-specific information regarding nutrition and obesity may be a goal for future community assessments in the North Pima region.

52 Child and Family Statistics. *America's Children in Brief: Key National Indicators of Well-Being, 2008*. Federal Interagency Forum on Child and Family Statistics, Washington, DC: U.S. Government Printing Office.

Immunizations

Immunization of young children is known to be one of the most cost-effective health services available and is essential to prevent early childhood diseases and protect children from life threatening diseases and disability. Immunizations not only directly protect the children who are immunized, but also protect the children not immunized by decreasing the chances that disease outbreaks will occur. A Healthy People 2010 goal for the U.S. is to reach and sustain full immunization of 90 percent of children two years of age.

Although more recent data were unavailable for this report, data from 2003 suggest that communities in North Pima lag behind the state and nation in percent of immunized two year olds. In 2003, only 34.6 percent of Marana two year olds and 33.4 percent of Oro Valley two year olds were immunized according to the recommended immunization schedule. This percentage seems low for this relatively affluent community. Data gathered from ASIIS, the Arizona State Immunization Information System, revealed that the Pima County immunization rate was approximately 43 percent in 2007. ASIIS acknowledges these data are only a subset of the children immunized within the county and therefore their generalizability to the surrounding area is limited, as well.⁵³

Percent of Immunized Two-Year-Olds

North Pima RPC	2003
Marana	34.6
Oro Valley	33.4
Tucson	63.6
Pima County	59.4
Arizona	79.8
US	80.3

Source: ADHS Community Health Profiles, 2003

In addition to hospitals and public health facilities, the Marana Care Fair provides free immunizations annually to students in kindergarten through grade 12.

Oral Health

Good oral health begins during the prenatal period with the good oral health of the mother. Following birth, parents support their baby's good oral health by keeping gums clean as baby teeth emerge and by scheduling a first oral health visit by age one. Healthy eating, tooth brushing, and oral health checks work together to prevent dental disease and tooth decay that not only affects the health of children into adulthood, but can cause pain and discomfort that interferes with learning.

In the North Pima Region, key informant interviews with pediatric dentists in July 2008 highlighted concerns related to the poor oral health of the young patients they serve. Providers noted the significant amount of tooth decay in young children, citing poor oral hygiene routines; sugar-filled diets; putting babies to bed with a bottle full of milk; and lack of parent awareness as major contributing factors to this problem. One

⁵³ Richard Bradley from ASIIS provided Pima County immunization data for 19-35 month-olds in 2007.

pediatric dentist reported that almost every day, children come to the dental office “having eight plus teeth with cavities; and not just small cavities, gaping holes requiring root canals and crowns – and all of this is preventable with early intervention.”

According to these local pediatric dentists, several barriers exist that prevent young children from receiving appropriate oral health care. A key issue that prevents access to care is the availability of pediatric dentists throughout the region. According to one provider, there are approximately 11 pediatric dentists in Pima County, mostly within the Central Pima area. Fewer than half of these are located in the Northern Pima communities, and only one primarily serves children in the Marana, Picture Rocks, and Avra Valley areas. There are more general dentists, but the number of dentists with the pediatric specialty and required additional training does not meet the need.

Lack of insurance is another reason that children receive inadequate dental care. Families without any insurance, or families with lower incomes, may access public health services through community health programs, but many of these programs do not have pediatric dentists in their clinics. These families may also qualify for AHCCCS, but many dentists do not accept this plan because of the low reimbursement rates.

Pediatric dentists in the North Pima region also note lack of awareness of the importance of early dental exams as another reason for the poor oral health among children in the area. Not only are many parents uninformed about preferred dental practices for young children, but interviewees noted that pediatricians are also unaware of the importance of early visits to the dentist. However, pediatric dentists report that dental visits by age one could significantly improve the oral health of their patients. In addition, regular dental care can prevent problems that result in emergency visits, such as abscessed teeth, significant decay, and oral neglect. These situations result in increased costs for both the family and the provider, and in cases of neglect, providers must report lack of parental follow-up for treatment to Child Protective Services. Further, problems associated with tooth decay result in extreme pain for children that also affects their behavior, social interactions, eating habits, and ability to concentrate in learning environments.

Arizona’s Department of Health Services has recognized the importance of preventive care and in February 2008 released a statement highlighting the benefits of dental exams by age one, and establishing dental homes for young children. The Department launched the “First Dental Visit by Age One” campaign, which is an effort to reach and inform parents through the news media. Efforts like the activities noted above could result in significant improvement in the oral health of the young children in the North Pima region and throughout the state of Arizona.

Breast-feeding Support

Another indicator of interest in the North Pima region is information about breast-feeding resources. The benefits of breast-feeding include better overall nutrition, lower rates of chronic disease and diabetes, the passing of immunization properties from mother to child, economic savings for parents, and many others.⁵⁴ The development of a close bond between the infant and mother is another critical reason many people support breast-feeding.

54 http://www.mamaslatte.com/ml_reasonsToBreastfeed.asp

Despite these benefits, many mothers resist breast-feeding. An interview with a hospital administrator in the North Pima region indicated several barriers that may prevent mothers from breast-feeding their babies. These include: cultural norms; lack of modeling from friends and family members; low comfort level breast-feeding in public; poor maternal nutrition; and post-partum depression. Mothers who return to work while still breast-feeding may not have access to private space to pump their breast milk, and other parents may be unable or unaware of proper storage guidelines for breast milk.

In order to educate parents about the benefits of breast-feeding and support mothers who choose to breast-feed, the North Pima region offers several resources. A variety of services and educational programs are available through the Women's Center at Northwest Medical Center; Marana Health Center's Obstetrics facility; and private groups such as Mama's Latte, which provides in-home assessment and support for nursing mothers. Babies R Us provides a weekly breast-feeding support group, but it is not physically located within the region.

Access to these services poses a challenge for some families in North Pima. Northwest Medical Center is the only major hospital to offer parent support/breast-feeding services because its other location in Oro Valley does not have a maternity ward. Marana Health Center's maternity/obstetrics facility is located close to Northwest rather than in Marana, which places it a far distance from the rural parts of the region. Cost is another issue; while Mama's Latte provides in-home services, the fee for each visit ranges from \$40 to \$65. There is no charge for their support groups.

Two other hospitals, Tucson Medical Center and St. Joseph's/Carondelet are not physically located within the region but are in the center of Tucson and accessible for some residents of North Pima. Both hospitals offer a variety of childbirth education, parenting classes, and support groups, including breast-feeding and postpartum depression.

The North Pima hospital administrator notes that 85% of mothers leaving the maternity ward of the facility report that they plan to breast-feed. Results of three-month follow up phone calls indicate that this percentage has dropped to 67%. Data are not readily available for rates within specific areas of the region. These and other indicators may be a target area for data collection during future assessments.

Services for Children with Special Needs

Key informant interviews noted the critical lack of accessibility of services for children with special needs. Of particular note is the shortage of pediatric therapists of all type (i.e., occupational, physical, speech and mental health). Therapists that are available in the Tucson area are not readily able or available to make home visits to the farther reaches of Pima County. These needs mirror state-level results from a national survey that reported that approximately 40 percent of Children with Special Health Care Needs (CSHCN) have difficulty getting referrals and over 20 percent have unmet needs for specific health care services. The survey results further showed that over 38 percent of CSHCN lack family-centered care.⁵⁵

55 Child and Adolescent Health Measurement Initiative. 2005/2006 National Survey of Children with Special Health Care Needs, Data Research Center, Retrieved 7/2008 from www.cshcndata.org

Family Support

Family support is a foundation for enhancing children's positive social and emotional development. Children who experience sensitive, responsive care from a parent perform better academically and emotionally. Beyond the basics of care and parenting skills, children benefit from positive interactions with their parents (e.g. physical touch, early reading experiences, and verbal, visual, and audio communications). Children depend on their parents to ensure they live in safe and stimulating environments where they can explore and learn.

Many research studies have examined the relationship between parent-child interactions, family support, and parenting skills.⁵⁶ Much of the literature addresses effective parenting as a result of two broad dimensions: discipline and structure, and warmth and support.⁵⁷ Strategies for promoting enhanced development often stress parent-child attachment, especially in infancy, and parenting skills.⁵⁸ Parenting behaviors have been shown to impact language stimulation, cognitive stimulation, and promotion of play behaviors—all of which enhance child well being.⁵⁹ Parent-child relationships that are secure and emotionally close have been found to promote children's social competence, prosocial behaviors, and empathic communication.⁶⁰

The new economy has brought changes in the workforce and family life. These changes are causing financial, physical, and emotional stresses in families, particularly low-income families. Increasing numbers of new immigrant families are challenged to raise their children in the face of language and cultural barriers. Regardless of home language and cultural perspective, all families should have access to information and services and should fully understand their role as their children's first teachers. Within the North Pima region, many of the larger communities have access to online services to better research information; however, smaller communities like Picture Rocks, Avra Valley, and Rillito still often lack access to Internet resources.

Supporting families is a unique challenge that demands collaboration between parents, service providers, educators and policy makers to promote the health and well being of young children. Every family needs and deserves support and access to resources. Effective family support programs will build upon family assets that are essential to creating self-sufficiency in all families. Family support programming will play a part in strengthening communities so that families benefit from “belong-

56 Brooks-Gunn, J., Klebanov, P.K., & Liaw, F. R. The learning, physical, and emotional environment of the home in the context of poverty: The Infant Health and Development Program. *Children and Youth Services Review*, 1994, 17, 251-276; Hair, E., C., Cochran, S. W., & Jager, J. Parent-child relationship. In E. Hair, K. Moore, D. Hunter, & J. W. Kaye (Eds.), *Youth Development Outcomes Compendium*. Washington DC, Child Trends; Maccoby, E. E. Parenting and its effects on children: On reading and misreading behavior genetics, 2000, *Annual Review of Psychology*, 51, 1-27.

57 Baumrind, D. Parenting styles and adolescent development. In J. Brooks-Gunn, R., Lerner, & A. C. Peterson (Eds.), *The encyclopedia of adolescence* (pp. 749-758). New York: Garland; Maccoby, E. E. Parenting and its effects on children: On reading and misreading behavior genetics, 2000, *Annual Review of Psychology*, 51, 1-27.

58 Sroufe, L. A. *Emotional development: The organization of emotional life in the early years*. Cambridge: Cambridge University Press; Tronick, E. Emotions and emotional communication in infants, 1989, *American Psychologist*, 44, 112-119.

59 Brooks-Gunn, J., Klebanov, P.K., & Liaw, F. R. The learning, physical, and emotional environment of the home in the context of poverty: The Infant Health and Development Program. *Children and Youth Services Review*, 1994, 17, 251-276; Snow, C. W., Barnes, W. S., Chandler, J., Goodman, I. F., & Hemphill, J., *Unfulfilled expectations: Home and school influences on literacy*. Cambridge, MA: Harvard University Press.

60 Hair, E., C., Cochran, S. W., & Jager, J. Parent-child relationship. In E. Hair, K. Moore, D. Hunter, & J. W. Kaye (Eds.), *Youth Development Outcomes Compendium*. Washington DC, Child Trends; Sroufe, L. A. *Emotional development: The organization of emotional life in the early years*. Cambridge: Cambridge University Press; Tronick, E. Emotions and emotional communication in infants, 1989, *American Psychologist*, 44, 112-119.

ing.” Success is dependent on families being solid partners at the table, with access to information and resources. Activities and services must be provided in a way that best meet family needs.

Family support is a holistic approach to improving young children’s health and early literacy outcomes. In addition to a list of services like the licensed child care providers, preschool programs, food programs, and recreational programs available to families, Regional Partnership Councils will need to work with their neighborhoods to identify informal networks of people – associations – that families can join and utilize to build a web of social support. The development of a comprehensive parent education resource list for various service areas and target populations within the region could be a future goal of the North Pima Regional Partnership Council.

State-wide programs such as Healthy Families Arizona, Promoting Safe & Stable Families, Parents As Teachers through the Marana School District, Head Start, Arizona Early Intervention Program, and In-Home Family Preservation for families involved with Child Protective Services, and others are offered in Northern Pima County. In 2007, Healthy Families Arizona served over 1000 families through eleven program areas in Pima County by providing home visitation with families from the prenatal period through age five. Although many of these statewide programs serve North Pima communities, they often have limited resources to meet the full demand. A key informant interview with the Director of the MUSD Family Resource Center revealed that the program is comprehensive in what it offers (i.e., home visits and assistance with developmental delay referrals); however, the center has a capacity problem due to lack of staff.

Other resources within the region itself include two hospitals; a community health center with several locations throughout the region; one community college; three primary school districts; and seven libraries. In the region, several community centers, parks and recreation facilities, and faith-based organizations such as the Jewish Community Center also offer several sources of information for parents. Tucson Moms, a mother’s group on the northeast side of Tucson within the regional boundaries, offers play and support groups for mothers. The school districts also serve as a support and resource for teen parents. Several schools offer case management services; well-baby care through the Pima County Health Department; referrals for prenatal care; mental health assistance through Arizona’s Children Association; parenting groups; and home visits.

However, overall, there are relatively few programs located physically within the North Pima region. Many of the larger social service and family support organizations are physically located within the boundaries of the Central Pima region, and serve outlying communities only if they have the funding to travel to those areas. A key interview with the Director of a social service agency in Central Pima County revealed that the organization provides very limited family support services in the North Pima region due to high costs associated with traveling to those communities. In order for families to access many of the services that are located at these organizations, they must travel outside of their own communities to do so. For families without vehicles, with limited resources to pay for rising gas prices, or who rely on limited public transportation routes, accessing these programs is extremely difficult.

Families in crisis (financial, domestic violence, or substance abuse) have much greater levels of need for information and resources. Few resources for these families exist within the North Pima boundaries. Marana Health Center is the primary loca-

tion for basic information and services. Interfaith Community Services also provides assistance with rent and shelter; utilities; emergency medication prescriptions; and meals. During an interview in July 2008, the organization reported that all of its services are heavily used, but the greatest demand currently is assistance with rent and utility payments. Most other resources for families lie to the south in the Central Pima region; these organizations might provide in-home therapy services for families in the North Pima region referred by Child Protective Services (CPS) or the court system. Other options in the region are the AZ 211 information system, Information and Referral services in Tucson, and other online resources. However, as noted earlier, accessing online support services is a challenge for families in communities with limited Internet service.

Parent Knowledge About Early Education Issues

When asked, child care professionals continually report that families need more and better information around quality child care.⁶¹ Parents seem fairly perceptive of their need for more information. An online-survey conducted as part of a school readiness community assessment in Pima county (Nagle & Associates, 2007) included responses from 63 parents from Northern Pima County. These parents (81 percent of them mothers) noted that the most common source of information they received on raising a child was from *family and friends* (87 percent), followed by the Internet (76 percent), doctor's office (59 percent) and library (42 percent). They noted *managing stress* (43 percent) as their biggest challenge. The majority (62 percent) felt that *access to quality preschool* would most help their child be ready to start kindergarten. When asked what *one* thing would improve the lives of children birth through age five in their community, the most frequent responses of these parents was *affordable, high quality child care* (29 percent), followed by health insurance for all children (24 percent), and parent education and support (16 percent).

Individual interviews in June 2008 reiterated these need areas as well as identified additional categories of needed support for families. A private preschool Director in the North Pima region indicated that her families could use more support in learning about discipline; addressing behavioral challenges with their young children; alternative recreational activities besides television and computers; support groups; access to state-funded individual counseling; and guidance in empowering parents to be advocates for their children. Information compiled by the United Way of Tucson and Southern Arizona and Information and Referral Services in Tucson revealed that between July 1, 2007 and June 30, 2008, parents located in the North Pima region made 10 percent of all calls to I&R requesting parenting education information.

In May 2008, several hundred people attended the Community Conversation on Early Childhood Education, sponsored by the United Way of Tucson and Southern Arizona, Tucson Regional Town Hall, Southern Arizona Leadership Council, First Things First, and other community organizations. In addition to presentations and a panel discussion with featured guests, the event also included a group activity that allowed attendees to discuss issues related to early childhood, and to identify community priorities. Although the Community Conversation was county-wide, many

61 Whitebook, M., Howes, C., & Phillips, D. *Who cares? Child care teachers and the quality of care in America, 1989*, Oakland, CA: Child Care Employee Project.

of the results are applicable to the North Pima region specifically, notably in the categories of Parent Education, Family Support, and Professional Support. In addition to identifying the priority areas, groups at the Community Conversation also listed potential action steps to address each issue. Ideas for the Parent Education area include: education for parents about child development, the importance of quality in child care centers, literacy, and advocating for their needs; increased exposure of literacy programs; clear identification of specific parent needs; knowledge of available resources; and provision of parent kits. In the Family Support category, some suggestions were to increase affordability of child care; create a database of services for families; create “one-stop” resource centers for early childhood; and develop support/networking groups for parents.

Family Literacy

The Pima County parent survey (Nagle & Associates, 2007) that included 63 parents from Northern Pima County asked parents what would most help them read to their child. The most frequent response of these parents was “More time in my daily schedule” (58 percent) followed by “techniques to get my child interested in books” (20 percent).

To help address this need area, a dozen literacy-related agencies/programs are members of the Tucson Area Literacy Coalition. Many of these programs, such as Make Way for Books, Reach Out and Read, and Literacy Volunteers, serve communities within North Pima but few are actually located in the region. Additionally, seven libraries exist within the North Pima region. The Pima County Public Library network offers many services to encourage family reading. The Bookmobile provides library services to residents in outlying areas of Pima County, and loans approximately 17,000 items annually. In addition, library branches throughout the region offer regular storytime hours for infants through preschoolers, and their families. The public libraries also operate Project LIFT (Literacy Involves Families Together), which is a literacy outreach program specifically designed for teen parents in Tucson and Pima County. The program is offered in 46 sites throughout Pima County, and conducts outreach through school districts, alternative education programs, and social service agencies.

Professional Development

Professionals providing early childhood services to young children and their families can improve their knowledge and skills through ongoing professional development activities. Such activities may involve taking college level coursework that leads to a certificate, degree, or teacher certification, or could involve participation in conferences and workshops. Instruction might address developmental theory, as well as practical skills in areas such as child health, child safety, parent/child relationships, and professional child care service delivery. The professional capacity of the early childhood workforce and the resources available to support it affect the development of the region’s young children.

Child Care Professionals' Certification and Education

Research on caregiver professional development has found a relationship between the quality of child care services provided and child development outcomes.⁶² Furthermore, formal education is related to increased quality care; however, *experience without formal education* has not been found to be related to quality care.⁶³ In Arizona, the 2004 Compensation and Credentials Survey concluded that “high quality early childhood education sets the foundation for life-long learning and school success. And qualified early childhood teachers are the foundation of high quality early childhood education.” In 2004, only 8 percent of Assistant Teachers, 32 percent of Teachers and 40 percent of Teacher Directors in programs licensed by DHS and servicing children birth to age five were college graduates.⁶⁴

The preparation of the early childhood workforce is a priority for policy makers, child and family advocates, the early childhood education industry in Arizona, and those involved in early childhood education career development from the high school to the higher education levels. The percentage of Directors of programs, teachers, and assistants without a college degree of any kind, across the state, is extremely low. However, there are many barriers for those in the field to obtain higher education. Among these challenges is the low earnings of the workforce, which in 2004 recorded \$8.10 as the median wage for Assistant Teachers (\$9.00 for Teachers and \$10.92 for Teacher Directors).

In addition to the shortage of specialists such as occupational therapists discussed in the Health section of this report, a pressing concern for Regional Partnership Councils around the state is the preparation of its early childhood teachers. Professional training and credentialing of professionals appears to be lacking in the region. The chart below details the degree attainment of child care professionals for the North Pima Region. Comparing North Pima to the state, fewer child care professionals have no degrees and more have Bachelors degrees in this region.

Childcare Professionals' Educational Background

Degree Type	North Pima 2007		Arizona* 2007		U.S.** 2002	
	Teachers	Assistants	Teachers	Assistants	Teachers	Assistants
No degree	57%	75%	61%	82%	20%	12%
CDA	5%	14%	9%	7%	N/A	N/A
Associates	13%	7%	15%	8%	47%	45%
Bachelors	25%	17%	19%	7%	33%	43%
Masters	6%	0%	6%	<1%		

Source: Compensation and Credentials report, Center for the Child Care Workforce – Estimating the Size and Components of the U.S. Child Care Workforce and Caregiving Population report, 2002.

* Arizona figures were determined by using the statewide average from the Compensation and Credentials report.

**U.S. figures had slightly different categories: High school or less was used for no degree, Some college was used for Associates degree, and Bachelors degree or more was used for Bachelors and Masters degree

62 NICHD Early Child Care Research Network. The relation of child care to cognitive and language development, 2000, *Child Development*, 71, 960-980.

63 Galinsky, E. C., Howes, S., & Shinn, M. *The study of children in family care and relative care*. 1994, New York: Families and Work Institute; Kagan, S. L., & Newton, J. W. Public policy report: For-profit and non-profit child care: Similarities and differences. *Young Children*, 1989, 45, 4-10; Whitebook, M., Howes, C., & Phillips, D. *Who cares? Child care teachers and the quality of care in America*, 1989, Oakland, CA: Child Care Employee Project.

64 State Board on School Readiness. *Compensation and Credentials: A Survey of Arizona's Early Education Workforce*, July, 2005

To obtain more specific information regarding the level and type of child care professionals' educational backgrounds in the North Pima region, interviews were conducted in June 2008 with a random sampling of ten (10) licensed child care providers within each provider category as listed within the DHS licensed provider system (small group homes, private child care centers, and public preschools). Findings within each category are provided below.

Small Group Homes: Among the two (2) small group homes within the North Pima region, interviews with both providers revealed that one staff member holds a CDA, and the others working within the small group homes hold a high school diploma with some college credits.

Child Care Centers: A random sampling of ten (10) child care centers within the North Pima region provided the information in the table below. This table lists the qualification levels of both teachers and teacher assistants for child care center providers.

Qualifications of Teachers/Teacher Assistants within Child Care Centers

Qualifications of Child Care Professionals Serving in Child Care Centers in the North Pima Region					
Position	No Degree	CDA	AA/AAS	BA/BS	MA/MS or more
Teachers	41%	30%	14%	14%	1%
Assistant Teachers	61%	9%	12%	16%	2%

Public Preschools: A random sampling of 10 public preschools within the North Pima region provided the information in the table below. This table lists the qualification levels of both teachers and teacher assistants for public preschool professionals.

Qualifications of Teachers/Teacher Assistants within Public Preschools

Position	No Degree	AA/AAS	BA/BS	MA/MS or more
Teachers	0%	29%	57%	14%
Assistant Teachers	52%	24%	24%	0%

The data in the tables above indicate that the majority of teachers in North Pima child care centers have no degree, compared to a majority of teachers in public preschools who have a Bachelor's Degree. In both settings, a majority of teacher assistants do not hold a degree, but higher percentages of public preschool teacher assistants have either an Associate's or Bachelor's degree. Overall, a large percentage of all early childhood professionals in North Pima do not have degrees. Requirements for educational background and professional development vary from center to center and agency to agency. For example, centers associated with Head Start and the Arizona Department of Education require higher levels of educational attainment of their staff. However, these programs are not accessible to all children due to income eligibility requirements.

Professional Development Opportunities

Within the North Pima region itself, very few professional development opportunities exist for early childhood educators and professionals. The Northwest campus of Pima Community College is the only higher education facility physically located within the region. This campus offers courses that can be applied to an Associate of Arts Degree in Elementary Education, with an optional concentration in early childhood education. Students pursuing coursework in early childhood education can also take advantage of state university and national online education and degree programs.

However, the lack of coordinated higher education opportunities for early childhood professionals is a problem throughout Pima County. This gap is particularly critical due to the state requirement of an Early Childhood Teaching certificate for any professional teaching children birth through kindergarten (and optional for 1st – 3rd grade). This requirement takes effect in July 2009. Currently, The University of Arizona's College of Education is working on gaining approval from the Arizona Department of Education for an early childhood certificate program. Another barrier to degree completion in early childhood education is the transfer of coursework from Pima Community College to a four year university such as the University of Arizona. This process, referred to as articulation, is a critical step in the professional development path for providers who have completed community college coursework and ultimately seek to obtain a Bachelor's degree. Regional Partnership Councils may decide to advocate for and assist in further developing this process.

Available Education and Certification Programs for Child Care Professionals in Pima County 2007-08

PCC-Desert Vista Campus: PCC – offers an AA in Early Childhood Education; AAS Teacher/Director degree; A.A.S degree in School-Age Child Care; & five (5) types of Certificates in the following areas: Teacher Aide/Assistant Certificate, Basic School-Age Child Care Assistant Certificate, Advanced School-Age Child Care Certificate, Child Development Associate Certificate, and coursework to complete an Early Childhood Endorsement.

PCC Community Campus: PCC Community Campus offers coursework leading to Elementary or Secondary Certification – Post-Degree Certificates; Special Education Cross-Categorical K-12 or Learning Disabilities K-12 Certification – Post Degree Certificates; ESL Endorsement – Post-Degree Certificates; and K-12 Reading Endorsement – Post Degree Certificates. Also, other PCC campus sites offer Associate of Arts degree coursework in Elementary Education with an optional concentration in Early Childhood or Elementary Education.

Prescott College Tucson Center: Prescott College Tucson Center offers BA and MA degrees in education and courses in education leading to teacher certification in areas such as: early childhood education leading to teacher certification, elementary education, special education, literacy education, experiential education and environmental education.

University of Arizona: University of Arizona College of Education offers all levels of degrees in: early childhood education; elementary and secondary education; educational leadership, educational psychology; higher education; language reading and culture; rehabilitation and school psychology; & graduate programs in special education fields such as: emotional and behavioral disorders, gifted and talented, learning disabilities, learning disabilities-bilingual/multicultural, visual impairment, severe and multiple disabilities, orientation and mobility, and special education research .

Northern Arizona University: Offers a Bachelor's of Applied Science in ECE and a BA/BS Teacher Preparation Program with Certification in ECE; Master's Level Educational Leadership Program associated with elementary education. Classroom coursework is available at new Tucson campuses and through distance learning.

Employee Retention

Providing families with high quality child care is an important goal for promoting child development. Research has shown that having child care providers who are more qualified and who maintain employee retention is associated with more positive

outcomes for children.⁶⁵ More specifically, research has shown that child care providers with more job stability are more attentive to children and promote more child engagement in activities.⁶⁶

As the chart below shows, the average length of employment in North Pima has remained low, with teachers employed more than five years at 26 percent and assistant teachers employed more than five years at 9 percent.

Average Length of Employment for Childcare Professionals in North Pima (2007)

	6 Months or Less	7-11 Months	One Year	Two Years	Three Years	Four Years	Five Years or More	Not applicable	"Don't Know/Refused"
Teachers	13%	0%	13%	22%	13%	9%	26%	4%	0%
Assistant Teachers	11%	9%	13%	20%	16%	9%	9%	13%	2%
Teacher Directors	4%	0%	2%	7%	7%	2%	34%	43%	2%
Administrative Directors	9%	0%	13%	4%	0%	9%	30%	35%	0%

Source: Compensation and Credentials Survey

To obtain more specific information on average retention rates for child care professionals in the North Pima region, ten (10) random private child care providers and ten (10) public school child care program providers were interviewed in June 2008. Findings from these key informant interviews are provided in the two (2) tables below.

Retention Rates for Private Child Care Centers in the North Pima Region

Retention Rates for Private Child Care Centers in the North Pima Region	
	Average Retention in years
Teachers	4 ½ years
Assistant Teachers	1 ½ years

Retention Rates for Public School Child Care Programs in the North Pima Region

Retention Rates for Public School Child Care Programs in the North Pima Region	
	Average Retention in years
Teachers	3 years
Assistant Teachers	Just under 4 years

The data in the tables above indicate that teachers in private child care centers have a higher retention rate than public preschool teachers, but assistant teachers in public

65 Raikes, H. Relationship duration in infant care: Time with a high ability teacher and infant-teacher attachment. 1993, *Early Childhood Research Quarterly*, 8, 309-325.

66 Stremmel, A., Benson, M., & Powell, D. Communication, satisfaction, and emotional exhaustion among child care center staff: Directors, teachers, and assistant teachers, 1993, *Early Childhood Research Quarterly*, 8, 221-233; Whitebook, M., Sakai, L., Gerber, E., & Howes, C. *Then and now: Changes in child care staffing, 1994-2000*. Washington DC: Center for Child Care Workforce.

facilities stay in their position longer than their counterparts in private centers. The key informant interviews did not provide information highlighting reasons this result.

Compensation and Benefits

Higher compensation and benefits have been associated with quality child care. Research studies have found that in family care and in child care centers, workers' salaries are related to quality child care.⁶⁷ Furthermore, higher wages have been found to reduce turnover—all of which is associated with better quality child care.⁶⁸ Better quality care translates to workers routinely promoting cognitive and verbal abilities in children and social and emotional competencies.⁶⁹

As the chart below shows, salary increases have varied depending on position from 2007 to 2008 in North Pima. For Teacher Directors, the salary increased \$1.49 while during the same time period, teachers' wages increased by 45 cents.

Average Wages for Childcare Professionals in North Pima

	2004	2007
Teacher	\$10.18	\$10.63
Assistant Teacher	\$7.70	\$8.44
Teacher/ Director	\$12.06	\$14.55
Admin/ Director	\$16.35	N/A

Sources: 2004 and 2007 data is from the Compensation and Credentials Survey

To obtain more specific information on average wages and benefits for child care professionals in the North Pima region, 10 random private child care providers and 10 public school child care program providers were interviewed in June 2008. Findings from these key informant interviews are provided in the tables below.

Private Child Care Providers' Average Wages and Benefits

Private Child Care Providers' Average Wages and Benefits in the North Pima Region										
ID# of Center	Director	Teacher	Assist.	Medical	Dental	Pd sick	Pd Vac	Retir	Other	Tuition assist.
1	\$24,960	\$20,280	8.00	No	No	No	No	No	No	No
2	34,000	24,000	9.50	Yes	Yes	Yes	Yes	No	No	No
3	34,000	24,000	10.00	Yes	Yes	Yes	Yes	Yes	No	Yes
4	37,500	24,960	9.50	Yes	Yes	Yes	Yes	Yes	Child care discount	Yes
5	22,880	16,640	7.00	No	No	No	No	No	No	No
6	32,500	18,720	8.00	Yes	Yes	Yes	Yes	Yes	Child care d/c	Yes

67 Lamb, M. E. Nonparental child care: Context, quality, correlates. In W. Damon, I. E. Sigel, & K. A. Renninger (Eds.), *Handbook of Child Psychology* (5th ed.), 1998, pp. 73-134. New York: Wiley & Sons; National Research Council and Institute of Medicine. *From neurons to neighborhoods: The science of early childhood development*. Washington DC: National Academy Press.

68 Schorr, Lisbeth B. Pathway to Children Ready for School and Succeeding at Third Grade. Project on Effective Interventions at Harvard University, June 2007.

69 Ibid.

Private Child Care Providers' Average Wages and Benefits in the North Pima Region										
7	35,000	25,480	8.10	Yes	Yes	Yes	Yes	Yes	LT & ST disability	Yes
8	N/A	N/A	N/A	Yes	No	Yes	Yes	No	No	No
9	40,000	27,560	9.75	Yes	Yes	Yes	Yes	No	Child care d/c	Yes
10	34,000	17,680	7.50	Yes	Yes	Yes	Yes	Yes	No	Yes

Public School Child Care Programs' Average Wages and Benefits

Public School Child Care Programs' Average wages and benefits in the North Pima Region										
District	Director	Teacher	Assist.	Med	Dental	Pd Sick	Pd Vac	Retir	other	Tuition assist.
1	\$29,120	\$24,960	9.00/hr	Yes	Yes	Yes	Yes	Yes	Yes – computer loan	No
2	40,000	35,000	11.56	Yes	Yes	Yes	Yes	Yes	Discnt for child care	No
3	42,000	24,211	10.21	Yes	No	Yes	Yes	Yes	No	Yes
4	35,360	25,480	7.50	No	No	Yes	Yes	No	Free tuition for kids	No

As indicated in the tables above, wages and benefits vary widely across facility and throughout the region. On average, Directors' annual salaries in public preschools are higher than child care centers: \$36,620 compared to \$32,760. Similarly, public preschool teachers earn an average of \$27,412 compared to \$22,146 for teachers in child care centers. Average salaries for Directors and teachers in both types of facilities are well below average incomes for the North Pima region, as well as throughout Pima County. In addition, child care center teachers earn average salaries that place them just above the federal poverty income level of \$21,200 for a family of four.

The current data in this section do not indicate a relationship between education level, wages and benefits, and retention rates. In future assessments, the North Pima Regional Partnership Council may wish to examine a possible correlation between these factors.

Public Information and Awareness

Public interest in early childhood is growing. Recent research in early childhood development has increased families' attention on the lasting impact that children's environments have on their development. The passage of Proposition 203 – First Things First – in November 2006, as well as previous efforts led by the United Way, the Arizona Community Foundation, and the Arizona Early Education Funds, have elevated early childhood issues to a new level in our state.

Increasingly, families and caregivers are seeking information on how best to care for young children. National studies suggest that more than half of American parents of young children do not receive guidance about important developmental topics, and want more information on how to help their child learn, behave appropriately,

and be ready for school. Many of the most needy, low-income, and ethnic minority children are even less likely to receive appropriate information.⁷⁰

Families and caregivers also seek information on how families can connect with and navigate the myriad of public and private programs that exist in their communities that offer services and support to young children and their families. Few connections exist between such public and private resources, and information that is available on how to access various services and supports can be confusing or intimidating. Information provided to families needs to be understandable, culturally and geographically relevant, and easily accessible.

In the North Pima Region, many organizations currently play a role in providing information on child development and family resources and supports to families. A listing of resources is included in the appendix. Across each community in Arizona the following resources provide important early childhood services:

- **School Districts** – which disseminate information to parents and the community at large through a number of events throughout the school year that include open house nights, PTO monthly meetings, information fairs and parent university weekends. School districts also use federal funding to keep parents aware of important issues such as health care and child nutrition through information campaigns. School districts have also created a network of information for parents through weekly or monthly newsletters, health bulletins, and web site updates.
- **Public Libraries** – many libraries offer parent workshops to families on how to raise young readers. Many of the libraries offer story times for young children and their caregivers, where best practices in early literacy are modeled. The libraries may also conduct outreach story times at a limited number of child care centers in the region, where they also train child care providers and families on best practices in early literacy.
- **Community Organizations** – A variety of community organizations provide education, social services, education, and other forms of assistance related to early childhood. Each community has unique agencies that can foster the goals of promoting early childhood development.
- **Head Start** – The North Pima Region has three Head Start Programs to inform low income families about issues related to child growth and development as well as school readiness, issues around parent involvement, children's health, and available community social services.

United Way of Tucson and Southern Arizona (UWTSA) has started to build a comprehensive list of parent education services in Pima County. Although unavailable at this time, the ongoing effort to add to the resource list will include information about services areas and target populations. Organizations that are an important part of raising public awareness in the region include: UWTSA, First Things First, Child & Family Resources, Easter Seals Blake Foundation, Pima Community College, Jewish Community Center, AZ Child Care Association, Southern AZ Association for the Education of Young Children, DHS, DES, Make Way for Books, Reach Out & Read

⁷⁰ Halfon, Nel, et al. "Building Bridges: A Comprehensive System for Healthy Development and School Readiness." National Center for Infant and early Childhood Health Policy, January 2004.

and the Parent Connection. A listing of these assets is included in the appendix to this report.

Public awareness and information efforts also need to go beyond informing parents and caregivers of information needed to raise an individual child or support a family in care giving. Increased public awareness around the needs of children and their families is also needed. Policy leaders need to better understand the link between early childhood efforts and the broader community's future success. Broader public support must be gleaned to build the infrastructure needed to help every Arizona child succeed in school and life. Success in building a comprehensive system of services for young children requires a shift in public perceptions and public will.⁷¹

System Coordination

Throughout Arizona, programs and services exist that are aimed at helping young children and their families succeed. However, many such programs and services operate in isolation of one another, compromising their optimal effectiveness. A coordinated and efficient systems-level approach to improving early childhood services and programs is needed.

System coordination can help communities produce higher quality services and obtain better outcomes. For example, one study found that families who were provided enhanced system coordination benefited more from services than did a comparison group that did not receive service coordination.⁷² Effective system coordination can promote First Things First's goals and enhance a family's ability to access and use services.

Partnerships are needed across the spectrum of organizations that touch young children and their families. Organizations and individuals must work together to establish a coordinated service network. Improved coordination of public and private human resources and funding could help maximize effective outcomes for young children.

A wide array of opportunities exists for connecting services and programs that touch children and families. Early childhood education providers could be better connected to schools in the region. Services and programs that help families care for their young children could be better connected to enhance service delivery and efficiency. Public programs that help low-income families could be better coordinated so that redundancies as well as "gaps" in services are eliminated. Faith-based organizations could increase awareness among families of child development and family resources and services. Connections between early education and health providers could be forged.

Regarding coordination and collaboration efforts pertaining to early childhood issues, there is less of a coordination structure within the North Pima region than that which has already been established in the Pima Central and Pima South regions. Marana Health Center is noted as an important asset for Northern Pima County and serves as a place where multiple resources (i.e., agencies, programs, and individuals) come together to serve families.

71 Clifford, Dean, PhD. Practical Considerations and Strategies in Building Public Will to Support Early Childhood Services.

72 Gennetian, L. A., & Miller, C. *Reforming welfare and rewarding work: Final report on the Minnesota Family Investment Program: Effects on Children*, 2000, New York: Manpower Demonstration Research Corporation; Miller, C., Knox, V., Gennetian, L. A., Dodoo, M., Hunter, J. A., & Redcross, C. *Reforming welfare and rewarding work: Final report on the Minnesota Family Investment Program: Vol. 1: Effects on Adults*, 2000, New York: Manpower Demonstration Research Corporation.

Aside from the United Way and the First Focus on Kids Impact Council, the Jewish Community Center also serves as a location for community seminars regarding early childhood. One director of a child care facility participates in the Director's Network through Child and Family Resources. Providers that participate in accreditation programs can also rely on their network for information and support. Overall, there is a great deal of opportunity for improved coordination, particularly in the areas of child care, health services, and within the faith community.

There is a variety of comprehensive services, resources, and supports provided in the North Pima region and Pima County as a whole by agencies and organizations working in the early education field. A non-exhaustive list of these assets is included in the appendix to this report. 📄



Conclusion

The North Pima region presents an area rich with opportunity and a growing population that challenges the boundaries of social service capacity for children and families. It is a region of contrasts, with both affluent and low-income neighborhoods as well as metropolitan and rural communities. The 17,000 children age five and younger in the region represent diverse ethnic and cultural backgrounds, and these families deserve early care and education and family support services that are relevant to their experiences.

As a whole, the North Pima region is often near or above the state averages on key indicators of child well-being; however, there are significant needs throughout the region. More than 17,000 children age five and younger live in North Pima communities, yet there are only eight accredited early care and education settings. With few options for infant and toddler care, families in the region often travel more than ten miles each way to access care for their young children. In addition, the cost of high quality early care and education often represents a significant portion of a family's annual income and results in parents choosing care settings based on cost rather than on quality.

Early childhood professionals in the region also have limited resources for continuing their education and for earning a salary that approaches state and national averages. Early childhood professionals must take the vast majority of their college coursework on campuses outside of the North Pima region, requiring time and costs associated with travel. Further, few people are attracted to the early care and education field when the average salary for a teacher in a private child care center is only \$1,000 more annually than the federal poverty level of \$21,200 for a family of four.

State and local agency data as well as key informant interviews reveal health needs in areas including health insurance enrollment; significant numbers of tooth decay; and low immunization rates for two-year olds. Lack of coordinated and comprehensive services for families with young children is another critical need in the North Pima region, with parents reporting that they need more information about child development and accessing quality early care and education programs.

North Pima residents do have access to a number of community entities that provide support for children and families, and this network provides the foundation for establishing a more comprehensive and coordinated early childhood infrastructure throughout the region. Due to its close proximity to Tucson, an area with an established infrastructure, North Pima is uniquely positioned to foster collaborations with existing resources such as the community college and university systems; the United Way of Tucson and Southern Arizona; and other community-based organizations. Expanding collaborations among North Pima communities and those in the Central and South Pima regions will significantly enhance the services available for children and families. 🌍

Appendices

Chart of Regional Assets – North Pima

Agencies/Coalitions				
ADE – Parent Information Network (PIN)	statewide	N/A	AZ	N/A
AZ Early Intervention Program – Pima Co.	3170 E. Ft. Lowell	Tucson	AZ	85716
Arizona’s Children Association	2700 S. 8 th Ave.	Tucson	AZ	85713
KARE Family Center	4710 E. 29 th St. Bldg. #7	Tucson	AZ	85711
The Parent Connection	5326 E. Pima Street	Tucson	AZ	85712
Casa de los Niños	1101 N. Fourth Ave.	Tucson	AZ	85705
Catalina Community Resource Center	3414 E. Gulder Ranch	Tucson	AZ	85739
Catalina Recreation Center	16562 N. Oracle Road	Catalina	AZ	85739
Child & Family Resources	2800 E. Broadway	Tucson	AZ	85716
Child-Parent Centers – Head Start	602 E. 22 nd St.	Tucson	AZ	85713
Community Extension Programs (Amphi)	450 W. Wetmore Rd.	Tucson	AZ	85705
Community Foundation for So. AZ	2250 E. Broadway Blvd.	Tucson	AZ	85719
Community Partnership of So. AZ	535 N. Wilmot	Tucson	AZ	85711
DES Family Assistance Adm. Marana	13644 N. Sandario	Marana	AZ	85653
Easter Seals Blake Foundation	3170 E. Ft. Lowell	Tucson	AZ	85716
El Rio Community Health Center	320 W. Prince Road	Tucson	AZ	85705
Intermountain Centers for Human Dev.	994 S. Harrison Road	Tucson	AZ	85748
Jewish Community Center	3800 E. River Rd.	Tucson	AZ	85718
Jewish Family & Children’s Service	4301 E. 5 th St.	Tucson	AZ	85711
Junior League of Tucson, Inc.	2099 E. River Rd.	Tucson	AZ	85718
La Leche League	617 N. Keen Pl.	Tucson	AZ	85711
Lutheran Social Services of the SW	5049 E. Broadway, #102	Tucson	AZ	85711
MIKID (Mentally Ill Kids in Distress)	3928 E. 5 th St.	Tucson	AZ	85711
Marana Community Food Bank	11734 W. Grier Rd.	Marana	AZ	85653
Marana Health Center	13549 N. Sanders	Marana	AZ	85653
Marana Parks & Recreation	13251 N.. Lon Adams Rd.	Marana	AZ	85653
National Alliance on Mental Illness of Southern Arizona – NAMISA	40 N. Swan Rd. #45	Tucson	AZ	85711
New Parents Network	P.O. Box 64237	Tucson	AZ	85728
Northwest Interfaith Center	2820 W. Ina Rd.	Tucson	AZ	85741
Our Family Services	3830 E. Bellevue St.	Tucson	AZ	85716
Pima Community Access Program	655 E. River Rd	Tucson	AZ	85704
Pima Council on Developmental Disab.	2410 W. Ruthrauff #110-0	Tucson	AZ	85705
Pima County Community Services Dept	32 N. Stone	Tucson	AZ	85701
Pima County Health Dept	150 W. Congress	Tucson	AZ	85701
Picture Rocks Community Center	5615 N. Sanders Rd.	Tucson	AZ	85743
So. Az Children’s Advocacy Center	2530 E. Broadway #C	Tucson	AZ	85716
United Way of Tucson & Southern Arizona	330 N. Commerce Park Loop	Tucson	AZ	85745
WIC (Women, Infants, & Children)	13644 N. Sandario	Marana	AZ	85653
Wings on Words	202 E. Speedway	Tucson	AZ	85705
Colleges				
Pima Community College NW Campus	7600 N. Shannon Rd.	Tucson	AZ	85709

Hospitals/Clinics				
NW Medical Center Oro Valley	1551 E. Tangerine Rd.	Oro Valley	AZ	85755
NW Medical Center Urgent Care Marana	8333 N. Silverbell	Marana	AZ	85743
Tucson Medical Center	5301 E. Grant Road	Tucson	AZ	85712
University Medical Center	1501 N. Campbell	Tucson	AZ	85724
Schools				
Amphitheater School District	701 W. Wetmore Rd.	Tucson	AZ	85705
Catalina Foothills School District	2101 E. River Rd.	Tucson	AZ	85718
Flowing Wells Unified School District	1556 W. Prince	Tucson	AZ	85705
Marana Unified School District	11279 W. Grier Rd.	Marana	AZ	85653
MUSD Family Resource & Wellness Center	11279 W. Grier Rd.	Marana	AZ	85653
MUSD PAT (Parents At Teachers)	11279 W. Grier Rd.	Marana	AZ	85653
Tanque Verde School District	11150 E. Tanque Verde Rd.	Tucson	AZ	85749
Tucson Unified School District	1010 E. Tenth St.	Tucson	AZ	85719
Community Centers				
Marana Parks and Recreation	12775 N. Sanders Rd.	Marana	AZ	85653
Oro Valley Parks and Recreation	680 W. Calle Concordia	Oro Valley	AZ	85704
Libraries				
Dewhurst – Catalina Public Library	15631 N. Oracle Rd., #199	Catalina	AZ	85739
Dusenberry-River Branch Library	5605 E River Rd.	Tucson	AZ	85750
Geasa-Marana Branch Library	13370 N. Lon Adams Rd.	Marana	AZ	85653
Kirk-Bear Canyon Ranch Library	8959 E Tanque Verde	Tucson	AZ	85749
Nanini Branch Library	7300 N. Shannon Rd.	Tucson	AZ	85741
Oro Valley Public Library	1305 W. Naranja Dr.	Oro Valley	AZ	85737
Wheeler Taft Abbett, Sr., Branch Library	7800 N. Schisler Dr.	Tucson	AZ	85743
Faith-Based Organizations				
See local listings				

B. Citations for resources used and extant data referenced

AHCCCS enrollment and utilization data excerpts, by county: 2007-08.

American Association of Retired Persons: http://www.grandfactsheets.org/state_fact_sheets.cfm

American Community Survey (2003-2007) – U.S. Census: <http://factfinder.census.gov>

American Montessori Society: www.amshq.org

Annie E. Casey Foundation Kids Count Data Center <http://www.kidscount.org/datacenter/compare>

Annie E. Casey Foundation. Kids Count. Children in immigrant families: http://www.kidscount.org/datacenter/profile_results.jsp?r=320&d=1&c=12&p=5&x=135&y=8

Annie E. Casey Foundation. Family to Family Tools for Rebuilding Foster Care. July 2001.

Annie E. Casey Foundation. Kids Count Indicator Brief: Preventing Teen Births, 2003: <http://www.kidscount.org/datacenter/auxiliary/briefs/teenbirthrateupdated.pdf>

Annual EPSDT Participation Report CMS, 2003.

Arizona Child Fatality Review Board

Arizona Compensation and Credentials Report, 2007.

Arizona Dental Sealant Program data from 2004-2005 school year

Arizona Department of Commerce, Research Administration (June, 2008)

Arizona Early Intervention Program (AZEIP) July 1, 2006 – June 30, 2007 report.

Arizona Child Abuse and Neglect Prevention System: Action Plan for Reform of Arizona’s Child Protective Services, 2004.

Arizona Department of Economic Security, Child Care Market Rate Survey 2006.

Arizona Department of Economic Security Child Welfare Reports: <https://egov.azdes.gov/CMSInternet/appreports.aspx?Category=57&subcategory=20>

Arizona Department of Economic Security, Children’s Bureau

Arizona Department of Education: www.asdhez.gov/hsd/chprofiles.htm

Arizona Department of Education: SFY 2006-2007 Kindergarten DIBELS AZ Reading First Schools.

Arizona Department of Education: AIMS Spring 2007 Grade 03 Summary.

- Arizona Department of Education. *Preschool Special Education Counts* [Data file]. Available from Arizona Department of Education, Early Childhood Education Section.
- Arizona Department of Health Services, Community Health Profiles, 2003: <http://www.azdhs.gov/hsd/chppprofiles.htm>
- Arizona Department of Health Services, emergency room data for calendar year 2004.
- Arizona Department of Health Services, Health disparities report, 2005.
- Arizona Department of Health Services, Office of Oral Health, AZ School Dental Survey 1999-2003. Children 6-8.
- Arizona Department of Health Services, Office of Oral Health, 2006 Survey of AHCCCS Providers.
- Arizona Department of Health Services, National Immunization Survey, Comparison of 2007 to 2008 Results.
- Arizona Department of Health Services, Office of Women's and Children's Health Report, 2006: County Prenatal Block Grant Annual Evaluation, 2004-2005.
- Arizona Department of Health Services/Vital Statistics Division Community Profiles 2003-2006.
- Arizona Immunization Program Office, Assessment Unit: 2006-2007 School Year Immunization Coverage Levels in Arizona.
- Arizona Unemployment Statistics, Special Report, Sept. of Commerce, May 2008
- Ashford, J., LeCroy, C. W., & Lortie, K. (2006). *Human Behavior in the Social Environment*. Belmont, CA: Thompson Brooks/Cole.
- ASIIS Statistics Sheet, May 2008: <http://www.azdhs.gov/phs/asiis>
- Association of Christian Schools International (ASCI): www.asci.org
- Augoustios, M. Developmental effects of child abuse: A number of recent findings. *Child Abuse and Neglect*, 11, 15-27.
- Baumrind, D. Parenting styles and adolescent development. In J. Brooks-Gunn, R., Lerner, & A. C. Peterson (Eds.), *The encyclopedia of adolescence* (pp. 749-758) New York: Garland.
- Berrueta-Clement, J. R., Schweinhart, L. J., Barnett, W. S., Epstein, A. S., & Weikart, D. P., *Changed Lives: The effects of the Perry Preschool Program on youths through age 19*. Ypsilanti, MI: The High/Scope Press.
- Brooks-Gunn, J., Klebanov, P.K., & Liaw, F. R. The learning, physical, and emotional environment of the home in the context of poverty: The Infant Health and Development Program. *Children and Youth Services Review*, 1994, 17, 251-276.
- Campbell, F. A., Pungello, E. P., Miller-Johnson, S., Burchinal, M., & Ramey, C. T. The development of cognitive and academic abilities: Growth curves from an early childhood educational experiment. *Developmental Psychology*, 37, 2001, 231-242.
- Capps, R., Hagan, J. and Rodriguez, N. *Border Residents Manage the U.S. Immigration and Welfare Reforms. In Immigrants, Welfare Reform, and the Poverty of Policy*. Westport, CT: Praeger, 2004.
- Center for the Child Care Workforce: *Compensation and Credentials report, Estimating the Size and Components of the U.S. Child Care Workforce and Caregiving Population report*, 2002.
- Centers for Disease Control: www.cdc.gov/reproductivehealth/products&pubs/dataoaction/pdf/rhow8.pdf
- Center for Disease Control, fact sheet, 2001.
- Chen, E., Matthews, K. A., & Boyce, W. T. Socioeconomic differences in children's health: How and why do these relationships change with age? *Psychological Bulletin*, 128, 2002, 295-329.
- Child and Adolescent Health Measurement Initiative. 2005/2006 National Survey of Children with Special Health Care Needs, Data Research Center, Retrieved 7/2008 from www.cshcnadata.org
- Children's Action Alliance, *Going Beyond the Immigration Hype: Children and Our Shared Destiny*, Fact Sheet, 2006.
- Columbia University in the City of New York, *Current Population Survey – March 2003*.
- Commission on Medicaid and the Uninsured, *January 2006 Center for the Childcare Workforce*, 2002.
- Clifford, Dean, PhD. *Practical Considerations and Strategies in Building Public Will to Support Early Childhood Services*. Commonwealth Fund. *State Scorecard on Health Care System Performance*, 2007.
- Dubay, L., & Kenney, G. M., Health care access and use among low-income children: Who fares best? *Health Affairs*, 20, 2001, 112-121.
- Eckenrode, J., Laird, M., & Doris, J., *Maltreatment and social adjustment of school children*. Washington DC, U. S. Department of Health and Human Services
- English, D. J. The extent and consequences of child maltreatment. *The Future of Children, Protecting Children from abuse and neglect*, 8, 39-53.
- Federal interagency forum on child and family statistics. *America's children: Key national indicators of well-being*, 2002. Washington DC.
- First Things First Allocation Chart (2007).
- Federal Register, Volume 73, No. 15, January 23, 2008, pp. 3971-3972.
- Foreign-Born Populations of the United States: Ferrell Secakuku, March 2005, Smithsonian Institution.
- Galinsky, E. C., Howes, S., & Shinn, M. *The study of children in family care and relative care*. (1994). New York: Families and Work Institute.
- Garland, C., Stone, N. W., Swanson, J., & Woodruff, G. (eds.). *Early intervention for children with special needs and their families: Findings and recommendations*. 1981, Westat Series Paper 11, University of Washington.
- Gennetian, L. A., & Miller, C. *Reforming welfare and rewarding work: Final report on the Minnesota Family Investment Program: Effects on Children*, 2000, New York: Manpower Demonstration Research Corporation
- Hair, E., C., Cochran, S. W., & Jager, J. Parent-child relationship. In E. Hair, K. Moore, D. Hunter, & J. W. Kaye (Eds.), *Youth Development Outcomes Compendium*. Washington DC, Child Trends.
- Halfon, Nel, et al. "Building Bridges: A Comprehensive System for Healthy Development and School Readiness." National Center for Infant and early Childhood Health Policy, January 2004.
- Head Start, Region IX Performance Reports 2007-08.
- Health Insurance in Arizona, Residents of Maricopa County: Johnson, etal, ASU, 2004.

- Hendrickson, S., Baldwin, J. H., & Allred, K. W. Factors perceived by mothers as preventing families from obtaining early intervention services for their children with special needs, *Children's Health Care*, 2000, 29, 1-17.
- Hernandez, D. 2006. Young Hispanic Children in the U.S.: A demographic portrait based on Census 2000. Report to the national Task Force on Early Childhood Education for Hispanics. Tempe, Arizona State University.
- Hoff, E., Laursen, B., & Tardiff, T. (2002). Socioeconomic status and parenting. In M.H. Bornstein (Eds.), *Handbook of parenting, Volume II: Ecology & biology of parenting* (pp.161-188). Mahwah, NJ: Lawrence Erlbaum Associates.
- Inkelas, M., Regalado, M., Halfon, N. Strategies for Integrating Developmental Services and Promoting Medical Homes. Building State Early Childhood Comprehensive Systems Series, No. 10. National Center for Infant and Early Childhood Health Policy. July 2005.
- Intergenerational Impacts of Early Childhood Education, Clive Belfield, Dept. of Economics, CUNY, 2004.
- Johnson, R. B., Williams, M. A., Hogue, C.J.R., & Mattison, D. R. (2001). Overview: new perspectives on the stubborn challenges of preterm birth. *Paediatric and Perinatal Epidemiology* 15 (s2), 3-6.
- Johnson, W. & Rimaz, M. Reducing the SCHIP coverage: Saving money or shifting costs. Unpublished paper, 2005.
- Kagan, S. L., & Newton, J. W. Public policy report: For-profit and non-profit child care: Similarities and differences. *Young Children*, 1989, 45, 4-10.
- Kaplan, P. S., (2004) *Adolescence*. Boston, MA.
- Kenney, Genevieve. et al. Snapshots of America's Families, Children's Insurance Coverage and Service Use Improve. Urban Institute, July 31, 2003.
- Lamb, M. E. Nonparental child care: Context, quality, correlates. In W. Damon, I. E. Sigel, & K. A. Renninger (Eds.), *Handbook of Child Psychology* (5th ed.), 1998, pp. 73-134. New York: Wiley & Sons.
- LeCroy & Milligan Associates (2000). Why Hispanic Women fail to seek Prenatal care. Tucson, AZ.
- Lee, V. E., Brooks-Gunn, J., Shnur, E., & Liaw, F. R. Are Head Start effects sustained? A longitudinal follow-up comparison of disadvantaged children attending Head Start, no preschool, and other preschool programs. *Child Development*, 61, 1990, 495-507.
- Lindsey, D. (2004) *The welfare of children*, New York, Oxford University Press.
- Long, Sharon K and John A. Graves. What Happens When Public Coverage is No Longer Available? Kaiser Commission on Medicaid and the Uninsured, January 2006.
- Maccoby, E. E. Parenting and its effects on children: On reading and misreading behavior genetics, 2000, *Annual Review of Psychology*, 51, 1-27.
- Manlove, J., Mariner, C., & Romano, A. (1998). Positive educational outcomes among school-age mothers. Washington DC: Child Trends
- Maisto, A. A., German, M. L. Variables related to progress in a parent-infant training program for high-risk infants. 1979, *Journal of Pediatric Psychology*, 4, 409-419.
- Mathews, T. J., MacDorman, M. F., & Menacker, F. Infant mortality statistics from the 1999 period linked birth/infant death data set. In *National vital statistics report* (Vol. 50), National Center for Health Statistics.
- Mayo Clinic. Premature births, November, 2006
- Miller, C., Knox, V., Gennetian, L. A., Doodoo, M., Hunter, J. A., & Redcross, C. Reforming welfare and rewarding work: Final report on the Minnesota Family Investment Program: Vol. 1: Effects on Adults, 2000, New York: Manpower Demonstration Research Corporation.
- NACCRRRA fact sheet: 2008 Child Care in the State of Arizona. <http://www.naccrrra.org/randd/data/docs/AZ.pdf>
- National Association of Child Care Professionals (NACCP): <http://www.naccp.org>
- National Association for the Education of Young Children (NAEYC): www.naeyc.org
- National Center for Children in Poverty: http://www.nccp.org/profiles/AZ_profile_6.html
- National Center for Education Statistics: <http://nces.ed.gov>
- National Center for Health Statistics, 2007 Trendbook, CDC
- National Education Goals Panel. (1995). Reconsidering children's early developmental and learning: Toward common views and vocabulary. Washington, DC.
- National Research Council and Institute Medicine, From neurons to neighborhoods: The science of early childhood development
- National Research Council. Understanding child abuse and neglect. Washington DC: National Academy Press.
- NICHD Early Child Care Research Network, The relation of child care to cognitive and language development, *Child Development*, 2000, 71, 960-980.
- Osofsky, J. D. The impact of violence on children. *The Future of Children*, 9, 33-49.
- Peisner-Feinberg, E. S., Burchinal, M. R., Clifford, R. M., Culkin, M. L., Howes, C., Kagan, S. L., et al The children of the cost, quality, and outcomes study go to school: Technical report, 2000, University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center.
- Pence, A. R., & Goelman, H. The relationship of regulation, training, and motivation to quality care in family day care. *Child and Youth Care Forum*, 20, 1991, 83-101.
- Preliminary births for 2005: Infant and Maternal Health National Center for Health Statistics.
- National Household Education Survey: 2005 Initial Results from National Survey on Parents and Early Childhood
- National Research Council, Committee on Educational Interventions for Children with Autism, Division of Behavioral and Social Sciences and Education. Educating children with autism. Washington, DC: National Academy Press; 2001.
- National Task Force on Early Childhood Education for Hispanics. New York: Foundation for Child Development.
- New York Times: Pre-Term Births Linked with C-Sections: <http://www.nytimes.com/2008/05/28/> Release Date: March 20, 2008
- NICHD Early Child Care Research Network. The relation of child care to cognitive and language development, 2000, *Child Development*, 71, 960-980.
- Osofsky, J. D. The impact of violence on children. *The Future of children*, 9, 33-49.

- Petridou, E., Kosmidis, H., Haidas, S., Tong, D., Revinthi, K., & Flytzani, V. Survival from childhood leukemia depending on socioeconomic status in Athens. *Oncology*, 51, 1994, 391-395
- Raikes, H. Relationship duration in infant care: Time with a high ability teacher and infant-teacher attachment. 1993, *Early Childhood Research Quarterly*, 8, 309-325.
- Reynolds, A. J. Effects of a preschool plus follow up intervention for children at risk. *Developmental Psychology*, 30, 1994, 787-804.
- Robert Wood Johnson Foundation. Protecting America's Future: A State-By-State Look at SCHIP and Uninsured Kids, August 2007.
- Russell, et al. ASU (2007). 2006 Survey of AHCCCS Providers, S*CCEEDS professional development and training database excerpts: 2007-08.
- Schorr, Lisbeth B. Pathway to Children Ready for School and Succeeding at Third Grade. Project on Effective Interventions at Harvard University, June 2007.
- Sigelman, C. K., & Rider, E. A., Life-span development, 2003, Pacific Grove, CA: Wadsworth.
- Snow, C. W., Barnes, W. S., Chandler, J., Goodman, I. F., & Hemphill, J., Unfulfilled expectations: Home and school influences on literacy. Cambridge, MA: Harvard University Press.
- Southwest Institute SWIfT excerpts, 2008.
- Spring 2008 Guide to Test Interpretation, Arizona's Instrument to Measure Standards Dual Purpose Assessment, CTB McGraw Hill.
- Sroufe, L. A. Emotional development: The organization of emotional life in the early years. Cambridge: Cambridge University Press.
- State Board on School Readiness. *Compensation and Credentials: A Survey of Arizona's Early Education Workforce*, July, 2005
- Stremmel, A., Benson, M., & Powell, D. Communication, satisfaction, and emotional exhaustion among child care center staff: Directors, teachers, and assistant teachers, 1993, *Early Childhood Research Quarterly*, 8, 221-233.
- The Commonwealth Fund State Scorecard on Health System Performance (2007).
- The Foundation for Child Development: Child and Youth Well-being Index: 2008 Special Focus Report: Trends in Infancy/ Early Childhood..
- The Pew Internet and American Life Project: http://www.pewinternet.org/PPF/r/117/report_display.asp
- Tronick, E. Emotions and emotional communication in infants, 1989, *American Psychologist*, 44, 112-119.
- Urban Institute and Kaiser Commission on Medicaid and the Uninsured
- U.S. Census Bureau: Census 2000. www.census.gov
- U.S. Census Bureau: Annual Estimates of the Population for Counties of Arizona: April 1, 2000 to July 1, 2007 (CO-EST2007-01-04).
- U.S. Census Bureau: American Community Survey 2000, 2006, 2007: <http://www.census.gov/acs/www/index.html>
- U.S. Census Bureau: Grandparents living with grandchildren: 2000. Census brief (October, 2003): <http://www.census.gov/prod/2003pubs/c2kbr-31.pdf>
- US Census Bureau, "Income by education and sex"
- U.S. Department of Health and Human Services, Administration for Children and Families: AFCARS Reports: http://www.acf.hhs.gov/programs/cb/stats_research/index.htm#cw
- U.S. Department of Health and Human Services, Child Fatality Report, 2006.
- U. S. Department of Health and Human Services, Health Research and Services: Child Health USA 2003.
- Vagero, D., & Ostberg, V. Mortality among children and young persons in Sweden in relation to childhood socioeconomic group. *Journal of Epidemiology and Community Health*, 43, 1989, 280-284.
- Weiss, K. B., Gergen, P. J., Wagener, D. K., Breathing better or wheezing worse? The changing epidemiology of asthma morbidity and mortality. *Annual Review of Public Health*, 1993, 491-513.
- Web MD. Should you hesitate to vaccinate?: <http://my.webmd.com/content/article/3609.168>.
- Whitebook, M., Howes, C., & Phillips, D. Who cares? Child care teachers and the quality of care in America, 1989, Oakland, CA: Child Care Employee Project.
- Whitebook, M., Sakai, L., Gerber, E., & Howes, C. Then and now: Changes in child care staffing, 1994-2000. Washington DC: Center for Child Care Workforce.
- Wood, M. W. Costs of intervention programs. In C. Garland (Ed.), *Early intervention for children with special needs and their families: Findings and recommendations*. 1981, Westat Series Paper 11, University of Washington.
- Zaslow, M., Calkins, J., Halle, T., Zaff, J., & Margie, N. Background for community-level work on school readiness: A review of definitions, assessments, and investment strategies. Washington DC: Child Trends.
- Zeanah, C. H. *Handbook of infant mental health*, 2000, New York: The Guildford Press.
- www.library.pima.gov/services/bookmobile/
- www.mamaslatte.com/ml_reasonsToBreastfeed.asp
- www.nccp.org/topics/childpoverty.html
- www.thepepper.com/top10_employer.html
- www.zipcodestats.com

Description of Methodologies Employed for Data Collection

The needs and assets assessment commenced on May 1, 2008 and all data were collected by June 30, 2008. For existing data, collection methods included the review of published reports, utilization of available databases, and completion of environmental scans that resulted in asset inventories as well as listings for licensed and accredited childcare settings.

Primary data, otherwise defined as newly collected data that did not previously exist, were collected in the most rapid fashion available given the short time horizon in which to complete the assessment. For the North Pima Region, this rapid needs and assets assessment approach consisted of consultants working with the RPC to conduct key informant interviews to collect information on early care and education centers in the region. To collect information on current child care enrollment, adult to child ratios, and the number of programs serving children with special needs in Head Start and accredited early care and education centers, a comprehensive phone survey was conducted by the consultant in June 2008, with information obtained from 4 of the NAEYC accredited programs in the North Pima region. Existing data on the number of licensed centers within the North Pima region was obtained by the consultants through a review of the ADHS website listing licensed centers for the 2007-2008 period. Relevant data on the current enrollment capacity and actual numbers served within licensed child care centers and licensed child care homes in the North Pima region was obtained by the consultant in June 2008 from published data sets provided by the FTF Arizona early Childhood Development and Health Board for the 2007-2008 period.

Existing data pertaining to the cost of child care by provider type and age of child within the North Pima region was collected and organized by the consultant in June 2008 from published data sets, including the 2006 DES Market Rate Study and the 2008 Childcare in Arizona (NACCRA) data set. To provide further qualitative information at the regional level, the RPC Coordinator conducted in-depth phone interviews with a random sampling of ten licensed child care centers, group homes, and public school programs in June 2008. Information collected included actual monthly costs by type of facility and facility location, adult to child ratios by age, current enrollment, teacher qualifications, length of employment, access to benefits, and valuable feedback regarding the quality, accessibility and affordability of early childhood services within the region. Other key informant interviews included: parent interviews, CPS supervisors, employees at the Marana Health Center, WIC, physicians, pediatric dentists, and higher education facilities such as Pima Community College.

Community asset information was collected jointly by the North Pima RPC Coordinator and Consultant between June-July 2008, through a review of the most recent community resources guides and community asset studies, and cross checking this information with members of the North Pima RPC. The asset list compiled represents diverse sectors of the community, including school districts, community colleges, child care and learning centers, preschools, faith-based organizations, churches, non-profit organizations, Head Start programs, local governmental entities, and relevant early childhood associations and advocacy groups.

As made plain in the state's 2007 *Bright Futures* report, gaps in data capacity infrastructure are more than evident when looking for evidence of how well young children are doing in Arizona with regard to early childhood health and education

efforts. Data were not always available at the regional level of analysis, particularly for the more common social and economic demographic variables that are measured collectively as part of the larger Pima County region overall. In particular, data for children birth through five years were especially difficult to unearth and in many cases indicators are shown that include all children under the age of 18 years, or school age children beginning at age six. One exception to this case is the Head Start data that are reported which do pertain to children under the age of five years. Compounding this problem are additional barriers that limit the sharing of data between communities, organizations, and other entities due to concerns over privacy and other obstacles that impede the dissemination of information.

It is also important to note that even when data are available for this population of children (birth through five years), or even the adult population of caregivers or professionals, there are multiple manners in which data are collected and indicators are measured, depending on agency perspectives, understanding in the field, and the sources from which data are mined. These indicators, approaches, and methods of data collection also change over time, sometimes even yearly, and these inconsistencies can lead to different data representations or interpretations of the numbers presented in this and other reports where data capacity infrastructure efforts are still in their infancy as they are in Arizona and nationally, with regard to young children ages birth through five years.

Given these limitations with Arizona's current data capacity infrastructure, data presented here should be interpreted carefully; yet, also be seen as one step in the right direction towards building this capacity at the local level by conducting regular community assessments on a biennial basis. 🇺🇸





FIRST THINGS FIRST

North Pima Regional Partnership Council

310 S. Williams Blvd, Suite 106
Tucson, Arizona 85711

Contact: (520) 628-6666 • Fax: (520) 747-1029

www.azftf.gov