

2008

NEEDS AND ASSETS REPORT



FIRST THINGS FIRST

Northeast Maricopa

Regional Partnership Council



Northeast Maricopa

Regional Partnership Council

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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.

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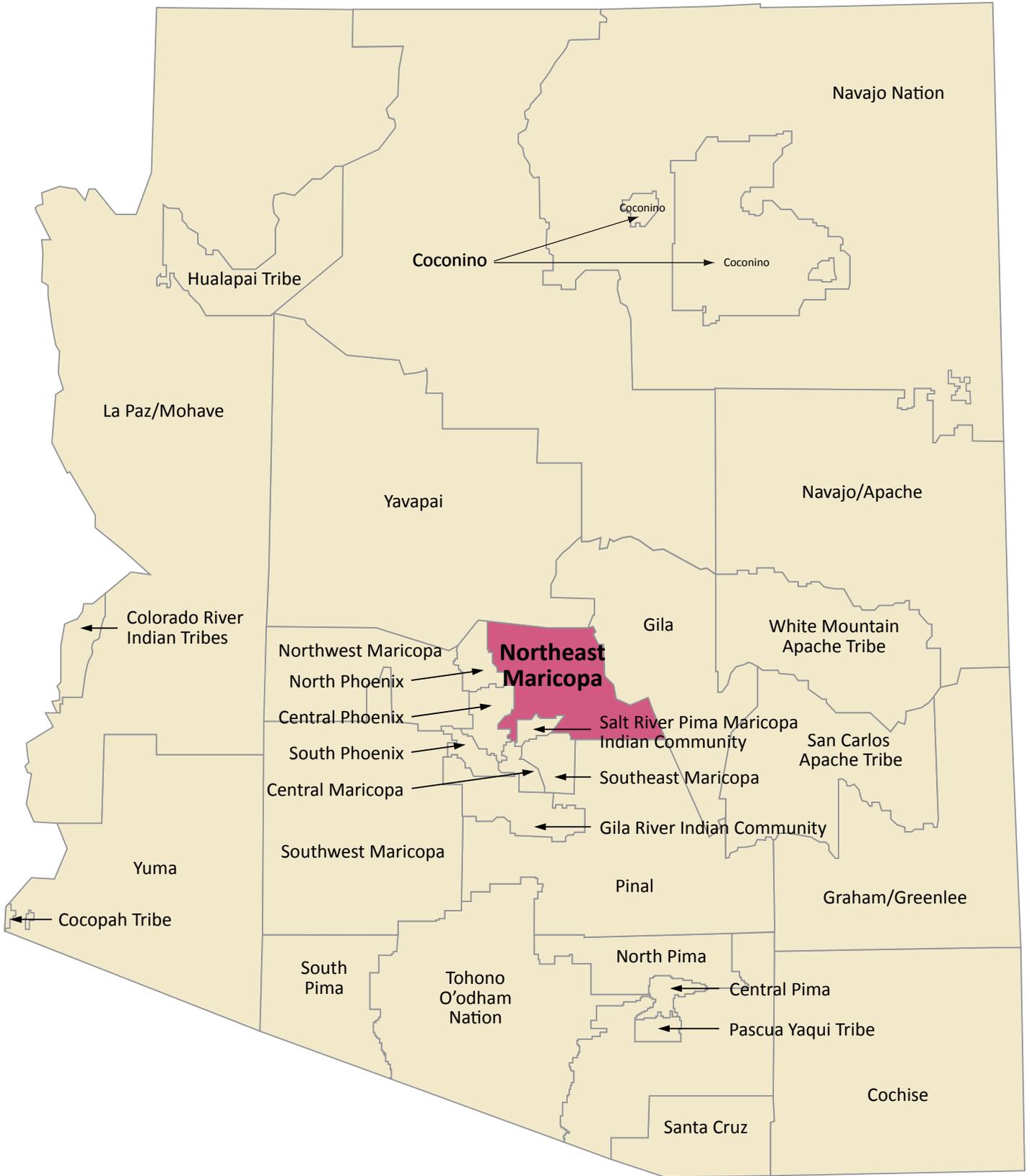


First Things First – A Statewide Overview

The mission of First Things First (FTF) is to increase the quality of, and access to, an Early Childhood System 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. 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, 31 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 First Things First 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 Northeast Maricopa Regional Partnership Council

The First Things First Northeast Maricopa 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, health 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 Northeast Maricopa 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. As a first step, The First Things First report, *Building Bright Futures: A Community Profile*, provides a glimpse of indicators that reflect child well being in the state and begins the process of assessing needs and establishing priorities. The report reviews the status of the programs and services serving children and their families and highlights 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 Northeast Maricopa Regional Partnership Council will undertake strategic planning 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 will align with 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 Northeast Maricopa Region. This report serves as a planning tool for the Regional Council 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 for which the Regional Council may focus its efforts and resources.

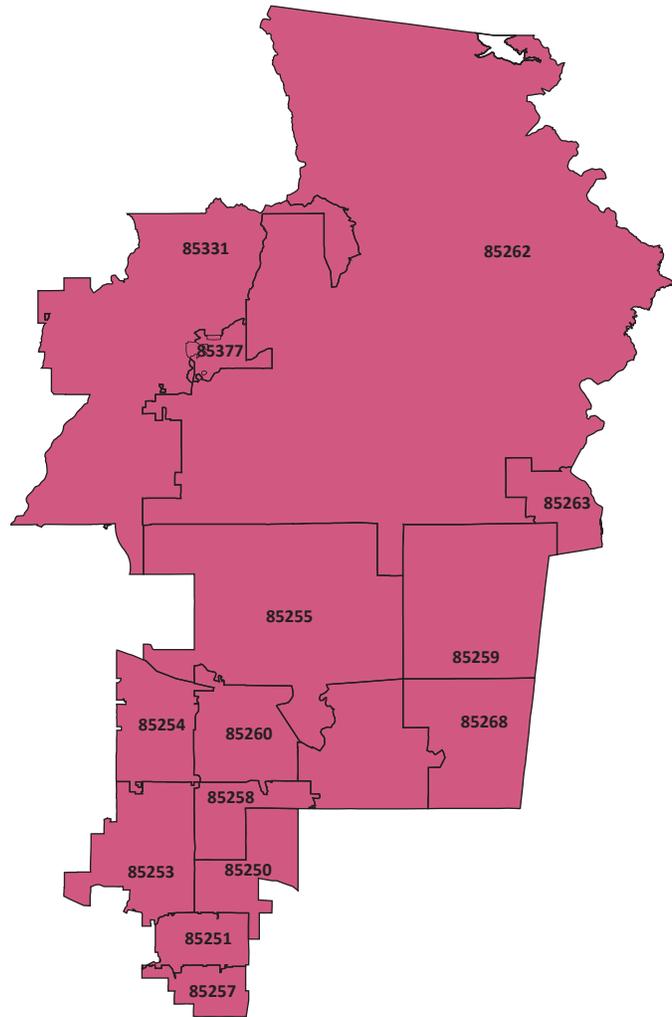
It is important to note the challenges in writing this report. While numerous sources for data exist in the state and region, the information was often difficult to analyze and not all state data could be analyzed at a regional level. Lack of a coordinated data collection system among the various state agencies and early childhood organizations often produced statistical inaccuracies and duplication of numbers.

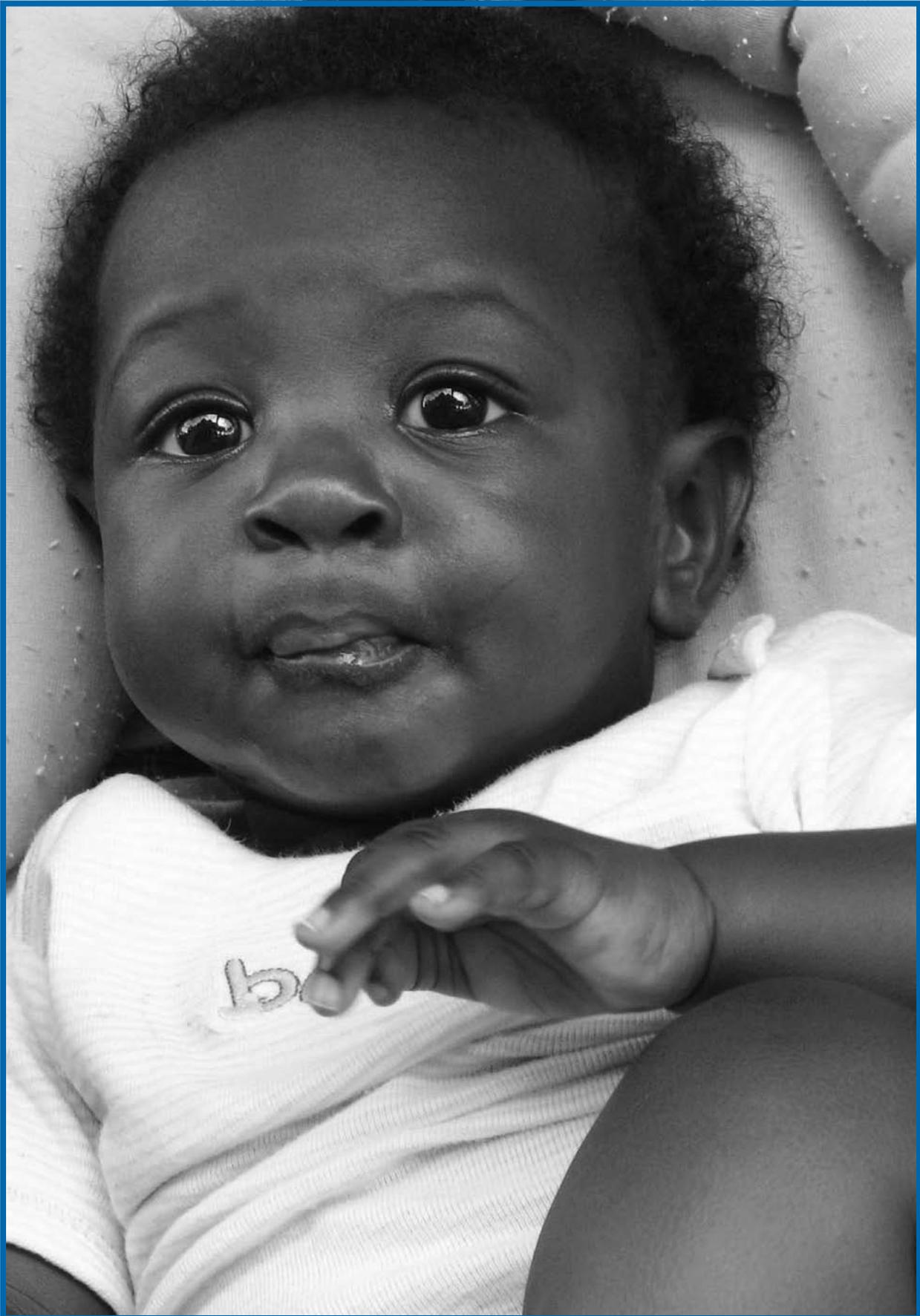


Additionally, many indicators that could effectively assess children’s healthy growth and development are not currently or consistently measured.

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.

During the coming years, the Regional Council will work with the FTF Board to improve data collection at the regional level so that the Regional Council will have reliable and consistent data in order to make good decisions to advance the services and supports available to young children and their families. In the fall of 2008, FTF will conduct a statewide family and community survey that will provide information on parent knowledge related to early childhood development and health and their perspective 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.





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 includes every community through the thirty-one Regional Partnership Councils, in sharing the responsibility as well as the benefits of safe, healthy and productive citizens.

The First Things First Northeast Maricopa 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. Located on the Northeast side of Phoenix and Maricopa County, the Northeast Maricopa Region includes several large communities, as well as smaller towns, and areas of Mountain Preserve Land, tribal lands and recreation areas. The area is over 40 miles from North to South and 30 miles from East to West. Scottsdale is the largest urban area in the region with a population estimate for 2008 approaching a quarter of a million people, ranking it the sixth largest city in Arizona. Paradise Valley and Fountain Hills are also significant population centers, with other smaller communities including Cave Creek, Carefree, and Rio Verde also part of the Northeast Maricopa Region. The Native American Community, Fort McDowell Yavapai Nation, is also located in the region.

With areas of the region known for their upscale tourist business, including renowned hotels, resorts, restaurants and golf courses, the overall economic well-being of Northeast Maricopa is typically well above state averages. The region is heavily dependent on small business with 90 percent of businesses having 11 employees or less. 60 percent of employees in Scottsdale live in other areas of the valley.

The Northeast Maricopa Region has an estimated 22,282 children in 2008 with approximately 1,572 living in poverty. Since 2000, the region has experienced explosive growth especially in the Northern and Eastern areas of the region. Overall growth for the region was 27 percent between 2000 and 2006, but the growth in children birth to five grew 34 percent in the same timeframe. Much of the region has grown at twice the overall rate.

The region has less diversity than the rest of the state with over 90 percent of the population of the region White non-Hispanic. The region does include diverse neighborhoods especially in the South Central Scottsdale area and in Central Cave Creek.

The region also has significantly higher educational levels than the valley as a whole. High school graduation rates as well as AIMS testing results are much higher than the county as a whole, although these results vary across the region.

Unemployment rates are lower than the rest of the county, but rates are trending up due to the economic downturn. In spite of higher median incomes than county, state and national levels, the region has significant differences of income between zip codes. Housing affordability and commute time of more than 30 minutes may provide additional challenges for families.

34 percent of the children in the region live in single parent families which is higher than neighboring communities. 25 percent of households are headed by mothers and 9 percent by fathers. Approximately 25 percent of the births in the region are to single parents with approximately 5 percent of the births to teen mothers. On the

Ft. McDowell Yavapai Nation, 80% of the mothers are single and 20 percent are teen mothers.

Although the region seems to have ample child care and early education programs, affordability and quality seem to be the biggest challenges. The region has only two Head Start programs, both located in South Scottsdale, serving only 64 children. All of the school based programs charge fees for pre-kindergarten classes. Programs for special needs children are the exception. Overall child care rates are higher than in neighboring regions. Approximately 10 percent of early childhood programs in the area are accredited.

Much of the health information reported for the Northeast Maricopa Region is reflective of the County in general as reliable data is typically unavailable at the regional level. However, based on the data that is available and key informant interviews, several key health issues are evident within the region. 35 percent of children ages six through eight have untreated tooth decay and only 28 percent have received the recommended sealants. Dental care for children of special needs seems of special concern with parents reporting that local pediatric dental practices will not treat children with special needs. Other concerns include an increasing trend to use urgent



care as the primary medical care which may be impacting children receiving necessary immunizations, screening and preventative care.

Throughout the region, child care, early education, health and social services are fragmented, with little coordination of services making the system difficult to navigate for both families and service providers. Provision of services has not kept pace with the massive growth of the Northern and Eastern areas of the region, resulting in large areas of the region that have little support for children and families. The one exception seems to be child care facilities which appear to be built based on expectations of future growth in the regions.

Community interviews revealed that the lack of services in the region and lack of coordination of these services are significant issues that need to be addressed. They also revealed the area has a fragmented system of screening for health, mental health and developmental issues and support for the families and care providers for children with special needs. Currently the region lacks any cohesive point of entry or coordination of services that can support parents in obtaining the information and services that they need to insure that children have the best chance of success in school. These interviews indicated special concern regarding lack of services for children birth to three and their families.

The Northeast Maricopa 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 in the area. The 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. While numerous sources for data exist in the state, the information can be difficult to analyze and often is not available at the regional level. Many indicators that could effectively assess children's healthy growth and development are not consistently measured across the state and are not available at the local level. The Northeast Maricopa Regional Partnership Council will focus its efforts and work in partnership with the FTF Board to improve data collection so that regionally specific data is available for the Regional Council to make the right decisions around services and programs for the children of the region.



Regional Child and Family Indicators

Characteristics of the region impact its residents. Demographic information paints the picture of how living in the region compares to life in the state and perhaps the nation. In some cases information is presented for Maricopa County as a whole rather than data specific to the region. While it is easy to assume that the county data would be reflective of the region, in fact the county data may not be reflective of this region. While every attempt was made to collect data for each year at each level of reporting (regional through National), there are some items for which no reliable or comparable data currently exists. As the *Building Bright Futures* report duly noted, the infrastructure for sharing, collecting and accessing early childhood data in Arizona is a gap that the First Things First initiative seeks to address systematically. These biennial community-level assessments are one part of the process that will be used to close this data infrastructure gap over time.

Regional Findings on Child and Family Indicators

The population of children and families in the Northeast Maricopa region differs from much of the rest of Arizona and the nation in that in general they live in an area with higher income/educational levels. While often thought of as a retirement area the number of children birth to five grew at a much greater rate than the general population increasing 34 percent from 2000-2007. Growth estimates since 2000 vary by source of data, but the region has experienced tremendous growth especially in the North Scottsdale, Carefree, Cave Creek and Fountain Hills areas. The City of Scottsdale Human Service five-year plan indicates their two planning zones in the North part of the city grew 120 percent and 92 percent between 2000 and 2007 estimates. The actual census data estimates for the period of 2000-2006 reflect an overall growth rate of 27 percent in the region which is significantly higher the state average of 22 percent. Communities such as Cave Creek and Carefree, however, have grown much faster than the region as a whole. Fueled by thriving tourist and small business industries, the overall region is still growing at a faster rate than the state and nation.

Racially, the population has a higher percent of White, non-Hispanic residents than other areas of Maricopa County and the state with official statistics showing over a 90 percent White non-Hispanic population. The ethnic composition, however, does vary within the region and in zip codes contained within the region. The Ft. McDowell Community which is primarily American Indian has approximately 1000 total population.

With lower unemployment rates and poverty levels, and higher median incomes than the state average, the Northeast Maricopa region is generally identified as a wealthier area, but when you look at information by zip code the median household income varies from \$40,000 in South Scottsdale to over \$150,000 in Paradise Valley. In analyzing data from “Demographics Now” over 17,000 household in the region have median household incomes of less than \$20,000 and over 45,000 have household incomes of less than \$40,000. It is unknown how many of these households have children birth to five. Assumptions that the area is a high income area may not fully address the pockets of poverty and the needs of those families. Of additional concern are families that are making an income well above the poverty line that may still be struggling due to the high housing and child care costs in the area. Educa-

tional attainment in the region is also generally above the state average, both for new mothers and when looking at current graduation rates.

In regard to health and well-being in the Northeast Maricopa region, few babies are born to mothers 19 years old or younger, most mothers have prenatal care in the first trimester, and the rate of low birth weight babies is relatively low in most areas. 2002 data regarding Ft. McDowell Yavapai Nation, however, indicates a significantly higher percent of teen and unwed mothers, at 20 percent and 80 percent respectively. Programs that have been instituted since 2000 by the Ft. McDowell Nation may have changed this picture. Further research is needed to determine the impacts of tribal educational programs on teen and unwed mother birth rates.

Twenty-three percent of births in the Northeast Maricopa Region are paid for by public funds, further suggesting that some families are struggling, particularly with the current economic situation. Access to medical care may also be limited by financial concerns as well as lack of public transportation within the large geographic area of the Northeast Maricopa Region.

Regional Population

From 2000 to 2006, the overall population of the Northeast Maricopa region increased by 27 percent, a rate well above the state average of 22 percent. New construction in North Scottsdale, Fountain Hills, Carefree, and Cave Creek areas are bringing more families into these and other areas of the region.

Population Growth (all ages)

	2000	2006**	% Change
Carefree	2,920	3,799	+30%
Cave Creek	3,685	4,951	+34%
Fountain Hills	20,199	24,669	+22%
Paradise Valley	13,629	14,479	+6%
Scottsdale	202,744	231,127	+14%
Northeast Maricopa*	317,684	403,458	+27%
Arizona	5,020,782	6,116,318	+22%
U.S.	281,421,906	301,621,157	+9%

*Data includes Carefree, Cave Creek, Fountain Hills, Paradise Valley, & Scottsdale. Source: American Community Survey (2000 & 2006)

**Are based on Census Estimates for 2006

With this overall increase in population came significant growth in the number of children ages birth through five, as the total number of children in this age range in the region grew by 34 percent as compared to 26 percent for the state as a whole. If the Northeast Maricopa region's population continues to grow at this pace, there will be significantly more children five years and under in the region in the years ahead.

Population Growth for Children Ages 0-5 Years

	2000	2007	% Change
Northeast Maricopa by zip code	16,685	22,358	+34%
Arizona	381,833	480,491	+26%
U.S.	19,175,798	20,724,125	+8%

Sources: U.S Census (2000) with population estimates applied

Regional Race, Ethnicity and Language

Race and Ethnicity Characteristics

Overall, the racial make-up of Maricopa County is reflective of the state as a whole. According to the U.S. Census data from 2006, Maricopa County's racial make-up included 30 percent Hispanic/Latino, 60 percent White, Non-Hispanic, 5 percent-Black/African American, 2 percent American Indian, and 3 percent Asian American. Northeast Maricopa, however, has a higher White, Non-Hispanic population than the rest of the county. For example, in Scottsdale, 92 percent of the population is White, Non-Hispanic. Ethnic composition varies across the region. For example, in 85251 and 85257 which are both South Scottsdale zip codes, persons of Hispanic/Latino ethnicity made up approximately 14 percent of the population in 2000.¹ The Hispanic population in these zip codes seems to be increasing as a percent of the population, but accurate information will not be available until after the 2010 census data is reported.

Some estimates suggest the population of young children is more diverse than the census data suggests. 2008 AIMs data for 3rd grade children showed 16 percent of children (293 of 1,834 tested) in the Scottsdale Unified School District and 26 percent (633 of 2,393 tested) in the Paradise Valley School District were Hispanic. In the Cave Creek Unified District only 7 percent (30 of 431 tested) were Hispanic.²

In Ft. McDowell, the majority of the population is American Indian, though the population is less than 1,000 people in total.

Race/Ethnic Characteristics

	White Non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
Maricopa County	60%	30%	5%	2%	3%
Scottsdale	92%	7%	1%	1%	2%
Fountain Hills	96%	3%	<1%	<1%	1%
Carefree	98%	3%	<1%	<1%	<1%
Paradise Valley	96%	3%	<1%	<1%	2%
Cave Creek	95%	7%	<1%	<1%	<1%
Ft. McDowell	14%	10%	<1%	81%	<1%
Arizona	59%	29%	4%	5%	2%

US Census Data (2000) – Due to data reporting methods the numbers do not add up to 100%

The following table shows aggregate birth rates by racial/ethnic group for the North-

¹ US Census Data (2000)

² Arizona Department of Education School Report Cards (2008)

east Maricopa region. The largest percentage of births in 2006 occurred among White, Non-Hispanic families (72 percent), followed by births to Latinos (14 percent). The Northeast Maricopa region had 30 percent more births to White, Non-Hispanic mothers than the state rate. There are, however, demographic differences among areas of the region.

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

	White Non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Unknown
Northeast Maricopa*	72% (2,245)	14% (440)	2% (66)	6% (155)	6% (171)	1% (30)
Arizona	42% (43,013)	44% (44,862)	4% (3,864)	6% (6,364)	3% (3,136)	<1% (803)

*This includes the cities of Carefree, Cave Creek, Fort McDowell, Fountain Hills, Paradise Valley, and Scottsdale. Source: ADHS Vital Statistics, 2006.

Immigration Status

According to Kids Count, 30 percent of all children in the state have at least one foreign-born parent. Children of immigrants face difficulties that children of native-born parents do not. Nationally, 40 percent of children in immigrant families live with a mother or father who has not graduated from high school, compared with 12 percent of children with non-immigrant families. Children of immigrants may be less prepared than their counterparts to start kindergarten. Nationally, statistics reveal that three and four year olds children in immigrant families are less likely to participate in nursery school or preschool programs than their peers.

The number of children living in immigrant families in the region is unknown, but likely to be low compared to the rest of the state. Children that are part of an immigrant family are likely to be citizens themselves. Citizenship status allows children to qualify for public benefits such as Arizona Health Care Cost Containment System (AHCCCS) and KidsCare (publicly financed health insurance for low-income children) that are generally off limits to non-citizens. Nonetheless, citizenship status does not guarantee that young children are able to access services. It is believed that many Hispanics do not seek the services they need for themselves or their children for fear of having their status questioned, even if they do have legal living status in the United States. National studies suggest that many eligible citizen children with non-citizen parents are unaware or afraid of the consequences of participating in public programs for which their children are eligible.³

While young children in the Northeast Maricopa Region may be less likely to reside in an immigrant family, those that are part of immigrant families are likely to face barriers, even when children are citizens. Most of the resources for immigrant families are isolated in the Central and South Scottsdale areas of the region. While other areas of the region have a much smaller concentration of immigrant families, community members report pockets especially in the Cave Creek area.

3 Children’s Action Alliance, “Going Beyond the Immigration Hype: Children and our Shared Destiny” Fact Sheet 2006.

Regional Immigration Characteristics (2006)

	US Born Citizens	Foreign Born Naturalized Citizens	Non-US Citizens	Foreign-born
Maricopa County*	(83%) 3,111,817	(5%) 177,801	(13%) 478,505	(17%) 656,306
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)

Phoenix, AZ	Arizona	U.S.
46%	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).

Language Characteristics

Language characteristics, in terms of primary language 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 Maricopa County data shows that 12 percent of families with young children speak primarily Spanish and may be isolated because of this. This percent, however, may be even lower in the Northeast Maricopa Region based on the number of White, Non-Hispanic families in the area.

Language Use Among Individuals Living in Maricopa County

	Percent who speak only English	Percent who speak English Less than "Very Well"
2000	76%	12%
2006	72%	14%

*County level data used, as census tract data for the Northeast Region is not available for 2006. Sources: U.S. Census (2000); American Community Survey (2006).

Data from 2008 third grade AIMS testing reveals that approximately 9 percent of Scottsdale Unified District's students have limited English proficiency. Paradise Valley Unified School District has 12 percent of students with limited English (although some of these students may be in district schools that are included in the North Phoenix Regional Partnership area). Cave Creek and Fountain Hills School Districts each report having less than ten third grade students (who took the AIMS test) with limited English proficiency.⁴

Family Composition

In the Northeast Maricopa Region, the majority of children live in households with two parents. Maricopa County has about the same percentage of single parent families that is reported for state and national averages.

Makeup of Households with Children 0-18 Years of Age for Selected Arizona Cities

City	Married Couple Households	Male Headed Household without Wife	Female Headed Household without Husband
Avondale	64%	2%	34%
Chandler	71%	9%	19%
Gilbert	74%	7%	17%
Glendale	61%	10%	27%
Mesa	70%	8%	22%
Peoria	71%	11%	18%
Phoenix	63%	10%	26%
Scottsdale	68%	9%	22%
Surprise	82%	3%	15%
Tempe	65%	9%	25%
Maricopa	67%	9%	23%
Arizona	65%	9%	24%

Source: American Community Survey (2006)

Since the year 2000, approximately one out of every three family households in Arizona has been headed by a single parent. Estimates indicate that almost a quarter of all families are led by mothers-only, while up to 9 percent of all families are led by fathers-only. In the Northeast Maricopa Region, data on single parent households in 2006 was only available for Scottsdale. Scottsdale reflects the county as a whole regarding single parent families. In fact the number of single parent families in Scottsdale is higher than for the neighboring communities of Mesa, Gilbert and Chandler. While this number of single-parent households might seem high, Arizona is actually right at the national average for this statistic and better than many states where single parent households can approach the 50 percent mark (i.e., Washington, D.C. and Mississippi).⁵ One of the more reliable predictors of a child receiving early education and care services is whether or not the child's mother is both a single parent and needs to work to support the family. Nationally, in 1991, 85 percent of working mothers of four -year olds used early childhood education and care programs, with that figure jumping to 91 percent in 1999.

Teen Parent Households

The Northeast Maricopa region is well below the state teen birth average, with about one out of every twenty children being born to parents aged 19 years or younger in any year since 2002. However, it should be noted that there is a range of teen preg-

⁵ Hernandez, D. (2006). Young Children in the U.S.: a Demographic portrait based on the Census 2000. Report to the national Task Force on Early Childhood Education for Hispanics, Tempe, Arizona State University.

nancy rates in the Northeast Maricopa region, from a low or non-existent rate in the communities of Carefree (0 percent), Fountain Hills (<1 percent), Paradise Valley (2 percent), Scottsdale (5 percent) to a much higher rate in communities such as Fort McDowell (20 percent).⁶

Percentage of Children Born to Teen* Mothers

	2002	2003	2004	2005	2006
Northeast Maricopa**	5%	5%	4%	5%	5%
Arizona	13%	12%	12%	12%	12%
U.S.	11%	10%	10%	10%	10**

*Teen defined as 19 years and under. Sources: American Community Survey, National Center for Health Statistics, ADHS Vital Statistics **Preliminary Data for 2006, 12/5/2006.

**Includes data on Carefree, Cave Creek, Fountain Hills, Ft. McDowell Yavapai Nation, Paradise Valley, and Scottsdale

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.⁷

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 percent of births to teen mothers were the mother's second child.⁸ 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. Dropout prevention studies consistently identify the need for high-quality early childhood education to prevent the high school drop-out problems. The scarcities of quality early care resources for teen parents are thought to be one reason why children of teenage mothers often have poor early childhood outcomes themselves.

In regard to health and well-being in the Northeast Maricopa region, few babies are born to mothers 19 years old or younger, most mothers have prenatal care in the first trimester, and the rate of low birth weight babies is relatively low in most of the region. Ft. McDowell, however, has a significantly higher percent of teen and unwed mothers, at 20 percent and 80 percent respectively. Twenty-three percent of births in the Northeast Maricopa region are paid for by public funds, further suggesting that some families are struggling, particularly with the current economic situation and/or the increasing trend of young parents returning to live with their parents.

Access to medical care may also be limited by financial concerns as well as lack of public transportation within the large geographic area of the Northeast Maricopa region.

6 American Community Survey, National Center for Health Statistics, ADHS Vital Statistics **Preliminary Data for 2006, 12/5/2006

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

8 Ibid.

Grandparent Households

Arizona has approximately 4.1 percent of grandparents residing with one or more grandchildren, which is higher than the 3.6 percent national average. Out of the 1,322,104 households in Maricopa County, there were 77,897 households with grandparents living with their own grandchildren under 18 years. Of those households with grandparents residing with their grandchildren, 34 percent (n=26,403) had grandparents that were totally responsible for these children. The City of Scottsdale Annual Plan reported that grandparents as caregivers in Scottsdale totaled 1,921, of which 1,137 are totally responsible for children under 18 years old making almost 60 percent of those grandparents as primary caregivers. For many grandparent caregivers this responsibility is a long-term commitment.⁹

It is critical to note that grandparent caregivers are more likely to be financially challenged when compared with parent-maintained families. Furthermore, many grandparent caregivers have functional limitations that affect their ability to respond to the needs of grandchildren.¹⁰

Juvenile Justice

The Northeast Maricopa Regional Partnership Council has identified a special interest in learning more about juvenile justice cases as it relates to family risk factors. Data suggests this is an increasing concern in the area, as the rate of referrals to the Scottsdale Juvenile Diversion Program increased overall by 16 percent or 77 cases between FY 2005/06 and FY 2006/07. The biggest increase was in the Shoplifting category at 50 percent. The second biggest increase was in the Alcohol category at 39 percent. An increase in curfew, truancy, disorderly conduct, traffic, and littering were also noted.

When looking at the Juvenile Justice statistics by zip code, the majority of juvenile crimes committed were by non-Hispanic Whites. Less than 18 percent of the total crimes were committed in the two zip codes of 85250 and 85251 that are traditionally identified with higher poverty levels. This might suggest that children across the region need strong support systems in early childhood to prevent juvenile justice issues as they grow older.

⁹ Ibid.

¹⁰ Grandparents Living with Grandchildren, 2000, census brief.

Juvenile Justice Petitions by Zip Code – Calendar Year

Zip	2005	2006	2007	2008 Through August 31	Total	Total *Population
85250	25	20	24	8	77	16,500
85251	48	57	64	37	206	35,700
85253	17	12	8	4	41	18,400
85254	73	72	86	66	297	49,800
85255	23	27	20	18	88	27,400
85256	18	24	35	17	94	4,900
85257	59	66	67	46	238	30,500
85258	18	17	15	9	59	25,000
85259	13	17	23	28	81	20,000
85260	38	21	36	19	114	35,700
85262	8	11	15	6	40	11,200
85264	9	5	6	3	23	900
85266		1	2		3	
85268	27	25	41	20	113	20,400
85331	18	41	42	31	132	22,400
85377	3	2			5	2,000
Total	397	418	484	312	1,611	322,400

* Census estimate data was provided by the Juvenile Justice System and may differ from other census data in this report.

Petition Results					
Petition Results	2005	2006	2007	2008 Through August 31	Total
Adjudicated	9	13	9	1	32
Admit	260	286	302	135	983
Dismiss	105	95	121	50	371
Other	22	23	52	126	223
Remand	1	1			2
Total	397	418	484	312	1611
Petition Severity					
Petition Severity	2005	2006	2007	2008 Through August 31	Total
Violent	23	32	31	20	106
Felony Property	86	72	76	50	284
Obstruction	2	3	3	3	11
Fighting	44	30	34	30	138
Drugs	70	79	96	50	295
Public Peace	123	161	177	96	557
Misdemeanor Property	49	41	67	63	220
Total	397	418	484	312	1611

Petition by Age of Juvenile					
Age	2005	2006	2007	2008 Through August 31	Total
10	1	2	4		7
11	3	3	3	1	10
12	8	8	7	6	29
13	16	14	20	12	62
14	45	28	32	23	128
15	61	56	55	40	212
16	111	105	111	75	402
17	95	139	172	102	508
18	57	63	80	53	253
Total	397	418	484	312	1,611

Ethnicity						
Race	2005	2006	2007	2008 Through August 31	Total	% of Total
Unknown	23	20	25	3	71	4.4%
African American	18	18	23	38	97	6.0%
Anglo	316	338	365	226	1,245	77.3%
Asian		1	3	4	8	.50%
Hispanic	38	38	47	20	143	8.9%
Native American	2	3	21	21	47	2.9%
Total	397	418	484	312	1,611	

Further data collection in the other Northeast Maricopa Region communities is needed to offer a full picture of this area of concern.

Employment, Income and Poverty

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 3.6 percent in May of 2007. For the most recent twelve month reporting period, unemployment in Arizona has mirrored the national trend where an economic downturn has led to higher jobless rates. Data is presented in monthly increments because economic indicators such as joblessness are measured over much smaller periods of time than are more static social indicators (i.e., gender, ethnicity, etc.). In growth-prone areas of Arizona such as Phoenix, unemployment rates have been slower to creep up toward the state and national averages.

Unemployment in the Northeast Maricopa region is generally lower than the rest of the county, state and nation, but just like the rest of the state the unemployment rates are trending up for all of the cities in the region. At 3.4 percent, the Maricopa County unemployment rate is nearly a percentage point below the state average and two percentage points below the national average. More study is needed to determine the impacts of the upswing in unemployment on the pockets of lower income families in the area. While the unemployment rates are lower than the county average, the high concentration of small business and tourist related industry may impact those rates significantly if the economic downturn continues. Community interviews revealed concerns about previously high income families that are losing their

jobs and homes due to the economic downturn. The impact of the current national investment and financial crisis on the region cannot be evaluated, but may have a significant impact on families in the area that work in the financial sector or depend heavily on investment income to meet their daily expenses. Many of the families in the region seem to have over-extended themselves financially and even a short period of unemployment can result in loss of homes.

Average Unemployment Rates

	May 2007	April 2008	May 2008
Scottsdale	2.0%	2.3%	2.5%
Paradise Valley	1.2%	1.4%	1.6%
Fountain Hills	1.3%	1.5%	1.7%
Cave Creek	1.2%	1.4%	1.5%
Carefree	0.9%	1.1%	1.2%
Maricopa County	2.7%	3.1%	3.4%
Arizona	3.6%	3.9%	4.4%
U.S.	4.5%	5.0%	5.5%

Source: Arizona Dept. of Commerce, Research Administration (June, 2008)

Annual Income

The Northeast Maricopa region has significant variations in median income, though overall it is well above the county and state averages on this indicator when compared by city. Zip code data show pockets of lower income areas. While current data is not available for all cities in the region, data from the 2000 Census shows that Paradise Valley has a significantly higher income level, at \$150,228 a year, while Cave Creek and Scottsdale are just under \$60,000 a year. The only information on Ft. McDowell is zip code information which shows a median household income of just over \$47,000 in 2000.

Within the population centers there are variations in median income. For example, according to the City of Scottsdale Human Services Plan, in Zone A, which includes South and Central Scottsdale, almost half the population has incomes less than \$50,000. Interviews with community leaders indicate that the current economic downturn and rising costs are having significant affects on families across economic lines.

Northeast Maricopa Median Income By Zip Code (2000)*

Community	Median Household Income
Scottsdale	\$57,484
Town of Paradise Valley	\$150,228
Fountain Hills	\$61,619
Cave Creek	\$59,938
Care Free	\$88,702
Rio Verde	\$86,248
Ft. McDowell **	\$47,222
Maricopa County	\$45,358

Source: US Census Bureau

*Data only available from 2000 Census for select Northeast Maricopa Cities

** Ft. McDowell data taken from the 2000 Census by zip code

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. In Maricopa County for the same year, the average was \$52,521 per year.

Median¹¹ Annual Income (per year- pretax)

	2002	2003	2004	2005	2006
Maricopa County	\$45,776	\$44,901	\$46,111	\$48,711	\$52,521
Arizona	\$41,172	\$40,762	\$41,995	\$44,282	\$47,265
U.S.	\$43,057	\$43,564	\$44,694	\$46,242	\$48,451

*Data includes all of Maricopa County Source: American Community Survey

Families in Poverty

For a family of four, the Federal Poverty level is \$21,200 a year (for the 48 contiguous states and D.C.).¹² In Maricopa County, 9 percent of families were living at or below federal poverty guidelines in 2006. The percent of families in the Northeast Maricopa Region appears to be even lower, with only 4% living at or below poverty guidelines in Scottsdale, for example. It is also of note that 50 percent of families living in poverty are single parent households with children under 18 years of age. When looking at Demographics Now data by zip code, the two South Scottsdale zip codes have poverty levels for median household income of over 15 percent. Further study is needed regarding the status of families with children birth to five especially in the identified higher poverty pockets in the region.

Families Living in Poverty (2006)

City	Percentage of families below 100% federal poverty level
Chandler	5%
Gilbert	3%
Glendale	12%
Mesa	8%
Phoenix	13%
Scottsdale	4%
Tempe	8%
Tucson	13%
Yuma	14%
Arizona	10%
Maricopa	9%

Source: American Community Survey (2006)

Furthermore, 39 percent of children in Maricopa County live at or below 200 percent of the federal poverty level. Again, this number is likely lower in the Northeast Maricopa Region. In Scottsdale, 21 percent of children are living at or below 200 percent of the poverty level.

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

Children* Living at or Below Federal Poverty Level (2006)

	Percent of children living at or below 200 percent of the Federal Poverty Level
Scottsdale	21%
Maricopa County	39%
Arizona	42%
US	36%

*Children defined as less than 18 years. **2006 Data was available for Scottsdale only. ***Includes all of Maricopa County. Source: American Community Survey (2006)

Data from the Arizona Department of Education School District Score Card shows 24 percent of Scottsdale Unified third graders that took the AIMS test in 2008 were considered Economically Disadvantaged. The percent of students economically disadvantaged in Paradise Valley Unified was 33 percent, in Fountain Hills 11 percent, and in Cave Creek 3.4 percent.

The chart below shows the numbers of food stamp and Children WIC (Women, Infant, Children) recipients for the major cities in the Northeast Maricopa region. Although current data is not available, it shows 5,612 families received food stamps; 1,311 children and 630 mothers participated in the WIC foods program in 2003.

Welfare Benefits—Northeast Maricopa Region

Benefits For Region	Scottsdale	Paradise Valley	Fountain Hills	Cave Creek	Carefree	Maricopa County	Arizona	National
Food Stamps	5,224	NA	208	175	5	246,166	504,400	7,286,735
Children WIC Recipients	1,211	2	44	51	3	93,699	158,270	5,773,612
Women WIC Recipients	582	0	20	26	2	40,770	69,124	1,857,396

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

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 chart below shows the number of food stamp recipients in Maricopa County in July of 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	6,661	14.4%
Arizona	554,389	8.7%

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

Seven percent of the population in Maricopa County received food stamps in 2007, a rate slightly lower than the state average. While a large number of individuals participate in the food stamps program in Maricopa County, specific data is not available on zip code areas of Northeast Maricopa County in comparison to census data.

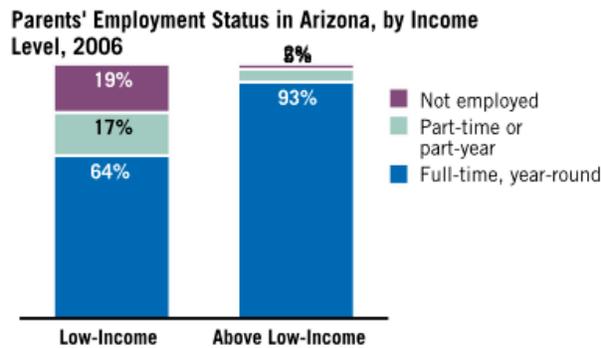
Opportunities also appear to exist for many more infants, children, and women to receive WIC nutritional services. In 2007, 34,493 children received WIC services in Maricopa County. In 2009, 159,676 children will be potentially eligible. The chart below demonstrates that trend.

WIC Participation by County, 2007

County	Number Enrolled, 2007			Potential Eligible, FY 2009		
	Infants	Children	Women	Infants	Children	Women
Maricopa	19,283	34,493	35,046	39,920	159,679	49,899

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.

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.



© National Center for Children in Poverty (nccp.org)
Arizona Demographic Profiles

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. With a high school diploma that income expectation rises to more than \$26,000 per year. In 2004 women with a bachelor's degree reported an average income of \$41,000 per year.¹³

Additional indicators addressed under this priority:

Housing Affordability

Many people that are employed in the Northeast Maricopa region cannot afford housing and therefore commute to work from outlying areas. Many of the jobs in the region are entry level retail, government, medical, and services jobs which do not enable families to afford housing that is available nearby. This may play a particularly large role in single parent households. In order to afford housing in the region often two parents need to be working full-time or have considerable savings for a down-payment on a home. Most of the people with necessary savings are older families with grown children or those that have considerable equity in their homes. The Links Study "the Scottsdale Housing Ladder: A Reality Check on the State of Workforce Options, Fall 2007" states the average worker in Cave Creek, Carefree, Scottsdale and Fountain Hills earns on the average 19-32 percent of the income needed to purchase the median price house depending on area of the city. The affordability factor is even more of an issue for Paradise Valley with the median household income only providing 10 to 18 percent of the necessary income to purchase a house.¹⁴ Effects of the housing downturn and foreclosures on the area needs further study.

Parent Education Attainment

Studies have found consistent positive effects of specific parenting education on varying aspects of child rearing, such as parenting approaches, attitudes, and child-rearing philosophy. Parent education can potentially impact child outcomes by providing an enhanced home environment that reinforces cognitive stimulation and

¹³ US Census Bureau, *Income by education and sex*.

¹⁴ The Scottsdale Housing Ladder: A Reality Check on the Stat of Workforce Options, Fall 2007 published by LINKS – Leader s in Non-Partisan Knowledge-Based Solutions. 2007.t.

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 percent of a child's future earnings may be linked (through their own educational achievement) to whether or not their parents or primary caregivers have completed high school and higher education.

Approximately 22 percent of births nationally are to mothers who do not possess a high school degree. While data for the Northeast Maricopa region is not available, in Maricopa County that percent is much higher than the national average. According to data reported from 2002 to 2006, almost 30 percent of mothers who gave birth in Maricopa County had less than a high school diploma, almost 10 percent higher than the state average 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. Maricopa County is near the state average for percent of mothers with some college experience. The Northeast Maricopa Region has much higher rates of high school graduation with over 94 percent of adults having a high school diploma compared to 82.5 percent for the county as a whole. Although mother's educational level was not available specific to the region, these rates may be significantly higher than the county as a whole.

Percentage of Live Births By Educational Attainment of Mother

		2002	2003	2004	2005	2006
Maricopa County	No H.S. Degree	30%	31%	31%	30%	30%
	H.S. Degree	27%	26%	29%	27%	28%
	1-4 yrs. College	33%	33%	33%	34%	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%

Arizona Dept. of Health Services, Vital Statistics, American Community Survey Numbers do not add to 100% since any education beyond 17 years and unknowns were excluded.

Healthy Births

Prenatal Care

Adequate prenatal care is vital in ensuring the best pregnancy outcome. A healthy pregnancy leading to a healthy birth sets the stage for a healthy infancy during which time a baby develops physically, mentally, and emotionally into a curious and energetic child. Yet in many communities, prenatal care is far below what it could be to

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.

ensure this healthy beginning. Some barriers to prenatal care in communities and neighborhoods include the large number of pregnant adolescents, the high number of non-English speaking residents, and the prevalence of inadequate literacy skills.¹⁶ In addition, cultural ideas about health care practices may be contradictory and difficult to overcome, so that even when health care is available, pregnant women may not understand the need for early and regular prenatal care.¹⁷

- 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.

Just over 1 percent of women in the Northeast Maricopa region are reported as receiving *no* prenatal care, but overall, pregnant women across Arizona often fail to receive *early* prenatal care. According to national statistics 83 percent of pregnant women receive prenatal care in their first trimester, compared to 77 percent in Arizona¹⁸. Approximately 88 percent of mothers in Northeast Maricopa received prenatal care in the first trimester in 2006. The rate is lower in the smaller community of Ft. McDowell with only 65 percent of mothers receiving first trimester care. Rio Verde is a retirement community. The three births in the Rio Verde community are likely to be grandchildren of the residents or older parents as the community requires residents to be over 55 years of age.

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.¹⁹ Any effort to increase prenatal care should consider these large ethnic differences. There are many barriers to early prenatal care, including: lack of general health care, transportation, poverty, teenage motherhood, fear, stress, and domestic violence.²⁰

16 Ashford, J., LeCroy, C. W., & Lortie, K. (2006). *Human Behavior in the Social Environment*. Belmont, CA: Thompson Brooks/Cole.

17 LeCroy & Milligan Associates (2000). *Why Hispanic Women fail to seek Prenatal care*. Tucson, AZ.

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

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

20 <http://www.cdc.gov/reproductivehealth/products&pubs/dataaction/pdf/rhow8.pdf>

Selected Characteristics of Newborns and Mothers, Northeast Maricopa (2006)

Community	Total	Teen Mother (<=19yr)	Prenatal Care 1 st Trimester	No Prenatal Care	Public \$	Low birth weight <2500 grams	Unwed Mothers
Scottsdale	2,552	149 (6%)	2,210 (87%)	36 (1.5%)	659 (26%)	193 (8%)	648 (25%)
Paradise Valley	93	2 (2%)	91 (98%)	0 (0%)	3 (3%)	10 (11%)	5 (5%)
Fountain Hills	137	1 (1%)	125 (91%)	1 (<1%)	16 (12%)	15 (11%)	23 (17%)
Cave Creek	320	8 (2.5%)	305 (95%)	0 (0%)	40 (13%)	18 (6%)	33 (10%)
Carefree	9	0 (0%)	9 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Ft. McDowell	20	4 (20%)	13 (65%)	1 (5%)	8 (40%)	0 (0%)	16 (80%)
Rio Verde	3	0 (0%)	2 (67%)	0 (0%)	1 (33%)	0 (0%)	1 (33%)
TOTAL	3,134	164 (5%)	2,755 (88%)	38 (1%)	727 (23%)	236 (8%)	726 (23%)

* 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 three lbs, four oz.) are leading causes of infant health problems and death. Many factors contribute to low birth weight, the most prominent being drug or alcohol use during pregnancy, smoking during pregnancy, poor health and nutrition, and multiple births. The Northeast Maricopa Region has low birth weight rates that range from about 0 percent (Carefree, Ft. McDowell, and Rio Verde) to 11 percent (Paradise Valley and Fountain Hills) depending on the city. Overall, 236 low birth weight babies (8 percent) were born in the Northeast Maricopa region in 2006.

Tobacco Use during Pregnancy in 2006:

Women who smoke during pregnancy are at a greater risk of premature births, low birth-weight babies, stillbirths, infant mortality and other complications. Data shows that mothers ages 17-19 are more likely to use tobacco before and during pregnancy.

Arizona has a lower than average incidence of pregnant women who smoke cigarettes. 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. Specific data is not available on the region regarding tobacco use among pregnant women.

Pre-Term Births

Pre-term births, which are defined as births 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.²¹ In the chart above, low birth-weight is presented. Low birth weight can be considered as a proxy for pre-term births, because these indicators are closely linked. 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. Some studies point to advances in neonatal care capabilities, as well as a higher incidence of cesarean sections that are not medically necessary, as contributing to these rates.

In the Northeast Maricopa region in 2003, 395 pre-term (<37 Weeks) were born in the region representing 11.4 percent of all babies born during that time frame. There is, however, some variation in these rates across communities in the region. Of interest, both Fountain Hills and Paradise Valley had a rate of 14% which is higher than the rest of the region. Further research is needed to determine if this is a single year occurrence or a continuing pattern. These areas also had the highest rates of low birth-weight babies

Births to Teen Mothers

About 10 percent of American teen girls between the ages of 15 and 19 become pregnant each year. It is a startling fact that one in five 14-year-old girls become pregnant before reaching the age of 18.²² 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.²³ 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.²⁴ In spite of a declining teen birth rate, teenage parenthood is a significant social issue in this country. Teen parents face significant obstacles in their ability to rear healthy children. Teen parents are generally unprepared for the financial responsibilities and the emotional and psychological challenges of rearing children.

According to data from 2006, the number of mothers ages 19 years or younger is relatively low across Northeast Maricopa County. There is more variation in the percent of mothers who are unwed, with roughly a quarter of new mothers unwed across the region. The percent of teen mothers and unwed mothers is particularly high in Ft. McDowell, at 20 percent and 80 percent respectively as reflected in 2003 data. Further research is needed to see if Ft. McDowell's emphasis on education and family support is decreasing teen pregnancies and unwed parents.

21 Johnson, R. B., Williams, M. A., Hogue, C.J.R., & Mattison, D. R. Overview: New perspectives on the stubborn challenge of preterm birth, *Pediatric and Perinatal Epidemiology*, Vol 15.,2001.

22 Center for Disease Control, fact sheet, 2001.

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

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

Public Funds

Over 23 percent of the births in the Northeast Maricopa Region are paid for by public funds, suggesting that the overall median income of the region may not truly reflect the economic status of some young parents in the region. Community interviews indicate a developing trend in the region of young parents returning to live with their own parents due to the high cost of living. And it is believed this trend may be increasing due to the nationwide economic downturn.²⁵

Mothers' Mental Health:

The impact of post partum depression is a concern for health and development of a baby. Hormonal fluctuations seem to impact depression. Pregnancy and delivery produce major changes in the levels of estrogen and progesterone. Serious, stressful life events also impact the development of depression. Poverty is linked to depression. Unfortunately, there is currently no way to assess mothers' mental health status throughout the region. Another area for additional research is the prevalence of drug abuse in the area. Community interviews indicate concerns about the number of higher income mothers that are reportedly using drugs such of Methadone to lose weight.

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 when needed. Research shows that children receiving health care insurance²⁶:

- 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.

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

From 2001 to 2005, Arizona had a higher percentage of children without health

²⁵ Included in RPC coordinator response to FTF model draft of needs/assets report.

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.

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.

insurance coverage compared to the nation. 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' employers. In Arizona, 48 percent of children (ages birth through eighteen) receive employer-based coverage, compared to 56 percent of children nationally.²⁹

Data on the number of uninsured children birth through five in the Northeast Maricopa Region was not available. However, a 2007 report entitled *Health Insurance in Arizona: Residents of Maricopa County* provides estimates of the number of uninsured children living in each zip code area in Maricopa County. The estimates are based on health records contained in a community health data system, known as Arizona Health Query (AZHQ). The data system contains health records for 1.4 million people in Maricopa County, representing 40 percent of county residents. Health records for children are even more complete in the AZHQ database, representing 72 percent of the county's children, ages birth to nine.

In the chart below, the number of children without health insurance is estimated by zip code for 2004. Estimates are based on an estimated rate of uninsured children (Taken from the AZHQ data) in each zip code area applied to US Census population projections. The report estimates that almost 3,000 children birth to nine are uninsured in the region. It is highly likely that the true number of children in the region that are uninsured is much higher since most of undocumented immigrants and children born to undocumented parents are not fully represented in this estimate. While the overall percentage of uninsured children appears to be lower than the state as a whole, it appears that the South Scottsdale zip codes 85251 and 85264 (Ft. McDowell) have uninsured rates that are significantly higher than the rest of the region.

Uninsured Children (Ages 0-9) by Selected Zip Codes in the Northeast Maricopa Region, 2004

Zip Code	Children's Uninsured Rate	Estimated Number of Uninsured Children
85250	5.2%	166
85251	9.0%	673
85253	5.9%	276
85254	NA	NA
85255	4.3%	214
85259	4.8%	406
85260	5.6%	536
85262	4.1%	52
85263	0%	0
85264	10.1%	49
85266	New zip code	
85268	4.9%	220
85331	4.6%	336

Source: Arizona Health Query, as reported in Johnson, Dr. William G., et al. *Health Insurance in Arizona: Residents of Maricopa County*. Ira A. Fulton School of Computing and Informatics, Arizona State University, 2007. Note: Counts for smaller enclosed zip codes were added to the counts for larger enclosing zip codes. Data were reported where total AZHQ was ≥ 500 .

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.

Percent 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.

The chart below shows children enrolled in AHCCCS or KidsCare – Arizona’s publicly funded low cost health insurance programs for children in low income families. As the chart shows, 66,791 children (ages birth through five) were enrolled in AHCCCS or KidsCare in Maricopa 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
Maricopa County	54,083	63,590	59,097	59,850	3,996	4,963	6,016	6,941	58,079	68,553	65,113	66,791
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.

While many children do receive public health coverage, many others who likely qualify, do not. 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.³⁰ Indeed, the large percent of families who fall below 200 percent of the Federal Poverty Level in the region suggest that many children are likely to qualify for public coverage. National studies suggest that these same children are unlikely to live in families who have access to employer-based coverage.³¹

Access to Medical Care

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.

The Northeast Maricopa Region has a large number of pediatric and family care physicians, but few clinics providing care to the low income uninsured population. For the Northeast Maricopa Region, geographic proximity may potentially play a large role. Given the distances between urban areas and lack of public transportation, families living outside of Scottsdale may have difficulties accessing services.

30 Genevieve Kenney, et al, “Snapshots of America’s Families, Children’s Insurance Coverage and Service Use Improve,” Urban Institute, July 31, 2003.

31 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.

Community interviews revealed a concern that due to parents' work schedules and the resulting difficulty in scheduling appointments, there is an increased use of urgent care as the primary medical care. Concerns were expressed that the lack of a medical home has resulted in children not receiving the well care that they need and delays in identifying issues.

The linguistic and cultural accessibility of services is also a concern statewide. For example, 37 percent of 788 AHCCCS providers surveyed in 2005 (representing 98 percent of all AHCCCS providers) had no means of understanding their monolingual Spanish-speaking patients unless the patient's family member could translate for their relative and the medical provider.³² Similarly, a 2007 Commonwealth Fund study found low rates of patient satisfaction among Arizonans, who cited lack of cultural competency as one contributing factor.³³

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 2003.³⁴

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 Maricopa County, 78 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 the year in 2007.

Percent of Children (ages 12-months – 5 years) Continuously Enrolled in AHCCCS Receiving One or More Visits to a Primary Care Practitioner

	Maricopa County*	Arizona
2005	77%	78%
2006	78%	78%
2007	78%	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

Oral Health Access and Utilization

Access to dental care is limited for young children in both the state and the region. However, as the chart below shows, Northeast Maricopa is often below the state average for percent of children (ages six to eight) with untreated tooth decay and tooth decay experience. Scottsdale is close to the state average across oral health indicators.

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

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

Oral Health—Northeast Maricopa—Children 6-8 Years Old

North East Maricopa Communities* (2003)	Untreated tooth decay	Tooth decay experience	Urgent Treatment needs	Sealants present
Cave Creek	13%	33%	3%	29%
Fountain Hills	23%	48%	5%	26%
Scottsdale	35%	61%	11%	23%
Arizona	40%	62%	9%	28%

*Includes all cities in the region for which oral health data was available. Data obtained from a survey of children kindergarten to 3rd grade. Source: Arizona Department of Health Services, Community Health Profile 2003.

Enrollment in Head Start helps ensure access to medical and dental care. The region has only two Head Start programs. Well child and oral health needs of the areas' low income children may be greater than the county in general which has greater access to Head Start programs.

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 Health Provider Survey report recommended more training for providers to work with Special Needs Plans (SNP) and collaborating with American Disabilities Act (ADA) and Arizona Department of Health Services (ADHS) to increase the number of providers who accept young children.

Low Income Access to Care

The Northeast Maricopa region has two clinics providing care to low income children in the region. The Northern and Eastern portions of the region are over 30 miles from the nearest clinic providing uncompensated or low cost care for low income children. While the two clinics are located in the South Scottsdale area of the region that has been identified as having the highest percentage of low income children, services may be unavailable for many of the region's children. Clinic operators report that there is a great demand to serve children of the working poor at or near 200 percent of the federal poverty level. One of the clinics reported that due to their funding guidelines they could not serve the population above the 200 percent level. They report that the high cost of living in the area, especially housing and child care costs, prevent many uninsured children that do not qualify for State insurance programs from receiving the care that they need.³⁵

³⁵ Included in RPC coordinator response to FTF model draft needs/assets report.

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 the Northeast Maricopa region.

Child Abuse and Neglect

Child abuse and neglect can result in both short-term and long-term negative outcomes. A wide variety of difficulties have been documented for victims of abuse and neglect, including mental health difficulties 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 physical complaints.³⁶

While data demonstrates that child abuse and neglect exists within the region, it is important to note that a child abuse report is not an indicator of risk and does not necessarily correlate to the removal of a child. There are many cases where the specific allegations in the report cannot be proven.

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. 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.

Child abuse and neglect are strongly linked with negative outcomes for children including being placed at greater risk for poor school performance, frequent grade retention, juvenile delinquency and teenage pregnancy.

The chart below provides a history of child abuse reports received and the outcome for Maricopa County. The number of child abuse and neglect reports for Maricopa County declined between the April 2005-March 2006 time period and April 2006-March 2007 time period, at 20,595 and 19,195 respectively. Initial data suggests a slight increase for the following year.

³⁶ 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 Maricopa 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	11,877	11,303	10,823	10,576	10,019	9,622	9,573	10,284
Number of reports Substantiated	NA	NA	NA	NA	536	573	641	448
Substantiation rate	NA	NA	NA	NA	5%	6%	7%	4%
Number of new removals	1,847	1,947	1,888	2,080	1,954	2,013	2,013	1,988

*All data taken from Arizona Department of Economic Security Child Welfare Reports. Discrete data for “number of reports substantiated” not available in reports 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. Over half (57 percent) of the reports received were in Maricopa County. Of those reports made in Maricopa County, 6,098 were reports of neglect, followed by 3,424 reports of physical abuse, 645 reports of sexual abuse, and 117 reports of emotional abuse. Of the total reports, between 4-7 percent resulted in substantiation of the report.

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
Maricopa	117	6,098	3,424	645	10,284	57.0%
Arizona	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.

Most child welfare experts believe the actual incidence of child abuse and neglect is almost three times greater than the cases reported. Further, experience suggests that many child abuse reports are unsubstantiated due to limitations faced by the child welfare system, such as: a lack of resources to investigate all cases thoroughly; lack of training for Child Protective Services staff, where employee turnover rates remain high; and the strained capacity of the foster care system.

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

- **Birth to one year** 24 incidents for every 1,000 children
- **one – three years** 14 incidents for every 1,000 children
- **four – seven years** 14 incidents for every 1,000 children
- **eight – eleven years** 11 incidents for every 1,000 children

According to overall child well-being indicators, in 2005 Arizona ranked 36th out of the 50 states, 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.

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 Maricopa County there were 4,454 child placements in 2004 and that number increased to almost 5,000 in 2005 (See chart below). The majority of children in out-of-home care across the state of Arizona are either White (42 percent) or Hispanic (35 percent), followed by African American (13 percent).

Problems with the foster care system have led to efforts at reform. Efforts have included new methods for keeping children safe in their own homes, provision of kinship care, and family foster care.³⁷ 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.

Child Placements in Foster Care

The region has relatively few children removed from their homes and placed in foster care and most can be placed in foster care homes in the region. 85264 which is Ft. McDowell has a higher level of removals than the rest of the region with six and a population of less than 1,000.

Availability of Foster Home Placements as Related to Child Removals in the Northeast Maricopa Region (2007)

ZIP Code	Number of Removals	Number of Foster Homes	Number of Removals (excluding children placed with relatives)	Difference between Foster Homes and Removals (excluding children placed with relatives)	Description
85250	2	6	2	4	Foster Homes Exceed Children
85251	7	6	7	-1	Balance of Foster Homes and Children
85253	0	1	0	1	No children removed
85254	6	6	5	0	Balance of Foster Homes and Children
85255	5	4	4	0	Balance of Foster Homes and Children
85257	18	6	11	-5	Shortage of Foster Homes
85258	1	3	1	2	Balance of Foster Homes and Children
85259	0	2	0	2	No Children Removed
85260	1	1	1	0	Balance of Foster Homes and Children
85262	1	2	1	1	Balance of Foster Homes and Children
85263	0	0	0	0	No Children Removed
85264	6	2	3	-1	Balance of Foster Homes and Children
85266					New Zip Code Not Reported
85268	6	2	3	-1	Balance of Foster Homes and Children
85331	5	6	5	1	Balance of Foster Homes and Children
Total	58	47	43	3	

Source: Arizona Department of Economic Security, Point in Time Report, Nov. 2007.

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.³⁸ Furthermore, children living in poverty are more likely to die in the first year of life. Children living in poverty are more likely to die from health conditions such as asthma, cancer, congenital anomalies, and heart disease.³⁹ 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, in many circumstances, preventable injury.

The table below provides information on the total number of child deaths in the Northeast Maricopa Region for children under the age of fourteen, followed by the leading causes of death for infants in Maricopa County in 2006.

38 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.

39 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.

Child Deaths

	2003	2004	2005	2006
Northeast Maricopa*	28	27	27	12
Arizona	872	870	938	920

*Data includes Scottsdale, Fountain Hills, Paradise Valley, Carefree, Cave Creek **Data available for children 0-14 years of age only. Sources: CDC; Arizona Department of Health Services

Leading Causes of Death Among Infants (n = 406) in Maricopa County During 2006⁴⁰

1. **Natural causes in the first thirty days following the birth** (23—50 percent)
2. **Congenital Malformations** (89 deaths—22 percent)
3. **Pre-term and Low birth-weight** (64 deaths—16 percent)
4. **Sudden Infant Death Syndrome** (21 deaths—5 percent)
5. **Homicide** (four deaths—1 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 intervention 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.⁴¹ Furthermore, research indicates that when children are involved in early childhood programs over a long period of time with additional intervention in the early school years, better outcomes can emerge.⁴² Long-term studies have documented early childhood programs with positive impact evident in the adolescent and adult years.⁴³ Lastly, research has confirmed that early childhood education enhances young children's social developmental outcomes such as peer relationships.⁴⁴

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, self confidence and willingness to persist at a task. 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.

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

⁴⁰ Child Fatality Review Report, Maricopa County 2005

⁴¹ 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.

⁴² Reynolds, A. J. Effects of a preschool plus follow up intervention for children at risk. *Developmental Psychology*, 30, 1994, 787-804.

⁴³ 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

⁴⁴ 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.

at the start of kindergarten), current assessment of those learning standards have yet to be validated nor have the standards been applied consistently throughout the state.

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 is available for the Northeast Maricopa 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.⁴⁵ 2008 was the first year for AIMS Data for Science and the statewide data shows that 53 percent of fourth graders, 50 percent of eighth graders and 37 percent of High Schools students passed the science AIMS Test. The school districts in the Northeast Maricopa Region showed over 75 percent passing at fourth grade and rates significantly higher than statewide averages for eighthth Grade and High School. The chart below shows how the school districts in the Northeast Maricopa region performed on this measure. All of the districts have a higher percentage of children meeting or exceeding the standard than the County or State as a whole. (Note: not *all* Paradise Valley Unified Schools are considered to be in this Regional Partnership Region). Due to the small number of children tested through the Ft. McDowell School, the data is not reported to protect the confidentiality of the students.

Northeast Maricopa AIMS DPA 3rd Grade Score Achievement Levels in Mathematics, Reading, and Writing*

School District	Mathematics				Reading				Writing			
	FFB	A	M	E	FFB	A	M	E	FFB	A	M	E
Cave Creek Unified	4	7	52	37	2	9	66	23	1	3	63	33
Fountain Hills Unified	3	5	51	41	0	8	67	25	0	5	69	26
Ft. McDowell Schools **												
Paradise Valley Unified	6	12	51	31	4	15	62	19	3	8	61	28
Scottsdale Unified	4	8	50	38	3	10	60	27	2	6	62	31
Maricopa County	9	16	53	22	6	22	59	14	5	13	65	18
Arizona State	9	17	54	20	6	23	59	13	5	13	66	16

*Arizona Department of Education AIMS Spring 2007 Grade 03 Summary

NA is used when data have not been published to protect student privacy in districts in which fewer than 10 students took the exam. Asterisks indicate data were not available for other reasons.

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

**Ft. McDowell student population is small to be reported on these AIMS measures.

Secondary Education

The completion of high school is a critical juncture in a young adult's life. Students who stay in school and take challenging coursework tend to continue their education, stay out of jail, and earn significantly higher wages than their non-graduating counterparts.⁴⁶ As the chart on schools in the Northeast Maricopa Region show, high school graduation rates vary by school district and year of graduation. Furthermore, graduation rates are likely to vary according to race and gender. Compared with the state and national data, the schools in the Northeast Maricopa Region often have higher graduation rates—sometimes by a significant amount.

High School Graduation Rates

2006

NE Maricopa HS Districts	Total # Graduates	Total # in Cohort	Graduation Rate
Cave Creek Unified (N=1)	286	323	89%
Fountain Hills Unified (N=1)	159	174	91%
Paradise Valley Unified (N=6)	2157	2397	90%
Scottsdale Unified (N=6)	1749	1950	90%
Arizona*	50,355	71,691	70%
United States**	N/A	N/A	N/A

2005

NE Maricopa HS Districts	Total # Graduates	Total # in Cohort	Graduation Rate
Cave Creek Unified (N=1)	N/A	N/A	N/A
Fountain Hills Unified (N=1)	163	170	96%
Paradise Valley Unified (N=6)	2172	2388	91%
Scottsdale Unified (N=6)	1776	2016	88%
Arizona*	50,923	68,498	74%
United States**	2,799,250	3,747,323	75%

2004

NE Maricopa HS Districts	Total # Graduates	Total # in Cohort	4-year Graduation Rate
Cave Creek Unified (N=1)	272	273	100%
Fountain Hills Unified (N=1)	193	210	92%
Paradise Valley Unified (N=6)	2244	2533	89%
Scottsdale Unified (N=6)	1825	2019	90%
Arizona*	47,071	61,450	77%
United States**	2,753,438	3,705,838	74%

* Arizona Department of Education

** National Center for Education Statistics

High School Graduation Rates*

	2004	2005	2006
Arizona	77%	74%	70%
U.S.	74%	75%	74%

*Measured using a 4 year cohort of students

Source: Arizona Department of Education; National Center for Education Statistics

Ft. McDowell Yavapai Nation

In the Northeast Maricopa region, Ft. McDowell Yavapai Nation has developed a strong educational focus for their community. Between 2002 and 2008 the high school graduation rate increased from 46 percent to 82 percent. The tribal leaders have placed a strong emphasis on supporting children's success in school:

- There are incentives to obtain a high school diploma versus a GED.
- Families and students under the Ft. McDowell truancy program are “fined” for unexcused absences.
- Last year 70 members of the community were enrolled in post-secondary programs. The tribal community has a commitment to provide tuition to encourage adults to return to school.
- In a true collaborative effort, Ft. McDowell Yavapai Nation has placed 8 teachers within the Fountain Hills schools to support their children's growth and development.
- The elementary school in the community, Hman ‘Shawa Elementary, has been a pre-k through third grade. Starting in the 2009-2010 school year, the school will be changing to pre-k to transitional first grade.

(Source: field trip and interview with Gary Loutzenheiser, Director of Education, Ft. McDowell Yavapai Nation).

Current Regional Early Childhood Development and Health System

Summary of Regional Findings on Early Childhood System

Although there are lists available for the licensed and certified child care options, little is known about the numbers or quality of the unregulated (neither licensed nor certified) care options in the region. In 2008, Northeast Maricopa region's fee-paying facilities included: 86 licensed non-public school based facilities, 34 licensed school based programs, two Head Start programs, six small group homes, 16 approved family child care homes, and 20 otherwise unregulated family child care providers listed with the resource and referral agency.

Arizona rates poorly on many measures of child well being including education, health care and child care. The category of child abuse and neglect remains a leading contributor to the state's poor ranking among other states in the U.S. The state also ranks poorly on measures of access to and quality of health care services, especially for behavioral health needs. While recommended, all Arizona children are not routinely screened for developmental delays. In Maricopa county less than two percent of children receive Arizona Early Intervention Program (AZEIP) screening at birth to twelve months or 13-36 months of age. Data from 2003 suggest that Maricopa County lags behind the state and nation in percent of immunized two year olds. Overall, the asthma rate in Arizona is nearly three times the national average, with even higher rates in some areas of Northeast Maricopa County.

A concern around the state is the preparation of its early childhood and elementary school teachers and it appears that this is also a need in this region. Professional training and credentialing of professionals appears to be lacking in the region, though a higher percent of teachers and teacher assistants have some type of degree than is average across the state. The average length of employment has remained low in the Northeast Maricopa region and relatively small salary increases have been implemented from 2004 to 2007.

The Northeast Maricopa region includes numerous agencies, organizations, and groups providing services, resources, information, and supports related to early childhood issues. Partnerships are needed across the spectrum of organizations that touch young children and their families. Resources include a variety of public parks, health care facilities, service providers, and schools, among other organizations. Like many communities, the Northeast Maricopa Region is facing barriers to coordination and cohesion of available resources for children and families. Barriers include: creating an awareness of current services available; language and cultural barriers; socio-economic barriers; funding for current services, and transportation. Overall many organizations that provide services in the county do not have offices/programs located directly in the region which may make it challenging for families to obtain services. City of Scottsdale has offered space to several community resources at a central Scottsdale neighborhood center to provide direct services within the community. Overall from community interviews and community presentations to the Regional Partnership Council, system coordination appears to be an area of need in the region.

Quality

Families use many criteria to make decisions about care for their children. Factors of importance include cost, proximity to home or work and recommendations from friends, family and acquaintances. Parents also use personal assessments of the center or home environments and interaction among themselves, caregivers and children.

States have been increasingly concerned about creating high quality early care and education. The need for child care is growing. A majority of children ages 0-6 years of age participate in regular, nonparental child care. Furthermore, 34% participated in some type of center-based program⁴⁷. In addition, research on the positive effects of early education has led to increased emphasis on quality early education. Research has also found that high quality child care can be associated with many positive outcomes including language development and school readiness.⁴⁸

Currently there is no common agreed upon set of indicators of quality for early care and education in Arizona. The State 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, which will take effect in 2010 and sets standards of quality for Arizona, will assist families and community members, as well as providers, in identifying what quality child care looks like and which providers offer quality care. The system will be a clear asset upon which regions can build when addressing quality.

Accredited Early Child Care Centers

Until statewide quality indicators are established, accreditation by various national accrediting bodies provides the best available information on quality early child care and education. While not all accrediting bodies measure the same indicators of quality in the same way, reviewing accreditation status provides a reflection of the availability of quality care in the area. This report presents the Northeast Maricopa Regional Partnership Council an initial snapshot of quality in the Region through the nationally accredited organizations approved by the Arizona Board of Education 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 Early Childhood Program Accreditation (NECPA).
- National Association for Family Child Care

The tables below present the number of accredited early care and education centers. In this first Needs and Assets Report for the Northeast Maricopa Regional Partnership Council, some data related to centers was not available.

⁴⁷ : Federal interagency forum on child and family statistics. *America's children: Key national indicators of well-being, 2002*. Washington DC.

⁴⁸ ; NICHD Early Child Care Research Network, The relation of child care to cognitive and language development, *Child Development, 2000*, 71, 960-980.

Northeast Maricopa has a total of nine accredited early care and education programs. Two programs have been accredited by the Association of Christian Schools. National Accreditation Commission for Early Care and Education has accredited two preschools. Five programs have earned National Association Education Young Children (NAEYC) accreditation. One Montessori program is American Montessori International (AMI) recognized for its program for children age three to twelve and four centers are recognized by the American Montessori Society (AMS). There are two Head Start sites in the region.

Northeast Maricopa County

Number of Accredited Early Care and Education Centers and Head Start Sites

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

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>

AMI awards recognition, based on self-study and visit, rather than accreditation.

**Source: Arizona Department of Health Services Licensed Child Care Centers List⁷

Ratios and Group Size

In addition to offering accreditation to early care and education programs, the National Association for the Education of Young Children (NAEYC) is involved in developing position statements around significant early childhood development issues. One area in which NAEYC has published recommendations for the industry is group sizes and staff to child ratios, since these factors have been shown to be significant predictors of high quality. Other national accreditation systems vary in the recommended ratios and group sizes. NAEYC has published standards for staff to child ratios based on the size of the program and according to age group, as reflected in the chart below.⁴⁹

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

⁴⁹ NAEYC standards here are used to provide a context for high standards. It is not presumed that all centers should become NAEYC accredited

Arizona Department of Health Child Day Care Licensing Ratios	
Age Group	Staff: Children
Infants	1:5 or 2:11
1-year-old children	1:6 or 2:13
2-year-old children	1:8
3-year-old children	1:13
4-year-old children	1:15
5-year-old and school-age	1:20

Arizona regulations do not address group size and ratios. The required ratios are much higher than the NAEYC recommended guidelines. It is difficult to determine which centers are meeting or exceeding the recommended ratios and group size. Community interviews indicate that staffing costs and room size were factors in both ratios and group size. Several child care centers indicated that one of the major barriers to accreditation is meeting the group size and ratio requirements without raising the cost of care beyond the parent's ability to pay.

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; time that families have to wait for an available opening (waiting lists); ease of transportation to the care facility; and the cost of the care. Data related to waiting lists is not currently available but will be a goal for future data acquisition. For the current Needs and Assets report for the Northeast Maricopa Region, available data include: number of early care and education programs by type, and average cost of early care and education to families by type. This information is available for those child care centers that are regulated (licensed or certified) by the state.

- Number of early care and education programs
- A network of programs for young children has developed in the region including:
 - School district preschool programs and pre-schools programs to support children with special needs (IDEA) ages three to five years
 - School based tuition supported child care for infants through entry to kindergarten
 - Two Head Start Programs
 - Licensed center based programs including non-profit, for-profit, church based, private elementary schools and charter schools
 - Licensed Small Group Homes
 - Certified Home based programs
 - Unregulated programs that provide home based care

Northeast Maricopa County Number of Early Care and Education Programs by Type

Licensed centers*	School District Based*	Head Start*	Small group homes*	Approved family child care homes**	Unregulated Providers registered with the Child Care Resource and referral***
88	34	2	6	16	20

*Licensed centers include only DHS licensed program providing fee-paying child care: full-day and part-day child care programs, Head Start centers, school district fee-based part-and full-day fee-paying care only. DHS licensed small group homes have a 10 child maximum. Source of data Arizona Department of Health Services Licensing Department Web-site

**DES certified family child care homes, homes approved for the child care food program. Source of data DES Child Care Market Survey 2006.

***CCR&R registered homes have a 4 child maximum. Source of data DES Child Care Market Survey 2006

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. Approved family child care homes are either certified or regulated by the Department of Economic Security (DES) to provide care, or are approved by agencies to participate in the Arizona Department of Education Child and Adult Care Food Programs (CACFP). Twenty homes in our region are unregulated providers that are registered with the Child Care Resource and Referral.

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. These important factors in quality care and parent decision-making are currently provided *only* with national accreditation (see discussion in the section on Quality). These factors as well as group size and staffing requirements will be included in First Things First's forthcoming Quality Improvement and Rating System called Quality First.

The Department of Economic Security's 2006 Child Care Market Rate Survey provides information on a range of child care settings. Child Care Resource and Referral is a good source of information on regulated centers, childcare group homes and certified homes as well as unregulated providers. This source of information is particularly useful for understanding approved and unregulated family childcare and childcare for working parents. It does not, however, provide information on Head Start and programs that *do not* charge a fee.

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, these data are more frequently updated than that of the Market Rate Survey. Data in the Child Care Resource and Referral database is 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.

Number of Children Enrolled in Early Care and Education Programs

The table below presents the number of children enrolled in early care and education programs by type in the Northeast Maricopa Region. These numbers do not account for children cared for in unregulated care, by kin, or who are in need of care but do not have access to it. Identification of methodologies and data sets related to unregulated care and demand for early care and education are a priority for the future.

In the Northeast Maricopa Region, in 2006, an average total of 9,218 children were enrolled daily in licensed centers, group homes, approved family child care homes and unregulated Child Care Resource and Referral listed family child care homes. The approved capacity was 15,947 children, though this refers to the total capacity of a physical site and does not necessarily reflect the size of the actual program in that site or age range served.

Northeast Maricopa County

Number of children Enrolled in Early Care and Education Programs by Type

	Licensed centers	Groups homes	Approved family child care homes	Providers registered with the Child Care Resource and referral	Total
Approved capacity	15,714	62	77	94	15,947
Average daily reported number served	8,936	6	65	171	9,218

Source: DES Child Care Market Rate Survey 2006

*Capacity refers to the total capacity of a physical site and does not necessarily reflect the size of the actual program in that site.

Conversations with community leaders indicate that many children in the region are cared for by nannies or other employees of the parents that provide child care for children in their own homes. Information regarding the number of children cared for in this manner or the quality of services provided is not available, but should be studied as it may have a significant impact on the preparation of the region's children for school success. Additional study is also needed to determine the extent that care is given in informal or unregulated settings. Additional research is needed to determine availability of infant/toddler care as well as programs for children with special needs.

Costs of Care

The table below presents the average cost for families, by type, of early care and education. These data were collected in the Department of Economic Security's Market Rate survey, by making phone calls to care providers asking for the average charge for care for different ages of children. In general, it can be noted 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 care provider skill sets that are unique. 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 Northeast Maricopa Region, childcare rates are most expensive for licensed centers when compared with other settings. Cost for infants show the greatest difference by type. Licensed centers were more expensive, with costs for infant care averaging \$41.12 per day. Certified homes were generally the least expensive, at \$22-24 a day depending on the age of the child.

Costs of Early Care and Education in Northeast Maricopa County – 2006

	Infant	Toddler	Preschooler
Group Homes	\$32.50 per day	\$32.17 per day	\$32.17 per day
Licensed Centers	\$41.12 per day	\$37.92 per day	\$32.17 per day
In-Home Care			
Certified Homes	\$24.50 per day	\$22.50 per day	\$22.50 per day
Alternately Approved Homes	\$30.19 per day	\$27.36 per day	\$27.22 per day
Unregulated Homes	\$33.16 per day	\$32.45 per day	\$32.58 per day

Sources: 2006 DES Market Rate Study

Child Care Costs in Reference to 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 in a family child care home. This represents about 12 percent of the median family income of an Arizona married couple with children under 18. It represents 22-30 percent of the median income of a single parent female head of household family 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 schoolage child in a center	\$6,240	\$2,500-\$8,600
Average, annual fees paid for before and after school care for a schoolage 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%

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

Child Care Trends

Interviews with community for-profit licensed child care programs that focus on care for working parents (eight programs out of approximately 26 centers in the region) indicate a disturbing trend. The ages of the children served in these centers has gone down significantly in the past few years with the majority of the children who are served being three years of age and under. They report a growing need for infant and toddler care and a significant decrease in their four and above population. Traditionally, the four and above age group has been the profit generator for programs, often supplementing the costs of providing infant and toddler care. This may lead to increased costs of care or affect the economic viability of the centers.

Currently public schools are offering pre-school programs that are often five hours or more in length. While there is a cost for these programs, it is usually less than other care options. Many of the schools are offering extended day options mixing these children into extended day programs for school age children which may be a concern for young children who need a higher level of supervision. Scottsdale Unified School District has started a tuition supported child care program for three and four year olds in the 2007/2008 school year. In school year 2008/2009 they have expanded this program to include infants and toddlers.⁵⁰

Preschool Enrollment and Disability Status

The following chart presents information from the Northeast Maricopa region on preschool enrollment by disability.

Preschool Enrollment According to Disability Status of Child*

School District	HI	PMD	PSD	PSL	VI	Total
Cave Creek Unified School District		13	15	25	*	54
Fountain Hills Unified School District #98		12		*	*	18
Paradise Valley Unified School District #69	*	140	94	95	*	342
Scottsdale Unified School District #48	*	86	48	53		194

*Data listed is an estimate and does not include all schools/districts in the region.

Key

- HI = Hearing Impaired
- PMD = Preschool Moderate Delay
- PSD = Preschool Severely Delay
- PSL = Preschool Speech & Language Delay
- VI = Visually Impaired

The Northeast Maricopa Regional Partnership Council expressed an interest in obtaining additional information on autism spectrum disorders. According to the Center for Disease Control, 1 out of 150 children born in the U.S. will be diagnosed with an

⁵⁰ Included in RPC coordinator response to FTF model draft of needs/assets report.

autism spectrum disorder. While no specific data is available for the region we can assume that the local rates are similar to the national level statistics. Assuming the region has approximately 23,000 children birth to five it is estimated that over 150 children in the region have been diagnosed with autism spectrum disorder in the region. The prevalence of this disorder is increasing at an alarming rate. With intensive, early intervention, many of the long term, negative outcomes of autism can be mitigated.

Currently, most children with autism in Arizona are unable to receive State funded “habilitation” or “applied behavior analysis” which is the most researched and proven effective treatment for reducing the symptoms of autism and building skills — until the child turns three years old. However, research supports the efficacy and need for early intervention prior to age three. This is a missed opportunity that has long term consequences by not taking advantage of the huge gains that can be attained by intensive early intervention⁵¹.

Many families with children with autism are in crisis mode and have limited supports available to them to help them learn how to cope with some of the severe, disruptive symptoms of autism. One-on-one parent training would empower parents to meet some of the demands of raising a child with autism.

In the public pre-school system, the aides who spend the most time with children with special needs have limited training in the disability of the children they are assisting. The pay is low for these aides and due to the lack of support financially and in terms of training, many aides and parents feel that efficacy of the aide is undermined. There is a need for additional supports to be put in place to equip the aides to better fulfill their intended purpose and to prevent low morale and turnover.

Many pre-school and childcare center staff in our region have expressed a need for independent evaluators to assist them with children they believe to be “at-risk” for developmental delays as well as training for staff in identifying potential developmental issues. The pre-schools and centers believe an independent evaluator could help eliminate the subjective elements when making a determination and referral for further testing and follow-up.

Department of Economic Security Subsidy

The percent of children receiving Department of Economic (DES) subsidies in Northeast Maricopa is unknown. Respondents to the child care survey were unclear or unwilling to report this information and DES subsidy was only reported by units paid by age classifications and did not match the time frame of the enrollment data. However, information from DES shows that from May 2007 to April 2008, 5,960 children from birth through age five years received 86,011 units of service from DES Child Care Subsidy totaling \$2,022,520.65. This represents an average of 14 days of service for each child and an average reimbursement rate of \$23.00 per day.

Community providers expressed concerns about the high DES co-pay that many parents are paying in order to access the higher cost of care in the region. Parents of infants and toddlers are reported to pay as much as a \$10 to \$15 per day co-pay in some centers.

51 Sallows, Glen and Graupner, Tamlynn. *Intensive Behavioral Treatment for Children With Autism: Four-Year Outcome and Predictors*. American Journal on Mental Retardation, Volume 110, Number 6:417-438, Nov. 2005.

Health

For families and their children, good health, beginning with a healthy pregnancy and birth is an essential element that is closely tied to a child's future success. 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. Previous sections of this report presented data on prenatal care, health insurance coverage, immunizations, and oral health for the Northeast Maricopa Region. This section focuses on developmental screening.

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 (AAP) 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 opportunities for success and self-sufficiency into adulthood. Research has documented that early identification of and early intervention with children who have special needs enhance developmental outcomes and reduce developmental problems.⁵² 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.⁵³

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 childcare provider cannot identify children with special needs correctly.⁵⁴

While recommended, all Arizona children are not routinely screened for developmental delays although nearly half of parents nationally have concerns about their young child's behavior (48 percent), speech (45 percent), or social development (42 percent)⁵⁵. Children most likely to be screened include those that 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 county Health Departments.

Every state is required to have a system in place to find and refer children with

52 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.

53 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.

54 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.

55 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.

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

In Arizona, one of the system components that serves eligible infants and toddlers includes the Arizona Early Intervention Program (AZEIP). Eligible children 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. Identifying how many children are provided services prior to reaching kindergarten is an important first step in understanding how well a community's screening and identification process is working. Additionally, the number of children being served provides initial information as to the demand for service providers who work with young children.

The following chart shows the number of AZEIP services for children birth to three for children throughout Maricopa County.

Children 0-3 Years Receiving Developmental Screenings in the Maricopa County

Service Received According to Age Group*	2005	2006
AZEIP Screening 0-12 months	276 (0.46%)	311 (0.49%)
AZEIP Screening 13-36 months	2,501 (1.39%)	2,810 (1.49%)

*The AZEIP data are only available at the county level.

Source: Arizona Early Intervention Program, Arizona Department of Health Services

There are many challenges for Arizona's early intervention and special education programs in being able to reach and serve children and parents. Speech, Physical, and Occupational Therapists are in short supply and more acutely so in some areas of the state than others. Families and health care providers are frustrated by the tangle of procedures required by both private insurers and the public system. These problems will require the combined efforts of state and regional stakeholders to arrive at appropriate solutions.

While longer-term solutions to the therapist shortage are developed, parents can be primary advocates for their children to assure that they receive appropriate and timely developmental screenings according to the schedule recommended by the Academy of Pediatrics. Also, any parent who believes their child has delays can contact the Arizona Early Intervention Program or any school district and request that their child be screened. 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 system and how it works, are parent support services that each region can provide. These measures, while not solving the problem, will give parents some of the resources to increase the odds that their child will receive timely screening, referrals, and services.

Insurance Coverage

Preventive Health Visits

The following chart compares the percent of children receiving no medical care for those insured all year versus those uninsured all or part of the year. As the chart shows, over 38 percent of children who are uninsured all or part of the year are not receiving medical care compared to 15 percent of children who are insured throughout.

Percent of Children (0-17) Not Receiving Any Medical Care, 2003

	Insured All Year		Uninsured All or Part of the Year	
	Percent not receiving medical care	Number not receiving medical care	Percent not receiving medical care	Number not receiving medical care
Arizona	14.8	171,303	38.1	134,259
US	12.3	7,635,605	25.6	2,787,711

Source: Robert Wood Johnson Foundation. Protecting America's Future: A State-By-State Look at SCHIP and Uninsured Kids, August 2007.

While the number of children having access to medical care or well child visits could not be determined for this report, the high rate of uninsured children in the region would suggest that access to medical care and well child visits is limited. As described in the section on Health Coverage and Utilization, children who are enrolled in AHCCCS are very likely to receive well child visits during the year, as are children who are enrolled in Head Start. Since the region has only two Head Start programs serving 64 children, this resource to advocate for well child visits is not available to a majority of children in the area. Further research is needed to obtain AHCCCS data and other available data on well children visits, dental visits and other preventive health information.

Immunizations

Childhood immunizations are known to be one of the most cost-effective preventive health measures available. Routine immunizations protect young children from ten diseases and their life threatening complications. The Healthy People 2010 goal is that 90 percent of two year old children are fully immunized.

Although recent local data was unavailable for this report, data from 2003 suggest that Maricopa County lags behind the state and nation in percent of immunized two year olds. In 2003, only 56 percent of two year olds were immunized compared to 80 percent statewide. This number was even lower in communities in the North-east Maricopa region, ranging from 25 percent in Carefree to 62 percent in Cave Creek. Most Carefree/Fountain Hills children did not receive services in their home areas due to lack of medical providers which may present an inaccurate view of the region. The high income and education levels of the area would indicate that most of the children are receiving their immunizations and the problem is the method of reporting statistics. Even so there is still much to do to reach the 90 percent goal. Parents, especially young parents, have no personal experience with possible severe complications of many childhood diseases and lack awareness of the benefits of immunizations. Recommended immunizations protect children from polio, diphthe-

ria, tetanus, measles, whooping cough, chicken pox, hepatitis and mumps. Parents of autistic children often express concerns about the safety of immunizations. Even though most research shows little evidence of a link between immunizations and autism, concern exists with many parents. Research seems to show that timing of the immunizations as well as giving fewer immunizations at a visit may reduce potential risks and side effects.

Free or reduced-price immunizations are available through public health clinics, and Scottsdale Health Care operates a free clinic monthly. Children with health insurance coverage through AHCCCS receive free immunizations from their primary care provider. One reason it is difficult to get children fully immunized is that the immunization schedule for babies and children is complicated. A fully-immunized two year old will have received 15 immunizations at six separate medical visits, starting at birth. There is little incentive for parents to complete the immunizations on schedule and often this much needed service is postponed. Arizona law requires children entering school to be fully immunized. Licensed child care providers must also ensure that children in their care are adequately immunized. A coordinated effort from health and early care and education providers to provide information and education to parents of young children could further improve immunization rates.

Percent of Immunized Two-Year-Olds

Northeast Maricopa	2003
Carefree	25%
Cave Creek	62%
Fountain Hills	28%
Paradise Valley	56%
Scottsdale	43%
Maricopa County	56%
Arizona	80%
US	80%

Source: ADHS Community Health Profiles, 2003

Asthma rates

Overall, the asthma rates in Arizona are nearly three times the national average. Some of the factors that can increase the risk for asthma include poverty, poor housing conditions, greater exposure to allergens, and air pollution.⁵⁶

Management of asthma for children requires both access to health care and information and education to parents on ways to keep children healthy in the home and in their preschools and other care settings. Child care providers' understanding of the health care needs of children with asthma is a critical factor in management of the disease. Procedures must be in place to keep the childcare environment free from asthma triggers and staff require training on how to respond appropriately and safely when children experience asthma symptoms.

⁵⁶ Rimsza, M. E., Johnson, W.G., White, R., & Bannister, W. (2001) Children with asthma, a report to the Maricopa county community. Tempe, AZ: School of Health Management & Policy, Arizona State University.

Healthy Weight, Nutrition, Physical Activity

Healthy weight and physical activity are important to children's wellness and their long term health. Overweight children tend to have health problems more commonly found in adults like type II diabetes, high cholesterol and high blood pressure. The percent of young children overweight for height has become a concern for medical providers. A recent national report of children's wellbeing provided data that show that 18 percent of children ages 6-17 in the nation are overweight.⁵⁷ According to national Pediatric Nutrition data (PedNSSo), a growing percentage of our nation's children younger than age five are overweight.

Staff of the Scottsdale Community Center report that they are very concerned about the weight of children participating in their programs. For instance, they have noticed that the sizes of clothing for their clothing drive are increasing every year. Last year they needed 40 – 4X shirts and over twenty girls needed size 20 or above pants. While the children served in this clothing drive are school age, the pattern for obesity forms early.

Attention to healthy weight supported by good nutrition and daily physical activity during early childhood is a key for parents and all of their caregivers to support healthy development.

Family Support

Family support is a broad, hard to define, system of programs, services and collaborations whose ultimate goal is to help families function to their maximum potential. This is accomplished by helping individuals gain the knowledge, skills and abilities to be successful in life. For individuals with children this includes being effective, loving parents who provide a nurturing environment for their children. Children who experience sensitive, responsive care from a parent perform better academically and emotionally. 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.⁵⁸ Much of the literature addresses effective parenting as a result of two broad dimensions: discipline and structure, and warmth and support.⁵⁹ Strategies for promoting enhanced development often stress parent-child attachment, especially in infancy, and parenting skills.⁶⁰ Parenting behaviors have been shown to impact language stimulation, cognitive stimulation,

57 Child and Family Statistics. *American'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.

58 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.

59 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.

60 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.

and promotion of play behaviors—all of which enhance child well being.⁶¹ Parent-child relationships that are secure and emotionally close have been found to promote children's social competence, prosocial behaviors, and empathic communication.⁶²

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. Many new immigrant families are challenged to raise their children in the face of language and cultural barriers. Regardless of home language and cultural perspectives, all families should have access to information and services that support them in being caring and responsive parents.

Family Support has the potential to impact all of the areas addressed in this report, including economic stability, poverty, health and education. While many family support programs provide services to adults, the benefits gained directly impacts the entire family and society as a whole. Examples of family support programs are those programs and services that: improve a parent's ability to be employed through job training and education; address a parent's health issues, including mental health and substance abuse, that interfere with employability and healthy family functioning; increase a parent's knowledge of child development and improves their parenting skills; provide emergency supports, such as food banks and shelter; and provide information that assists families' access to the resources that are available.

For the purposes of this report, family support will be limited to those programs and services that assist individuals to become the most successful parents possible. These parent support programs can be classified as: community information and referral about services and programs for families; home visitation programs; and parent education programs.

In the Northeast Maricopa Region, there appear to be an array of efforts, initiatives and programs providing support to families, but a close look revealed that this is somewhat fragmented and many of the valley resources are not providing direct services within the Northeast Maricopa Region . For example, there are state-wide programs such as Healthy Families Arizona and Promoting Safe & Stable Families that provide a variety of support services and parent education. From July 2006-June 2007, Healthy Families Arizona served over 2,300 families through twenty-two program areas in Maricopa County by providing home visitation with families from the prenatal period through age five. The Scottsdale site served 122 families during that time period. The nearest Promoting Safe & Stable Families location is in Mesa which is a considerable driving distance from most areas of the region.

In addition, the Family Resource Center (East Valley Crisis Center) addresses a variety of areas that parents face with young children. They offer numerous free workshops and resources. Located in Mesa this resource may not be convenient for most of the region. The area hospitals provide parenting and children's health and educational classes and materials for children's health and education. Faith-based

61 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.

62 ; 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.

organizations also offer learning opportunities and resources for families. Raising Special Kids, SAARC, United Cerebral Palsy of Central AZ, Inc., and Southwest Human Development all provide information and resources for families with children with special needs.

In order to better understand the resources available to the region, Northeast Maricopa Regional Partnership Council members have developed a data collection tool, 'Agency Program Profile' for programs and services in their area. Thirty-two community resources have responded and data from these responses will be compiled and analyzed to further study the resources in the area.

Home Visiting Programs

Ft. McDowell has identified providing a home visiting program for parents of children birth to three to assist families in overcoming generational poverty issues as a major need in their area. Several community resources indicated a need for a similar program in South Scottsdale's Hispanic and Native American community. Home visiting programs seem to be a need across the region. Currently only 122 families are served by Healthy Families in the region. Eighty-seven families with pre-term and low birth-weight babies received home visits and developmental screening by the Maricopa County Health Department – Newborn Intensive Care Follow-up from July 2006-June 2007. One hundred forty-five families were served in the fiscal year ending June 30 of this year.

Improving Quality of Family Support

Scottsdale Healthcare and Mayo Clinic have worked closely with Phoenix Children's Hospital to increase the training of pediatric and family practice residents in the area through the Healthy Steps program. Community interviews revealed concerns about the lack of knowledge and or time to fully address children's developmental needs with parents during well child visits.

Parent Knowledge About Child Development

Research indicates that most adults have significant information gaps about many areas of child development. For instance, most adults, including parents of young children, do not understand when children begin to "take in" and "react to" their world. While child development research shows this happens in the first days of life, 62 percent of parents with young children believe it does not occur until a child is two months old or older. Further, more than one in four parents of young children expect a three-year old to be able to sit quietly for an hour, yet child development research shows that they are not developmentally ready to do so.⁶³

Lack of parent awareness and knowledge about early child development was ranked as a significant barrier for families with young children, according to a 2007 early childhood parent survey. Valley of the Sun United Way conducted a survey with parents (N =250) across Maricopa County. Results indicated that many of the parents surveyed (40%) felt knowledgeable about early childhood issues. Still, almost

63 "What Grown-Ups Understand About Child Development, A National Benchmark Survey" Researched by DYG, Inc. for Civitas, BRIO Corp. and Zero to Three, 2000.

half of parents surveyed (40%) indicated they could use “a lot more” education about early childhood issues, with only 20% responding that they only wanted a little more information.

Community interviews indicated that: “Parents don’t know how or what to teach their child;” and “There is a lack of community and family awareness of the importance of birth to five development.” Another issue that may be somewhat unique to this region is that parents are reported to have unrealistic expectations about early learning, wanting academic programs that are not developmentally appropriate for the age of their children.

There are numerous programs providing parent education in the region. However, there is no comprehensive calendar of parent education classes that parents and service providers can refer to in order to identify the most appropriate or convenient class for a parent to take. While many of the classes are free of charge, as with other services, transportation difficulties or scheduling conflicts may limit access to some programs.

There are numerous programs providing parent education in the region including local hospitals, libraries and school district programs. There are seven libraries in the region. All provide a range of literacy programs for children and parents.

Reach Out and Read encourages family literacy by providing each child a book during his/her well-child checks at a local physician/clinic. Currently the Mayo Clinic, Noah Clinic, Heuser Family Practice as well as numerous pediatric and family physicians participate in the Reach Out and Read program. They serve 491 children annually, distributing 982 books through 29 providers serving approximately 2 percent of the children (ages birth to five) in the region.

Channel 8 PBS programming offers many opportunities for children and families to learn together using the internet, television programming, and direct training. In the parent training component – Ready to Learn — families meet with a trainer and are given books and techniques for reading to their children as well as strategies for watching television together. There has been no local survey conducted to-date that has measured daily reading with children or specific parent knowledge about early childhood education.

Professional Development

The commitment, education and experience, and continuity of teachers for young children are primary factors affecting children’s early learning and their development in math, language and social skills. Professionals providing early childhood services to young children and their families can improve their knowledge and skills through ongoing professional development activities. This may involve taking college credit-level coursework that leads to a certificate, degree or teacher certification. It may also encompass participation in higher-level training sessions, conferences and workshops.

Childcare Professionals’ Certification and Education

Research on caregiver training has found a relationship between the quality of child care provided and child development outcomes.⁶⁴ Furthermore, formal training is

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

related to increased quality of care, however, experience without formal training has not been found to be related to quality care.⁶⁵

A concern of the Northeast Maricopa Regional Partnership Council and for many other areas around the state, is the preparation of its early childhood teachers. Professional training and credentialing of professionals appears to be lacking in the region, though a higher percent of teachers and teacher assistants have some type of degree than is average across the state.

Childcare Professionals' Educational Background

Degree Type	Northeast Maricopa 2007		Arizona* 2007		U.S.** 2002	
	Teachers	Assistants	Teachers	Assistants	Teachers	Assistants
No degree	39%	63%	61%	82%	20%	12%
CDA	6%	8%	9%	7%	N/A	N/A
Associates	13%	6%	15%	8%	47%	45%
Bachelors	36%	28%	19%	7%	33%	43%
Masters	12%	3%	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

Professional Development Opportunities

Early childhood educators and professionals have a variety of education and training resources available, including online training and education and degree programs through the state universities or through the Maricopa Community College Programs. In the Northeast Maricopa Region, Scottsdale Community College provides limited classes in the early childhood field designed to meet the needs of individuals interested in pursuing careers in early childhood education, or who are currently employed at preschools, child care centers, extended day programs, or other programs or agencies that focus on early childhood education and development. Rio Salado and Paradise Community Colleges are located near the borders of the region and provide more comprehensive programs than Scottsdale Community College. Rio Salado's program is designed for those currently employed in the field with most of the classes available online. Community interviews with childcare center staff in the area indicated that many of the staff has difficulties obtaining certificates or degree programs due to family, time constraints and work schedules. Coordination of the community college programs with four year degree programs using a variety of venues including flexible classroom classes, online web-based classes, community or center-based education format should be explored.

Aside from other online educational programs, Arizona State University, Northern Arizona University, and University of Arizona programs are available. Tracking of

65 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.

personnel training and qualifications is provided by the S*CCEEDS Program from the Association for Supportive Child Care.

In addition to Arizona's post secondary programs in the area and accessible locally, there are ten online distance learning programs leading to degrees/certifications that professionals can access in the area.

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.⁶⁶ 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.⁶⁷

As the chart below shows, the average length of employment has remained low with teachers employed more than five years at 27 percent and assistant teachers employed more than five years at 16 percent. Teacher directors and administrative directors in the region have slightly higher retention rates.

Average Length of Employment for Child Care Professionals in Northeast Maricopa

	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	2%	3%	16%	21%	13%	12%	27%	6%	0%
Assistant Teachers	9%	6%	10%	14%	11%	6%	16%	24%	4%
Teacher Directors	4%	1%	5%	5%	6%	3%	30%	44%	3%
Administrative Directors	2%	0%	10%	10%	6%	4%	33%	32%	2%

*Includes data from Scottsdale, Paradise Valley, Fountain Hills, Cave Creek, Carefree and Fort McDowell Yavapai Nation

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 care⁶⁸. Furthermore, higher wages have been found to reduce turnover—all of which is associated with better quality child care.⁶⁹ Better

66 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.

67 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; Whitbook, M., Sakai, L., Gerber, E., & Howes, C. *Then and now: Changes in child care staffing, 1994-2000*. Washington DC: Center for Child Care Workforce.

68 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.

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

quality care translates to workers routinely promoting cognitive and verbal abilities in children and social and emotional competencies.⁷⁰

As the chart below shows, relatively small salary increases have been implemented from 2004 to 2007 in Northeast Maricopa. For teachers the salary increased only 78 cents from 2004 to 2007. The increase was slightly higher for assistant teachers with a change in salary of \$1.43 over the same time period. Teacher/Directors saw the highest increase, with average salaries rising from \$14.66 to \$18.11.

Average Wages and Benefits for Child Care Professionals in Northeast Maricopa

	2004	2007
Teacher	\$12.39	\$13.17
Assistant Teacher	\$8.73	\$10.16
Teacher/ Director	\$14.66	\$18.11
Admin/ Director	\$18.58	N/A

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

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 Fund, 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.⁷¹

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.

By its proximity to the greater Phoenix Metropolitan area, the Northeast Maricopa communities have access to many sources of information. In addition to yearly School District Child Find events and kindergarten round-ups and area Health Fairs, there are numerous organizations and individuals that provide leadership in public awareness of children and families: county health departments, hospitals, media sources (radio, television, and newspaper), public school districts, libraries, early intervention

⁷⁰ Ibid.

⁷¹ 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.

program providers, medical and behavioral health practitioners, and multiple community and service organizations. In spite of many resources, community interviews revealed that even the professionals were unaware of resources in the community or had difficulty in finding resources specifically in the Northeast Maricopa Region.

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.⁷²

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.

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.

Creating a seamless infrastructure of support for early childhood in the Northeast Maricopa Region requires connecting partners to obtain community-level information pertaining to systems coordination.

Some possible methods for improving coordination to better reach the underserved population within the Northeast Maricopa Region include the following:

- Establish an Early Childhood Coalition or workgroup to focus specifically on coordination of care and services in the area. (Current United Way Partnerships do not focus specifically on this region)
- Expand outreach efforts to better include members of the faith-based community, business community and health –focused providers within systems coordination in the region.

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

- Expand outreach efforts to better incorporate the needs of the children of undocumented families into early childhood coordination efforts.
- Work collaboratively to raise funds for priority projects given funds are limited and competition tends to encourage territorialism in service delivery.
- Improve collaboration efforts between Scottsdale and other smaller communities in the region.
- Increase public awareness regarding available services for early childhood development for families.
- Improve coordination between early childhood centers and health organizations and providers to improve service delivery.

Parent and Community Awareness of Services, Resources or Support

Building Bright Futures, the 2007 Statewide Assessment, noted that the passage of First Things First by majority vote demonstrates that Arizonans are clearly concerned about the well-being of young children in Arizona. However, when asked “how well informed are you about children’s issues in Arizona,” more than one in three respondents say they are not informed. A consistent method for measurement of parent satisfaction and community awareness, over time, will be helpful in measuring the effectiveness of First Things First. No such survey has yet been done in the Northeast Maricopa region.

The Northeast Maricopa Regional Partnership Council identified several areas that they would like additional information. Additional research will be needed to fully understand these issues.

- Children’s health issues including: childhood obesity, autism, timing of childhood immunizations, preventable injuries and the availability of mental health programs.
- Environmental health issues including local air quality/ozone levels. The Northeast Maricopa Region has the highest concentration of ozone in the valley. The Council is in the process of compiling data on ozone in the area and has been in conversation with Arizona Department of Environmental Quality to possibly develop a community partnership for future advocacy, education and possible creative ways to fund programs to address this issue.
- Current funding streams for programs in the region.
- Transportation issues in the region.
- Impact of current economic times, including foreclosures, bankruptcies, tax liens, and their overall affects on families.
- Housing costs and affordable housing options in the region.
- Identifying pockets of the region that may have specific needs.
- Additional information on tribal communities.

Conclusion

The Northeast Maricopa Region consists of several diverse and vibrant communities with programs whose goals are to help families be successful in life. The rapid growth in the area especially in the North and East portion of the region since 2000 provides challenges to offer services in the area and many of the newer areas of the region have few available supports and services. In spite of the commitment to strengthen families in the area, services in the area appear to be fragmented with little collaboration focused specifically on the region. Bringing the spirit of collaboration among service providers will allow them to consider how things might be done differently to allow a seamless system of care and services that will benefit all children birth to five in the region.

The vastness of the region and the rapid growth in the smaller communities has left large areas of the region with little or no community resources. Communities' members report a lack of coordination and collaboration among service providers and even a lack of knowledge about what is available in the region. These hurdles to collaboration will require innovation and new methods of working together.

The Northeast Maricopa Region tends to fall above the state average on many indicators of economic stability, health, and well-being. However, this picture may not fully reflect life for all families in the region. Certain communities and neighborhoods have much higher rates of poverty and increased health concerns. In spite of the fact that the region ranks well above the county, state and national economic, educational and healthcare standards, many children even those living in affluent families are still falling through the cracks in having the opportunity to be healthy and ready to learn when they enter kindergarten. Without a doubt there have not been enough resources to address the needs associated with building a comprehensive early child development system that ensures that all children have what they need to succeed. There are hurdles to collaboration that require innovation and new methods of working together. There are challenges associated with delivering services to a vast region with vast areas of mountain preserve land separating the communities. Providing services to families where both parents are employed and have long commutes each day to work provides another layer of challenges.

Children and their parents of all economic status have need for quality early childhood health and education services. While higher incomes often allow children to have more opportunities for health, literacy, family support and education than children living in poverty, families across the region still need to have a network of services, information and training to insure that their children have the highest opportunity to succeed. In many cases the stress on families today including increased work hours, commuting time, financial stress and lack of a family and community increases the need for support and services. Increased services that target higher income children and their families seem to be needed as well as services for the lower income children.

A review of the data and community discussions indicate the following issues in the Northeast Maricopa Region:

- Quality and affordability of early care and education centers.
- Availability of qualified staff including child care staff and health related staff that have training in early childhood.

- Fragmented system for screening and support for developmental issues and special needs children.
- Lack of Home Visiting Programs focused on breaking the cycles of poverty for children birth to five.
- Lack of comprehensive programs that include home visitation to assist a family in crisis.
- Lack of coordination and cohesion of available resources for children and families.
- Creating awareness for both parents and providers of current services available.
- Lack of quality health support including behavioral, speech, physical therapy and other health related services.
- Transportation barriers.
- Low rates of immunizations for two year olds, untreated oral health problems, and high asthma rates.
- Training needs for health care providers and child care providers regarding the identification of developmental issues.
- Lack of links between child care settings and the health community.
- System coordination was identified as an area for improvement in the region. While many organizations provide services and resources, they are not currently engaged in a coordinated, region-wide effort around early childhood education and well-being.

With this report the Northeast Maricopa Regional Partnership Council acknowledges all that has been accomplished throughout the region to support families in their important work of raising children. Many professionals have worked hard in the face of daunting challenges. It is now possible to look forward with energy and hope at new opportunities to help families and children. The Northeast Maricopa Regional Partnership Council invites service providers, community leaders, business people, members of the faith community, parents, children's advocates, grandparents, friends and neighbors to join with us in taking a stand for young children. They deserve our best effort. The stage is set for some very remarkable work to be accomplished.

Appendix

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
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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 child care 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 Northeast Maricopa Region, this rapid needs and assets assessment approach consisted of consultants working with the Regional Partnership Council to create a survey to collect information on early care and education centers in the region. Southwest Institute created a survey (SWI ECE Centers Survey) to collect information on early care and education centers in the Northeast Maricopa Region. Sixteen questions were included in the survey. Questions addressed issues raised by First Things First Needs and Assets Assessment. The survey was conducted by phone. All accredited and 30% randomly selected licensed (non-accredited) early care and education centers were attempted to be called. In the Northeast Maricopa Region, 6 out of 8 accredited centers and 42 out of 132 licensed centers successfully completed the survey. The remaining 2 centers were either closed for summer or unwilling to participate in the survey. Data collected from the centers were analyzed using Microsoft Excel. Results reported as sums, averages, and percentages in accordance with the question.

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 Maricopa County region overall. In particular, data for children 0-5 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; however, these data also represent all Head Start children receiving services in the County and do not zero in on those children residing only within the geographic boundaries of the Northeast Maricopa Region. 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 (0-5 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 0-5 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.



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