
2010 NEEDS & ASSETS REPORT
NAVAJO NATION
August 31, 2010



FIRST THINGS FIRST

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September 16, 2010

RE: Needs and Assets Report, 2010

Dear Honorable Board Members;

The past two years have been both challenging and rewarding for First Things First Navajo Nation Regional Partnership Council. Our task of improving the lives of young children in our communities is daunting and we greatly appreciate the support and guidance we receive from First Things First staff and Board of Directors. One piece that we are particularly proud of is the work completed in 2008 that began to give us a picture of what is really happening in our communities – this being the Navajo Nation Needs and Assets Report. We have used this report to guide our decisions, assist us with our focus areas and strategies, and share with community members both on and off the Navajo Nation.

This year we were presented with the job of once again contracting with an agency to update the current Needs and Assets report and again use this report as our guide to address the most paramount needs of young children in our region. Unfortunately, the report that was given to our Regional Council is not what we hoped it would be. We found misinformation and lack of disaggregated data included in the report. Further, the report painted a picture of desperate need without many resources. This we know is not true as we live and work in these communities. Although we appreciate the time and effort that was given by the selected vendor, MGT of America, we do not believe this report accurately reflects the Navajo Nation Region and therefore should not be published in its current state.

After much discussion the Navajo Nation Regional Council voted to approve the current Needs and Assets report only for statutory purposes. We do not want to use this report for our future planning, nor do we want this report published. We are considering other options to gain the data needed for our region and will practice due diligence in our process. We view this report similar to a teacher who looks at the cumulative record and assessments of the child - it is to guide us presenting both resources and areas of need. Therefore it is critical to have a completely accurate and comprehensive report with disaggregated data.

The First Things First Navajo Nation Regional Partnership Council will continue to advocate and provide opportunities to address critical early childhood issues. We will also commit to funding an addendum to our current Needs and Assets report that will give us the tool we need in the planning and decision-making process which we hold serious.

Thank you for your continued support.

Sincerely,

Paula Hale, Chair

Navajo Nation Regional Partnership Council

Introductory Summary and Acknowledgments

First Things First Navajo Nation Regional Partnership Council

The way in which children develop from infancy to well functioning members of society will always be a critical subject matter. Understanding the processes of early childhood development is crucial to our ability to foster each child's optimal development and thus, in turn, is fundamental to all aspects of wellbeing of our communities, society and the State of Arizona.

This Needs and Assets Report for the Navajo Nation Geographic Region provides a clear statistical analysis and helps us in understanding the needs, gaps and assets for young children and points to ways in which children and families can be supported. The needs young children and families face are outlined in the executive summary and documented in further detail in the full report.

The Navajo Regional Partnership Council recognizes the importance of investing in young children and empowering parents, grandparents, and caregivers to advocate for services and programs within the region. This report provides basic data points that will aid the Council's decisions and funding allocations; while building a true comprehensive statewide early childhood system.

Acknowledgments:

The First Things First Navajo Nation Regional Partnership Council owes special gratitude to the agencies and key stakeholders who participated in numerous work sessions and community forums throughout the past two years. The success of First Things First was due, in large measure, to the contributions of numerous individuals who gave their time, skill, support, knowledge and expertise.

To the current and past members of the Navajo Nation Regional Partnership Council, your dedication, commitment and extreme passion has guided the work of making a difference in the lives of young children and families within the region. Our continued work will only aid in the direction of building a true comprehensive early childhood system for the betterment of young children within the region and the entire State.

We also want to thank the Arizona Department of Economic Security and the Arizona Child Care Resource and Referral, the Arizona Department of Health Services and the Arizona State Immunization Information System, the Arizona Department of Education and School Districts across the State of Arizona, the Arizona Head Start Association, the Office of Head Start, and Head Start and Early Head Start Programs across the State of Arizona, and the Arizona Health Care Cost Containment System for their contribution of data for this report.

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EXECUTIVE SUMMARY

In January 2010, MGT of America, Inc. (MGT), was awarded a contract by the Arizona Early Childhood Development and Health Board, also known as First Things First (FTF), to provide a Regional Needs and Assets Report for the Navajo Nation Region. MGT teamed with Dr. Patrick Galvin, for this important engagement. The report synthesizes relevant community data to help inform the FTF Regional Council in decision making.

Methodology

The methodology used to prepare the Regional Needs and Assets Report is described in this section.

The focus of the report is a collection and meaningful analysis of informative data indicators. The Needs and Assets Report included an emphasis on the Councils' existing "assets," that is the institutions or organizations within each region that can be strengthened, expanded, and/or partnered with to support early childhood activities.

The team worked with FTF and other Arizona and national data sources for indicators in the Regional Needs and Assets Report template provided in the FTF solicitation. The team worked closely with Regional Coordinators and Managers to identify local sources of documented information. Examples of national and regional sources included in this report are as follows:

- Arizona Health Care Cost Containment System.
- Arizona Department of Economic Security.
- Arizona Department of Health Services.
- Arizona Department of Education.
- American Community Survey.
- Arizona Head Start Association and National Head Start.

Certain tables presenting data about the Navajo prekindergarten and other early childhood programs address specific questions raised by the Navajo Nation Regional Partnership Council. The data reported in the tables were generally extracted from Navajo Nation Head Start program reports and databases. Additionally, some of the information was collected directly from prekindergarten sites. Census 2000 data were used to calculate estimates of student populations where no other more current data were available. Arizona state community reports and other information was obtained from organizational websites. Program managers, site directors, and data management representatives of Head Start centers and other agencies were contacted in order to find, collate, and verify the data used in related exhibits.

Report Overview

The Navajo Nation Region has both strengths and challenges for young children and their families. Young child populations across the broader Navajo Nation Reservation (stretching between Arizona, New Mexico, and Utah) have declined in recent years, though these populations in the Arizona counties overlapping the region have remained relatively stable.

Economically, many additional challenging circumstances are present, median income levels in localities are lower than state and national benchmarks. Household incomes of single-parent females fall well below median values of married couples and single-parent, male householders. Contributing to this, unemployment rates are universally high across localities encompassed by the region, with a large proportion of communities exhibiting unemployment rates exceeding 20 percent.

As a result, poverty rates across the Navajo Nation Reservation and within encompassed counties in Arizona exceed statewide and national benchmarks. Fortunately, incidence of poverty among preschool and kindergarten enrollees showed declines in several encompassed localities (though rates remain very high).

Large percentages of local children are reported to be under the care of a grandparent. According the American Community Survey estimates, about 12 percent of children under the age of six years live in a grandparent's household across the entire Navajo Nation Reservation, and over nine percent in Navajo County. These ratios are more than two to three times the state and national benchmarks (both between three and four percent).

The physical infrastructure of some communities is also of serious concern, as more than 21 percent of occupied housing units across the Navajo Nation Reservation and nearly 8 percent in Navajo County lack complete plumbing facilities.

Despite poor and often deteriorating economic conditions, the numbers of families in the area receiving Navajo Nation Program for Self Reliance (NNPSR) and Child Care Assistance (CCA) declined in recent years, which may indicate difficulties in administering or accessing these programs. Women, Infants, and Children (WIC) participation increased substantially, however, as assistance increased by 139 percent among women and 64 percent among children.

With economic hardships forcing parents to seek additional sources of income, childcare needs are emphasized. The capacities of local childcare providers are not entirely clear, as some data suggest declining availability in the broader region containing Navajo, Apache, Coconino, and Yavapai counties, while more localized data suggest expanding availability specifically within the Navajo Nation region. Local Head Start centers represent a definitive asset to the region in this capacity; nonetheless, as noted successively in more detail, waiting lists and home-based enrollments in these centers appeared to show needs extending beyond the current resources that are available.

Preschool enrollment in Head Start centers, specifically, declined between 2007-08 and 2008-09 among children aged 3 to 5, but increased among younger children (ages 0 to 2 years). Estimates of overall participation rates by young children in Head Start programs varies widely, from a high of over 70 percent of young children in the Central Agency to less than 40 percent in the Western Agency.

Though these statistics in isolation do not demonstrate capacity needs (negative enrollment trends could reflect population dynamics), other indicators seem to point towards significant barriers to access due to capacity or other reasons. Home-based enrollments – usually associated with capacity shortages – represent as much as a quarter of total Head Start preschool enrollments in some communities. Where wait-lists are available, some include a volume of children in excess of 48 percent of total enrollments. Proximity to programs may represent one barrier to accessing preschool programs. About 15 percent of communities in the area were estimated to be in excess of 20 miles from the nearest Head Start program.

Aside from capacity constraints, Head Start programs appear to be performing well. According to a prekindergarten assessment administered within the region (Creative Curriculum), preschool programs are providing valuable contributions to the future of student success. As an example, preschool students in the Central Agency rated as “not ready” for more advanced educational programs declined from 19 percent to 2 percent between the fall and winter 2008-09 terms. The proportion rated as “ready” increased from just 8 percent to 49 percent over this time period. Tailored assessment tools of this nature are also an asset to the region, as they can be used to analyze circumstances and promote improvements if properly utilized.

The healthcare providers serving the region represent additional substantial assets in the area. However, the two primary care areas overlapping the region (Navajo and Apache counties) score very poorly based on combined measures of accessibility and assorted ratios gauging the availability of healthcare services and providers relative to local needs.

A related instance of need is the large proportion of local children that are reported to be disabled, which far exceeds state and national benchmarks (over four to five times the rate of incidence, respectively). Additionally, nearly one-third of these disabled children in the area may reside in households with incomes below the Federal Poverty Level (FPL). Screenings and services provided to disabled children declined between 2007 and 2009.

The numbers of mothers seeking prenatal care increased in Navajo County, but decreased in Apache and Coconino counties. Between 2005 and 2008, there was an increase in the need for neonatal intensive care for preterm births. Fortunately, the numbers of low birth-weight newborns decreased in Navajo County. Another positive aspect of the local early childhood health care system is that vaccination rates far exceed state and national averages from 12 through 35 months.

The total rates of uninsured for the broader Navajo Nation Reservation as well as all local counties in Arizona (Navajo, Apache, and Coconino) far exceed state and national rates.

Participation in the Arizona Health Care Cost Containment System (AHCCCS) increased significantly in recent years in all Arizona counties partially or fully overlapping the region. Simultaneously, KidsCare enrollment declined. Though the availability of Indian Health Service (IHS) mitigates these concerns, state and federal designations of primary care service needs and shortages of health care professionals are areas of concern.

The majority of children in tribal areas throughout the state appear to have adequate access to dental care, though a large segment still lacks access, as their frequency of visits lags behind statewide averages. Nearly a quarter of residents in all tribal areas throughout the state must drive more than 20 miles to a dentist. Local conditions suggest substantial access barriers for pediatric dental care with limited facilities available through IHS.

According to the Navajo Nation Regional Partnership Council funding plan for SFY 2011, prioritized needs are as follows:

- Increasing quality of early care and education programs that include: state of the art facilities, transportation, research-based data, trained staff, and culturally responsive with the native language.
- Enhancing family support, education, and outreach and/or support and expand community awareness.
- Increasing the numbers of highly skilled and well-prepared early childhood development workers.
- Expanding public awareness of early childhood development and health efforts.
- Decreasing dental disease among children six months through age five.
- Increasing education and guidance on nutrition and prevention of childhood obesity and diabetes.
- Developing access to comprehensive health and support services for children birth to age five.

These priorities are clearly supported by the data provided throughout this report.

1.0 INTRODUCTION

1.1 Overview of the Navajo Nation Region

Navajo Nation is the name of a sovereign Native American nation established by the Diné. The Navajo Indian Reservation covers about 27,000 square miles of land, occupying all of northeastern Arizona, and extending into Utah and New Mexico, and is the largest land area assigned primarily to a Native American jurisdiction within the United States. The latest Census Bureau estimates indicate over 163,000 individuals residing within the broader Navajo Nation territory. It is often said that there is a Navajo in every community in the world. However, all Diné cherish the notion of returning to the Navajo lands and there is a sacred relationship between the people and the land.

Each tribe establishes its own requirements for being an enrolled tribal member, which is usually based on “blood quantum.” The Navajo Nation requires a blood quantum of one-fourth for a person to be an enrolled tribal member and to receive a Certificate of Indian Blood (CIB). In comparison, some tribes require a one thirty-second blood quantum for issuing a CIB. CIB is required for enrollment in a myriad of services including IHS (health), financial aid, land, and social services. Recently, the Navajo Tribal Council voted down a proposal to reduce the blood quantum to one-eighth, which would have effectively doubled the number of individuals qualified to be enrolled Navajo tribal members. Navajo Nation has a well-established infrastructure of governmental communication to coordinate systems, with a central capitol in Window Rock and five Area Agencies: Western, Eastern, Fort Defiance, Central and Northern. Three of these agencies (Central, Western, and Fort Defiance) are located within the confines of the Navajo Nation FTF Region, and are therefore the primary focus of analyses (though other agencies may also serve local children).

As indicated in the regional council funding plan for SFY2011, the council has adopted the regional methodology utilized by the Coconino Regional Partnership Council, to divide the immense region into three separate service delivery areas – Navajo County, Apache County, and Coconino County.

1.2 Methodology

The team worked closely with Regional Coordinators and Managers to identify local sources of documented information. Examples of national and regional sources included in this report are as follows:

- Arizona Health Care Cost Containment System.
- Arizona Department of Economic Security.
- Arizona Department of Health Services.
- Arizona Department of Education.
- American Community Survey.

Many of the analyses included in the successive chapters of this report rely on American Community Survey (ACS) data published by the U.S. Census Bureau. The information presented for each topic area reflects the most current and geographically comprehensive data available through this source. More specifically, three particular databases were used to generate the tables: 1) three-year average estimates covering the 2006-08 period, 2) single-year estimates for the year 2008, and, 3) single year estimates for the year 2005 (used as a historic reference point to calculate change). Items noted as “2008” reflect either the three-year average estimate for the demographic statistic over the 2006-08 period or, if unavailable, the single-year estimate for the year 2008. Alternately, items denoted as "3-Year Trend" indicate the percentage change in the demographic component between the single-year estimates for the years 2005 and 2008.

As noted, data from ACS are presented for the most specific geographies available for each data element. ACS will not publish results when population totals are insufficient (too small) to allow for reliable estimation; therefore, localities depicted for respective analyses will vary from exhibit to exhibit.

In addition to national, state, and county-level data, geographies available through the ACS at the sub-FTE regional level include Census Designated Places (most frequently cities), Unified School Districts, Elementary School Districts, and High School Districts. Note that the demographic statistics associated with school districts do not apply specifically to enrollment in these systems, but cover all residents living within the geographic boundaries.

Certain tables about the Navajo prekindergarten and other early childhood programs address specific questions raised by the Navajo Nation Regional Partnership Council. The data reported in the tables were generally extracted from Navajo Nation Head Start program reports and databases. Additionally, some of the information was collected directly from prekindergarten sites. Census 2000 data were used to calculate estimates of student populations where no other more current data were available. Arizona state community reports and Navajo Nation Chapter House reports were obtained from organizational websites. Program managers, site directors, and data management representatives were contacted in order to find, collate, and verify the data used in related exhibits.

2.0 THE FAMILIES AND CHILDREN LIVING IN THE NAVAJO NATION REGION

This chapter presents data and analysis regarding families and children living in the region.

2.1 General Population Trends

Exhibit 2-1 presents an analysis of the population being served. As shown:

- The broader Navajo Nation Reservation (stretching between Arizona, New Mexico, and Utah) has seen substantial declines in its child populations in recent years.
- Counties in Arizona relevant to the Navajo Nation Region, however, have seen relatively stable child populations.

**EXHIBIT 2-1
PERCENTAGE, NUMBER, AND CHANGE IN POPULATION
AGED 0 TO 5 YEARS**

AREA	POPULATION 0 TO 5 YEARS		
	2008 Estimate*	Percent of Total Population (All Ages)	% Change: 2005 - 2008
Navajo Nation Reservation and Off-Reservation Trust Land, AZ--NM--UT	12,510	7.7%	-27.1%
Apache County	5,854	8.4%	-4.5%
Coconino County	9,957	7.8%	4.5%
Navajo County	9,103	8.2%	5.1%
Arizona	500,031	7.9%	12.1%
United States	20,672,826	6.9%	3.2%

Source: U.S. Census Bureau, American Community Survey.

* – values represent either the average estimate over the three years ending in 2008 (a more reliable estimate for small populations) or the single year estimate for 2008.

2.2 Additional Population Characteristics

This section presents other data and assorted indicators providing additional perspectives on the social circumstances that exist among children and families in the area.

Exhibit 2-2 presents data on the number of low birth weight newborns and unwed mothers. As shown:

- From 2005 to 2008, the number of low birth weight newborns in Arizona increased by almost 6 percent, as compared to the declining numbers in Apache County (-0.8 %) and Coconino County (-12.8 %), while the numbers increased at a rate exceeding the statewide average in Navajo County (9.4 %).
- The number of unwed mothers increased by more than 9 percent across the state of Arizona. The change in the number of unwed mothers was less substantial in local counties.

EXHIBIT 2-2
SELECTED CHARACTERISTICS OF BIRTHS

AREA	NUMBER OF LOW BIRTH WEIGHT NEWBORNS			NUMBER OF UNWED MOTHERS		
	2005	2008	Percent Change	2005	2008	Percent Change
Apache County	121	120	-0.8%	1,005	1,001	-0.4%
Coconino County	179	156	-12.8%	1,059	1,090	2.9%
Navajo County	138	151	9.4%	964	1,014	5.2%
Arizona	6,633	7,026	5.9%	40,981	44,728	9.1%

Source: Arizona Department of Health Services.

Exhibit 2-3 presents estimates of the total number of births in assorted localities as well as the distribution by age. As shown:

- The largest number of births was observed in Coconino County (over 34,600), which was more than double the number observed in Apache County and 28 percent more than what was observed in Navajo County.
- Apache County, however, has the largest share of births to teenage mothers (1.5 % of total), followed closely by Navajo County (1.3 %). These rates compare with a statewide rate of about 0.5 percent.

EXHIBIT 2-3
TOTAL BIRTHS AND DISTRIBUTION BY AGE OF MOTHER

AREA	TOTAL BIRTHS	PERCENTAGE OF BIRTHS BY AGE	
	2008 Estimate*	15 to 19 years	20 years and over
Navajo Nation Reservation and Off-Reservation Trust Land, AZ--NM--UT	42,140	0.8%	99.2%
Apache County (AZ)	16,836	1.5%	98.5%
Coconino County (AZ)	34,613	0.3%	99.7%
Navajo County (AZ)	27,036	1.3%	98.7%
Arizona	1,527,479	0.5%	99.5%
United States	75,860,506	0.4%	99.6%

Source: U.S. Census Bureau, American Community Survey.

* – values represent either the average estimate over the three years ending in 2008 (a more reliable estimate for small populations) or the single year estimate for 2008.

The education level of mothers and early learning exposure for their children are thought to be related. As shown in **Exhibit 2-4**:

- The proportion of new mothers in the broader Navajo Nation Reservation as well as those residing in Navajo County were less likely to have completed high school as compared to the average for Arizona, and much less likely to have completed high school as compared to the national rate.
- College-level attainment of new mothers in these areas also appears to fall behind statewide and national benchmarks, particularly at the bachelor's degree level.

EXHIBIT 2-4
EDUCATIONAL LEVEL OF WOMEN WHO GAVE BIRTH IN THE LAST 12 MONTHS

AREA	EDUCATIONAL ATTAINMENT RATES OF WOMEN WHO GAVE BIRTH IN LAST 12 MONTHS									
	Less than High School		High School or Equivalent		Some College or AA Degree		Bachelor's Degree		Graduate/ Professional Degree	
	2008 Estimate**	% Change: 2005 - 2008	2008 Estimate**	% Change: 2005 - 2008	2008 Estimate**	% Change: 2005 - 2008	2008 Estimate**	% Change: 2005 - 2008	2008 Estimate**	% Change: 2005 - 2008
Navajo Nation Reservation and Off-Reservation Trust Land, AZ--NM--UT	28.8%	-45.0%	42.0%	15.3%	26.3%	*	2.2%	*	*	*
Apache County	16.0%	*	39.9%	*	40.3%	*	3.8%	*	*	*
Coconino County	15.3%	-57.0%	21.8%	*	37.7%	176.0%	*	*	8.5%	*
Navajo County	27.6%	80.3%	34.1%	-57.4%	30.5%	*	4.4%	*	*	*
Arizona	25.3%	-1.6%	26.1%	-20.9%	30.0%	13.8%	12.4%	15.1%	6.3%	15.4%
United States	17.8%	-7.6%	25.9%	-8.3%	29.2%	11.5%	18.2%	-2.1%	9.0%	9.8%

Source: U.S. Census Bureau, American Community Survey.

* – indicates sample size too small to estimate specific demographic component.

** – values represent either the average estimate over the three years ending in 2008 (a more reliable estimate for small populations) or the single year estimate for 2008.

Exhibit 2-5 presents the percentage of households in which all parents in the home are employed or seeking employment and are in need of childcare. As shown:

- According to the most recent estimates, the percentage of families in the Navajo Nation Region within which all parents were in the workforce was less than the state and national averages.
- The trend across the state and nation suggests an increasing proportion of households with all parents in the workforce, increasing the likely need for childcare.

EXHIBIT 2-5
PERCENTAGE OF HOUSEHOLDS IN WHICH ALL PARENTS ARE
EMPLOYED OR SEEKING EMPLOYMENT/NEEDING CHILDCARE

AREA	PERCENT OF FAMILIES WITH CHILDREN UNDER 18**	
	2008 Estimate*	% Change: 2005 - 2008
Navajo Nation Reservation and Off-Reservation Trust Land, AZ--NM--UT	58.9%	*
Apache County	59.6%	*
Navajo County	64.3%	*
Arizona	67.2%	5.1%
United States	71.0%	4.1%

Source: U.S. Census Bureau, American Community Survey.

* – indicates sample size too small to estimate specific demographic component.

** – represents all households with all parents employed or seeking employment as a proportion of total households with children under the age of 18. Values represent either the average estimate over the three years ending in 2008 (a more reliable estimate for small populations) or the single year estimate for 2008.

Exhibit 2-6 presents an analysis of the populations' ability to speak English. Data were only available for one (Coconino) of the three counties encompassed by the Navajo Nation Region. As depicted:

- Overall, the population of Coconino County exhibits higher levels of English proficiency than statewide or national benchmarks, due primarily to a lower proportion of Spanish-speaking individuals.
- However, the area shows the largest proportion of individuals included in the "Other languages" category, which would include Navajo speakers.

EXHIBIT 2-6 ENGLISH LANGUAGE PROFICIENCY

AREA	TOTAL POPULATION AGES 5 YEARS AND OVER	2008 ESTIMATED PERCENTAGE OF POPULATIONS WITH LIMITED ENGLISH PROFICIENCY BY LANGUAGE SPOKEN AT HOME**				
		Spanish- speakers	Other Indo-European- speakers	Asian/Pacific Island-speakers	Other languages^	Subtotal, Limited English
Coconino County	117,334	1.8%	0.1%	0.2%	1.6%	3.7%
Arizona	5,843,921	6.5%	0.2%	0.3%	0.3%	7.3%
United States	280,564,877	3.5%	0.5%	0.7%	0.1%	4.8%

Source: U.S. Census Bureau, American Community Survey.

** —defined as those of each native tongue that speak English "not well" or "not at all." Values represent either the average estimate over the three years ending in 2008 (a more reliable estimate for small populations) or the single year estimate for 2008.

^ includes Navajo language.

Exhibit 2-7 presents an analysis of Navajo Nation language immersion programs at area Head Start centers. All of the Navajo Nation Head Start programs are full immersion language and culture programs, so the entire student program population is in an immersion program. It should be noted that there is a slight overlap of children by age across preschool and early childhood, and the figures depicted are for the Navajo Head Start program only; they do not include public school program enrollments. As shown:

- There was a 6.4 percent decline in preschool enrollments, while early childhood enrollments remained stable.
- These enrollments represent about 12 percent of the 24,900 total children aged 0 to 5 years in the tri-county area. (As previously shown in **Exhibit 2-1**).

EXHIBIT 2-7 CHILDREN UNDER FIVE ENROLLED IN A FULL OR PARTIAL NAVAJO LANGUAGE IMMERSION PROGRAM

AGE GROUP	2007-08	2008-09	PERCENT CHANGE
Preschool, Ages 3 - 5	3,047	2,852	-6.4%
Early Childhood, Ages 1 - 2	60	60	0.0%
Total	3,107	2,912	-6.3%

Source: Navajo Nation Head Start programs.

Exhibit 2-8 presents the numbers of children who have experienced domestic violence based on available data. Neither the justice department nor police department were willing to share data. A more complete account of domestic violence will require greater political support and negotiation with the respective agencies.

- The figure declined from 23 to 17 over the 2007-08 through 2008-09 period, a drop of about 26 percent, according to figures reported by Head Start.
- It is suspected that this is a small sample of the overall issues, however.

EXHIBIT 2-8
NUMBER OF CHILDREN WHO HAVE EXPERIENCED DOMESTIC VIOLENCE IN THE HOME (REPORTED)

AREA	TOTAL NUMBER	
	2007-08	2008-09
Navajo Nation	23	17

Source: Navajo Nation Head Start end of year program report.

Exhibit 2-9 depicts the number of children with one or more parent incarcerated over two points in time.

- The indication of only two children in either year seems improbably small, possibly due to reluctance to reporting such data.
- As in the previous analysis, this likely only represents a sampling of actual occurrences.

EXHIBIT 2-9
NUMBER OF CHILDREN WHO HAVE ONE OR MORE INCARCERATED PARENT OR FAMILY MEMBER

AREA	TOTAL NUMBER	
	2007-08	2008-09
Navajo Nation	2	2

Source: Navajo Nation Head Start end of year program report.

While the population of children across the broader Navajo Nation Reservation declined rapidly, the segments located in Arizona remained relatively stable. However, the population growth due to new births was associated with some concerns, as many risk factors are apparent for births in the area. Increasing numbers of low birth weight newborns and high rates of teenage motherhood (two to three times the statewide rate) were apparent in Navajo County. Additionally, women in the area who gave birth were much less educated than elsewhere in the state; with over 70 percent across the broader Navajo Reservation and over 60 percent of Navajo County residents having attained a high school education or less.

2.3 Economic Circumstances

This section presents assorted data and indicators outlining economic and infrastructural circumstances facing children and families in the area.

Children in families with unemployed parents may face additional stresses. **Exhibit 2-10** shows that from January-June 2007 to January-June 2009, the number of unemployment insurance claimants in the Navajo Nation Region and the state of Arizona increased dramatically, consistent with the nationwide economic downturn. Among local geographies, Navajo County experienced the greatest increase at over 109 percent. Nonetheless, this is less than the statewide rate of increase in claimants of 166 percent over this period.

EXHIBIT 2-10
UNEMPLOYMENT INSURANCE CLAIMANTS

AREA	JANUARY- JUNE 2007	JANUARY- JUNE 2009	PERCENT CHANGE
Navajo Nation	3,807	5,430	42.6%
Apache County	2,229	3,034	36.1%
Coconino County	2,777	4,946	78.1%
Navajo County	2,608	5,458	109.3%
Arizona	87,083	231,628	166.0%

Source: Arizona Department of Economic Security (2007, 2009). DES Multidata pulled on May 4, 2010 from Database (Unpublished Data).

Expanding on this issue, **Exhibit 2-11** presents the total employment and trend in employment rates on available data for assorted localities. As shown:

- Unemployment rates for March 2010 in the region range from a low of about six percent (Ganado) to 57 percent in Chilchinbito. Many communities have unemployment rates in excess of 20 percent.
- Unemployment rates in Navajo Nation increased by a proportion of 50 to 100 percent in many localities from 2005 to 2010.
- Areas where unemployment rates increased by over 80 percent during this period included Red Mesa (81.4%), Greasewood (82.8%), and Shonto (89.8%).

**EXHIBIT 2-11
UNEMPLOYMENT RATE**

AREA	TOTAL EMPLOYED INDIVIDUALS MARCH 2010	UNEMPLOYMENT RATE MARCH 2005	UNEMPLOYMENT RATE MARCH 2010	UNEMPLOYMENT PERCENT CHANGE
Burnside	129	6.9%	11.0%	59.4%
Cameron	307	10.9%	17.3%	58.7%
Chilchinbito	58	39.4%	57.0%	44.7%
Chinle	1,546	15.6%	24.2%	55.1%
Fort Defiance	1,265	10.3%	16.6%	61.2%
Ganado	632	3.6%	6.1%	69.4%
Greasewood	140	9.9%	18.1%	82.8%
Houck	269	11.0%	17.5%	59.1%
Kaibito	448	26.4%	37.8%	43.2%
Kayenta	1,483	13.9%	24.4%	75.5%
Leupp	397	2.4%	3.9%	62.5%
Lukachukai	187	28.6%	41.0%	43.4%
Many Farms	574	9.6%	15.5%	61.5%
Nazlini	35	21.4%	31.4%	46.7%
Red Mesa	94	4.3%	7.8%	81.4%
Rock Point	246	10.2%	16.6%	62.7%
Rough Rock	105	23.8%	35.2%	47.9%
Round Rock	105	15.4%	23.4%	51.9%
Sawmill	129	15.4%	24.1%	56.5%
Shonto	245	5.9%	11.2%	89.8%
St. Michaels	410	4.5%	7.2%	60.0%
Steamboat	59	6.8%	11.9%	75.0%
Teec Nos Pos	258	11.4%	18.1%	58.8%
Tonalea	166	36.3%	49.1%	35.3%
Tsaile	187	15.0%	23.4%	56.0%
Tuba City	3,457	10.9%	17.2%	57.8%
Window Rock	1,136	5.8%	9.7%	67.2%
Apache County	19,184	10.0%	16.1%	6.1%
Coconino County	68,953	5.1%	8.3%	3.2%
Navajo County	3,445	8.5%	15.6%	7.1%

Source: Arizona Department of Economic Security.

Federal poverty guidelines vary by size of family and are adjusted each year for inflation. As issued by the Department of Health and Human Services for 2009, the threshold for a single person is \$10,830 per year, and increases by \$3,740 with each additional family member. Families are considered to be living in poverty if their income is below \$14,570 for a family of two, \$18,310 for a family of three, and \$22,050 for a family of four.

Often correlated with high rates of unemployment are high rates of poverty. **Exhibit 2-12** presents estimates of the total number of families residing in local communities as well as the proportion with household income falling below the Federal Poverty Level. As shown:

- Poverty rates are most severe across the broader Navajo Nation Reservation (extending into Utah and New Mexico); where upwards of 30 percent of families are classified as impoverished.
- However, each of the local counties in Arizona exhibit poverty rates beyond statewide and national averages, with Apache County exhibiting the most severe levels.

EXHIBIT 2-12 POVERTY STATUS OF FAMILIES

AREA	TOTAL FAMILIES	PERCENT IN POVERTY
	2008 Estimate*	
Navajo Nation Reservation and Off-Reservation Trust Land, AZ--NM--UT	30,594	30.5%
Apache County (AZ)	13,108	24.5%
Coconino County (AZ)	29,282	10.6%
Navajo County (AZ)	25,923	17.3%
Arizona	1,483,518	10.2%
United States	74,870,525	9.6%

Source: U.S. Census Bureau, American Community Survey.

* – values represent either the average estimate over the three years ending in 2008 (a more reliable estimate for small populations) or the single year estimate for 2008.

Exhibit 2-13 presents an analysis of the means of transportation available to residents in the area. The availability and accessibility of transportation can affect a family's ability to find and attend work, transport their children to and from school, and seek medical care. While data specific to families with young children would be ideal, the best approximation available is the documentation of the means of transportation available to workers aged 16 years and over.

- The percentage of all workers without a personal vehicle are slightly higher than statewide averages for the broader Navajo Nation Reservation, but the three local counties have lower proportions of individuals without vehicles.

- The rates of using public transportation among workers without vehicles are much lower in all of the local areas than elsewhere in the state or across the nation.

EXHIBIT 2-13
MEANS OF TRANSPORTATION TO WORK AMONG
WORKERS AGE 16 AND OVER WITHOUT A VEHICLE

AREA	TOTAL WORKERS, 16+ YEARS	2008 ESTIMATED PROPORTIONS OF WORKERS WITH NO PERSONAL VEHICLE AVAILABLE BY MEANS OF TRANSPORTATION TO WORK (PERCENT OF TOTAL WORKERS 16+ YEARS)*						
		Drove Alone	Carpooled	Public Transportation	Walked	Other Transportation	Worked from Home	Subtotal, No Vehicle
Navajo Nation Reservation and Off-Reservation Trust Land, AZ—NM—UT	43,777	1.62%	0.56%	0.05%	0.54%	0.21%	0.54%	3.53%
Apache County (AZ)	18,514	0.39%	0.72%	0.03%	0.26%	0.09%	0.26%	1.75%
Coconino County (AZ)	60,174	0.58%	0.55%	0.18%	0.18%	0.57%	0.18%	2.24%
Navajo County (AZ)	39,840	1.19%	0.50%	0.27%	0.09%	0.40%	0.09%	2.55%
Arizona	2,787,916	0.73%	0.59%	0.68%	0.10%	0.40%	0.10%	2.61%
United States	138,847,754	0.77%	0.58%	1.78%	0.16%	0.33%	0.16%	3.79%

Source: U.S. Census Bureau, American Community Survey.

* – values represent either the average estimate over the three years ending in 2008 (a more reliable estimate for small populations) or the single year estimate for 2008.

The proportion of occupied housing units that lack complete plumbing facilities is presented in **Exhibit 2-14**. As shown:

- Less than one percent of occupied housing units across the state and nation lack complete plumbing facilities.
- Conversely, each of the Navajo Nation geographies has a much more significant share of housing units without complete plumbing facilities, ranging from 3.4 percent in Coconino County to 21.4 percent for the broader Navajo Nation Reservation.

EXHIBIT 2-14
LACK OF COMPLETE PLUMBING FACILITIES

AREA	2008 ESTIMATED TOTAL OCCUPIED HOUSING UNITS*	PERCENTAGE LACKING COMPLETE PLUMBING FACILITIES
Navajo Nation Reservation and Off-Reservation Trust Land, AZ--NM--UT	42,039	21.4%
Apache County	18,425	17.8%
Coconino County	44,530	3.4%
Navajo County	35,104	7.7%
Arizona	2,250,241	0.7%
United States	112,386,298	0.5%

Source: U.S. Census Bureau, American Community Survey.

* – values represent either the average estimate over the three years ending in 2008 (a more reliable estimate for small populations) or the single year estimate for 2008.

Note: Data regarding electricity in homes were not available.

Exhibit 2-15 presents the median household incomes of families residing in the area. As shown:

- Universally, single-parent female households have the lowest average income levels as compared to single-parent males and married couples.
- Additionally, while income levels of married couples and single-parent male households increased for all geographies (where data were available), income levels for single-parent female households fell in two of three local counties as well as across the broader Navajo Nation Reservation.
- In terms of geographic disparities, income levels in all local geographies besides Coconino County fall well below state and national benchmarks.

EXHIBIT 2-15
MEDIAN INCOME OF FAMILIES WITH CHILDREN UNDER 18 BY FAMILY TYPE

AREA	MEDIAN PERSONAL INCOME, FAMILIES WITH CHILDREN UNDER 18					
	Married Couples		Single-Parent, Male		Single-Parent, Female	
	2008 Estimate**	% Change: 2005 - 2008	2008 Estimate**	% Change: 2005 - 2008	2008 Estimate**	% Change: 2005 - 2008
Navajo Nation Reservation and Off-Reservation Trust Land, AZ--NM--UT	\$46,093	36.0%	\$30,177	148.8%	\$19,716	-18.6%
Apache County	\$45,075	9.2%	\$40,156	*	\$24,643	39.3%
Coconino County	\$72,159	21.7%	\$33,036	80.4%	\$24,432	-34.4%
Navajo County	\$56,422	44.4%	\$27,359	103.7%	\$21,980	-2.7%
Arizona	\$73,039	13.3%	\$39,197	11.3%	\$27,091	11.2%
United States	\$78,924	13.6%	\$38,160	7.3%	\$24,786	13.4%

Source: U.S. Census Bureau, American Community Survey.

* – estimate for baseline of trend fell within the lowest interval of an open-ended distribution and therefore was excluded from analysis.

** – values represent either the average estimate over the three years ending in 2008 (a more reliable estimate for small populations) or the single year estimate for 2008.

Economic circumstances in the area are severely depressed. Unemployment rates throughout many localities are dramatically higher than the state average and have increased in recent years with the national economic downturn. Poverty rates in Navajo County exceed state averages for married couples as well as single-parent homes. Infrastructural circumstances in the area inhibit development. Lacking plumbing facilities represent a sanitary health risk, while limited access to transportation inhibits workers' abilities to pursue or continue in positions of employment.

2.4 Educational Indicators

This section presents assorted data and indicators regarding the educational system serving children in the region.

Exhibit 2-16 shows the academic achievement of students (all grades) in the region as measured by scoring on America's Instrument to Measure Standards (AIMS). Science assessment scores were not available for 2008. Please note that schools with missing data were removed from this analysis. As shown:

- For both 2008 and 2009, Coconino County schools had a higher combined rate of "meets" or "exceeds" scores on math, reading, and writing assessments than either Apache or Navajo county.

- Over half of students in Apache County (52% in 2009) and nearly half of the students in Navajo County (47%) fell far below or only approached standards for math. Proportions in excess of 30 percent failed to meet standards in Reading and Writing and in every county.
- Ratings in the sciences appear to be the most serious concern, as 75 percent of students in Apache County, 52 percent in Coconino County, and 66 percent of students in Navajo County failed to meet standards.

EXHIBIT 2-16
AMERICA'S INSTRUMENT TO MEASURE STANDARDS (AIMS)
AVERAGE SCORES BY COUNTY AND SUBJECT AREA FOR ALL GRADES

AREA/ YEAR	MATH			READING			WRITING			SCIENCE		
	Number Tested	Combined Percent: Falls Far Below and Approaches	Combined Percent: Meets and Exceeds	Number Tested	Combined Percent: Falls Far Below and Approaches	Combined Percent: Meets and Exceeds	Number Tested	Combined Percent: Falls Far Below and Approaches	Combined Percent: Meets and Exceeds	Number Tested	Combined Percent: Falls Far Below and Approaches	Combined Percent: Meets and Exceeds
Apache (2008)	54,758	51.2%	48.1%	55,108	49.6%	50.4%	53,297	39.7%	60.5%	N/A	N/A	N/A
Apache (2009)	55,445	52.1%	47.9%	54,014	49.2%	50.8%	52,729	38.9%	62.0%	21,166	75.0%	26.3%
Percent Change	1.3%	1.7%	-0.3%	-2.0%	-0.8%	0.7%	-1.1%	-2.1%	2.5%	N/A	N/A	N/A
Coconino (2008)	76,107	37.8%	62.9%	76,026	35.7%	65.3%	75,246	32.0%	69.0%	N/A	N/A	N/A
Coconino (2009)	74,274	39.4%	62.3%	73,808	36.4%	65.0%	73,210	31.7%	69.0%	28,444	52.4%	48.4%
Percent Change	-2.4%	4.2%	-1.0%	-2.9%	1.9%	-0.6%	-2.7%	-1.1%	-0.1%	N/A	N/A	N/A
Navajo (2008)	83,135	46.7%	53.6%	80,732	42.1%	58.0%	79,453	37.3%	62.9%	N/A	N/A	N/A
Navajo (2009)	80,560	46.8%	53.9%	77,923	42.8%	57.3%	77,159	36.5%	63.6%	30,906	66.0%	34.2%
Percent Change	-3.1%	0.1%	0.5%	-3.5%	1.6%	-1.2%	-2.9%	-2.2%	1.1%	N/A	N/A	N/A

Source: Arizona Department of Education (2010). AZ's Instrument to Measure Standard (AIMS) Results. Retrieved March 31, 2010 from Arizona Department of Education. <http://www.ade.state.az.us/researchpolicy/AIMSResults/>.

N/A – data not available or calculation not applicable due to lack of data.

A potentially important perspective regarding service needs in the Navajo Nation Region relates to wait lists for preschool programs. However, there is no single source of information to adequately gauge this issue. The best approximation for this relies on an examination of several different sources of information dealing with capacities relative to potential demand for Head Start programs. **Exhibits 2-17 through 2-19** examine the numbers of children being served and the regional distribution of services offered to provide some insight into this question. Several assumptions and qualifiers underlie this analysis:

- The Head Start program serves ages 3, 4, and 5 (early childhood programs excluded).
- Using 2000 Census figures, we estimate that the total population of children ages 3, 4, and 5, is about 6,000.
- When the capacity of Head Start Centers is filled, students are placed in home-based services.
- The home-based enrollments serve as an indicator of unmet demand for Center Services and possibly broader preschool interest levels.

Exhibit 2-17 shows the number of preschool students enrolled in programs as a proportion of the total estimated populations. The estimated proportion of the population being served declined between 2007-08 and 2008-09.

**EXHIBIT 2-17
HEAD START ENROLLMENTS AS PROPORTION OF
CHILD POPULATION AGES 3-5**

YEAR	ESTIMATED POPULATION (AGES 3, 4, AND 5)	CUMULATIVE ANNUAL ENROLLMENT	ESTIMATED PERCENT OF POPULATION SERVED
2007-08	6,000	3,047	51%
2008-09	6,000	2,852	48%

Source: Census 2000 and Head Start program enrollment.

A second table accounts for the number of children enrolled in home-based programs, which are provided when the local center does not have room for additional children. The home-based program can be thought of as an overflow program, to provide for students who cannot be served in the center.

Exhibit 2-18 demonstrates total Head Start enrollments by agency adjacent to home based (overflow) enrollments for each, as well as a calculation of the associated proportions of unmet need.

EXHIBIT 2-18
HEAD START CENTER AND HOME-BASED ENROLLMENTS

AGENCY	2008-09 ENROLLMENT			
	Head Start Centers	Home-Based	Total	Estimated Percent Overflow Beyond Center Capacities
Central Agency	524	146	670	21.8%
Eastern Agency	509	60	569	10.5%
Fort Defiance Agency	544	59	603	9.8%
Northern Agency	399	55	454	12.1%
Western Agency	413	143	556	25.6%
Grand Total	2,389	463	2,852	16.2%

Source: Enrollment counts provided by the Navajo Nation Head Start program.

The final table in this analysis (**Exhibit 2-19**) provides a third perspective on this issue, based on the Head Start programs' accounts of student names on their official wait list.

EXHIBIT 2-19
HEAD START ENROLLMENTS AND ESTIMATED WAIT LIST VOLUME

AGENCY	2008-09 ENROLLMENT		
	Total Program Enrollment	Wait List Counts	Percent of Student Names on Wait List
Central Agency	671	98	14.6%
Eastern Agency	570	120	21.0%
Fort Defiance Agency	604	61	10.1%
Northern Agency	455	220	48.4%
Western Agency	558	82	14.7%
Grand Total	2,858	581	20.3%

Source: Enrollment counts provided by the Navajo Nation Head Start program.

Comparing the home-based statistics with wait-list data shows that the Northern Agency, for example, has a large wait-list but a relatively small home-based program. The juxtaposition of such data raises several questions:

- Does the larger wait-list in Northern show a greater demand for prekindergarten services or simply better record-keeping?
- Are there problems in Northern providing home-based services?

Alternately, in the Fort Defiance area, both the wait-list and home-based enrollments are comparatively small:

- Does this reflect the availability of alternative services?
- Does this reflect varying socioeconomic circumstances relative to other regions?
- Do other unidentified causes contribute to this?

Enhancements to reporting of statistics and general record keeping would assist in addressing some of these questions. Successive research efforts should attempt to examine some of these circumstances to clarify the dynamics behind the observed characteristics of various agencies.

The numbers of sites and preschool and childcare enrollment levels are depicted in **Exhibit 2-20**. As shown:

- The Eastern and Fort Defiance agencies have the most sites (28 each between preschool or childcare). The Fort Defiance Agency has the largest number of preschool sites, specifically, at 25.
- Enrollment levels are not consistent with the number of sites; for instance, the Central Agency reported the largest number of total enrollments, yet not the highest number of sites.
- If home-based enrollments serve as a proxy for unmet preschool needs, then the Western Agency and Central Agency may have the most significant needs as demonstrated by the large proportions of home-based enrollments.

EXHIBIT 2-20
SUMMARY OF PRESCHOOL AND CHILDCARE
ENROLLMENTS AND SITES BY AGENCY

AGENCY	NUMBER OF SITES			ENROLLMENTS		
	Preschool	Childcare	Total	Center	Home-Based	Total
Central Agency	17	3	20	381	134	515
Eastern Agency	21	7	28	429	12	441
Fort Defiance	25	3	28	438	59	497
Northern Agency	18	4	22	270	55	325
Western Agency	14	3	17	308	143	451
All Agencies	95	20	115	1,826	403	2,229

Source: Compilation of information provided by Navajo Nation Head Start programs, Chapter Centers, and websites.

The Navajo Nation Head Start program administers two sophisticated pre-kindergarten assessments: Creative Curriculum and Navajo Oral Language Assessment. Creative Curriculum is supplied by a third party vendor, whereas the Navajo Oral Language Assessment is designed by local Navajo experts in language and culture. It is well developed and very appropriate to its purposes.

The Creative Curriculum reports on four primary categories: Social Emotional Development, Physical Development, Cognitive Development, and Language Development. Unfortunately, the Creative Curriculum reports are housed in the individual resident centers and not incorporated into the Head Start central database. Therefore, it was not possible to assemble a comprehensive analysis of these data.

A similar set of problems are associated with the Navajo Oral Language Assessment. The data are not incorporated into a central database and are often interpreted and/or managed by different sites in different ways. Unfortunately, this limits the use of the data for evaluation and assessment purposes but some meaningful information can be extracted. A summary of these data are presented in **Exhibit 2-21**. As shown:

- These assessments are critical evidence of program effects, particularly as children progress through elementary school (longer term). However, these data are not reliably or uniformly collected, catalogued, and reported in a functional database, nor are the data linked to individual students so as to allow longitudinal analysis.
- The data available suggest that most pre-kindergarten students entering Head Start test at a “Beginning” or “Not Ready” status in the fall term.
- The winter assessment for students in the Central Agency shows students making tremendous progress, with more than 53 percent of the students achieving “Ready” or “Advanced” status.

- The evidence of student progress is consistent with the purpose of pre-kindergarten programs to orient and prepare young students for school schedules and activities. When students begin the programs, they are unfamiliar with the teachers, students, routine, and other aspects of the environment. By the winter term, the limited data available show that students are able to make tremendous strides.
- It should be noted that these assessments are administered by the students' teachers.

EXHIBIT 2-21
CREATIVE CURRICULUM OVERALL ASSESSMENT

<u>Central Agency (N=543)</u>	OVERALL SCORES 2008-09	
	Fall	Winter
Not Ready	19%	2%
Beginning	73%	45%
Ready	8%	49%
Advanced	0%	4%
<u>Eastern Agency</u>	NO DATA AVAILABLE	
<u>Fort Defiance Agency (N=464)</u>	OVERALL SCORES 2008-09	
	Fall	Winter
Not Ready	22%	-
Beginning	72%	-
Ready	5%	-
Advanced	1%	-
<u>Northern Agency (N=364)</u>	OVERALL SCORES 2008-09	
	Fall	Winter
Not Ready	14%	-
Beginning	76%	-
Ready	9%	-
Advanced	1%	-
<u>Western Agency</u>	NO DATA AVAILABLE	

Source: Creative Curriculum Summary Reports by Agency.

This is an area that deserves special attention because these data can serve as a foundation for identifying programs, services, and sites that are exemplary as well as justification for expansion.

A clear asset to this region, the Creative Curriculum tool is well-developed, including emotional, physical, and cognitive indices. It provides teachers and parents with a relatively complete picture of a child's development over time and can be used to target interventions that address an individual's needs, especially as she or he enters the school system.

The best available means for accounting for the proximity of students to preschool services and providers is to determine which communities within the Navajo Nation are more than 20 miles from a community with a preschool center. These communities were identified through an analysis of a map identifying all Navajo Head Start sites to estimate the proximity of respective communities to the nearest preschool sites.

Besides numerous isolated homesteads, the analysis revealed 11 population centers that are more than 20 miles from another community with a preschool. Within a total universe of 90 or more communities, this represents over 10 percent of the larger population centers with potential access barriers related to proximity. The geographically isolated communities are listed below:

- Cameron
- Chilchinbito
- Dennehotso
- Inscription House
- Kaibito
- LeChee
- Leupp
- Shonto
- Tolani Lake
- Tonalea
- Blue Gap

Central to the issue of proximity is the broader concern of access to preschool programs. One means of assessing access is an estimation of the number of students enrolled in preschool programs as a percentage of the total preschool population per agency. We Population estimates from Census 2000 were used in concert with preschool enrollments (ages 3, 4, and 5) by agency from Navajo Nation Head Start data to develop ratios. The result provides an estimate of the percentage of children served by each agency. **Exhibit 2-22** shows that:

- The Western Agency enrolled the fewest proportion of its local students (less than 40%), while most other regions enrolled between 40 and 50 percent, with the exception of the Central Agency, which enrolled 74 percent.

EXHIBIT 2-22
HEAD START ENROLLMENT AS PROPORTION OF
POPULATION BY AGENCY

AGENCY	HEAD START ENROLLMENT	ESTIMATED POPULATION (AGE 3, 4, AND 5)	ENROLLMENT AS PERCENT OF TOTAL POPULATION
Central Agency	659	891	74%
Eastern Agency	558	1,391	40%
Fort Defiance Agency	592	1,392	42%
Northern Agency	443	914	48%
Western Agency	547	1,506	36%
Total	2,799	6,093	46%

Source: Census 2000 and Navajo Nation Head Start enrollment data.

Educational indicators indicate significant challenges for the region. Over 40 percent of students in Navajo County fell below AIMS standards in Math and Reading, while nearly two-thirds fell below standards in Science. Approximately one-half of young children appear to be enrolled in local Head Start preschool programs, but large proportions of these students were enrolled in home-based programs, possibly indicating shortfalls in capacity or accessibility. While preschool programs appear to yield promising results (per Creative Curriculum outcomes), observations are limited in that they are only available for the Central Agency for two periods, so further documentation is required to determine the efficacy of these programs. Regardless, access remains the primary concern, as children not enrolled in these programs cannot benefit in any manner. A large number of communities appear to be geographically isolated from child care providers, with approximately 15 percent more than 20 miles away from the nearest Head Start center, which appears to be the largest barrier to access.

The Navajo National Regional Partnership Council funding plan for SFY2011 has recognized these issues and has planned resources to:

- Maintain suitable and safe facilities.
- Build a lattice of skilled and qualified directors, teachers, assistants, and home caregivers.
- Link compensation and retention to qualifications.

3.0 THE EARLY CHILDHOOD SYSTEM IN THE NAVAJO NATION REGION

This chapter presents information analyses and regarding educational services available to young children in the region.

3.1 Early Care and Education

This section provides further detail on the early education services in the area, including Head Start programs as well as the broader array of child care providers.

Head Start and the Child Care Development Fund (CCDF) provide a large majority of childcare services to the region with minimal or no charges involved. However, a small number of private providers also operate in the region.

Exhibit 3-1 provides data related to the affordability of early childhood educational services. As shown:

- At those providers, the average rates for full- and part-time care in Apache, Coconino, Navajo, and Yavapai counties almost universally increased from 2006 to 2008. The largest increases in rates appeared to occur among certified group homes.
- The increases in rates occurred simultaneously with declines in the numbers of most service providers, excluding centers, which saw moderate increases.

EXHIBIT 3-1
AVERAGE DAILY COST OF EARLY EDUCATION,
APACHE, COCONINO, NAVAJO, AND YAVAPAI COUNTIES

AGE GROUP	TYPE	MEDIAN RATES PER DAY					
		Part-Time			Full-Time		
		2006	2008	Percent Change	2006	2008	Percent Change
Under 1	Centers	\$18.00	\$20.00	11.1%	\$25.50	\$29.00	13.7%
	Number of Centers	16	23	43.8%	22	27	22.7%
	Approved Homes	\$12.00	\$13.00	8.3%	\$20.00	\$24.00	20.0%
	Number of Homes	164	94	-42.7%	197	131	-33.5%
	Certified Group Homes	\$16.00	\$25.00	56.3%	\$23.00	\$30.00	30.4%
	Number of Homes	12	14	16.7%	17	15	-11.8%
	Unregulated Homes	-	-	-	\$25.00	\$25.00	0.0%
	Number of Homes	-	-	-	2	2	0.0%
1 and 2 Year Olds	Centers	\$15.45	\$18.50	19.7%	\$23.26	\$25.00	7.5%
	Number of Centers	41	61	48.8%	48	66	37.5%
	Approved Homes	\$10.50	\$13.00	23.8%	\$20.00	\$21.00	5.0%
	Number of Homes	173	107	-38.2%	209	155	-25.8%
	Certified Group Homes	\$16.00	\$25.00	56.3%	\$22.00	\$27.00	22.7%
	Number of Homes	12	14	16.7%	17	15	-11.8%
	Unregulated Homes	-	-	-	\$25.00	\$20.00	-20.0%
	Number of Homes	-	-	-	2	2	0.0%
3, 4, and 5 Year Olds	Centers	\$13.95	\$15.00	7.5%	\$22.00	\$23.00	4.5%
	Number of Centers	112	124	10.7%	94	107	13.8%
	Approved Homes	\$10.00	\$12.00	20.0%	\$20.00	\$20.00	0.0%
	Number of Homes	177	115	-35.0%	214	156	-27.1%
	Certified Group Homes	\$16.00	\$21.80	36.3%	\$22.00	\$26.10	18.6%
	Number of Homes	12	15	25.0%	17	15	-11.8%
	Unregulated Homes	-	-	-	\$25.00	\$20.00	-20.0%
	Number of Homes	-	-	-	2	2	0.0%

Source: Arizona Department of Economic Security, Division of employment and Rehabilitation Services, Child Care Administration (2000-2008). *Arizona Child Care Market Rate Survey 2008*. Phoenix, AZ: Maricopa County Office of Research and Reporting.

Exhibit 3-2 depicts centers and enrollments reported by providers included in the Child Care Resource and Referral (CCR&R) program. As shown:

- From 2008 to 2010, the number of centers grew from 8 to 9, an increase of 12.5 percent, while the total capacity grew from 345 to 624, an increase of 80.9 percent.

- Associated with these changes, the capacity per center grew from 43.1 to 69.3, an increase of 60.8 percent.

EXHIBIT 3-2
CHILD CARE RESOURCE AND REFERRAL SUMMARY

NAVAJO NATION	2008	2010	PERCENT CHANGE
Number of Centers	8	9	12.5%
Total Capacity	345	624	80.9%
Capacity per Center	43.1	69.3	60.8%

Source: Arizona Department of Economic Security (2007, 2009). DES Multidata pulled on May 4, 2010 from Database (Unpublished Data).

Exhibit 3-3 presents data related to the affordability of private childcare in counties overlapping the Navajo Nation Region. As shown:

- The average cost of childcare in this region ranges from \$20 for preschoolers in approved or unregulated homes to \$30 for infant care in group homes.
- Infant care is consistently more costly than care for older children.

EXHIBIT 3-3
AVERAGE COSTS FOR FULL-TIME (6+ HOURS)
CHILDCARE SERVICES BY TYPE

SETTING TYPE AND AGE GROUP	APACHE, COCONINO, NAVAJO AND YAVAPAI COUNTIES (2008)
Group Homes	
Infant	\$30.00 per day
Toddler	\$27.00 per day
Preschooler	\$26.10 per day
Licensed Centers	
Infant	\$29.00 per day
Toddler	\$25.00 per day
Preschooler	\$23.00 per day
Approved Homes	
Infant	\$24.00 per day
Toddler	\$21.00 per day
Preschooler	\$20.00 per day
Unregulated Homes	
Infant	\$25.00 per day
Toddler	\$20.00 per day
Preschooler	\$20.00 per day

Source: Arizona Department of Economic Security, Child Care Market Rate Survey, 2010.

Note: Average rate charged per day for full-time (6 hours or more) childcare.

Exhibit 3-4 shows data related to the amount of assistance available for families to subsidize childcare expenses. The maximum reimbursement rates are based on the 75th percentile of Arizona's 2000 Child Care Market Rate Survey. The actual reimbursement rates for Child Care Assistance are equal to the reimbursement rate minus any DES designated co-payment. A full day consists of six or more hours per day, and less than six hours is considered a partial day. Child Care Assistance eligibility is determined by family size and maximum income levels. In addition to the DES region relevant to the Navajo Nation (covering Apache, Coconino, Navajo, and Yavapai counties), Maricopa County rates are included for reference. As shown:

- Reimbursement rates in the Navajo Nation area fall short in comparison to Maricopa County's rates.
- The reimbursement rates are less than the average rates depicted in **Exhibit 3-14**.

EXHIBIT 3-4
DES CHILDCARE SUBSIDY, EFFECTIVE APRIL 2009

AGE GROUP	MARICOPA	APACHE, COCONINO, NAVAJO, AND YAVAPAI COUNTIES
Childcare Centers		
0 – 1 Year		
Full Day	\$30.20	\$22.40
Part Day	\$22.40	\$18.40
1 Year < 3 Years		
Full Day	\$26.60	\$20.80
Part Day	\$20.00	\$18.00
3 Years < 6 Years		
Full Day	\$23.80	\$20.00
Part Day	17.00	\$15.00
6 Years < 13 Years		
Full Day	\$23.40	\$17.00
Part Day	\$16.00	\$14.00
Group Homes		
0 – 1 Year		
Full Day	\$24.00	\$23.00
Part Day	\$16.00	\$23.00
1 Year < 3 Years		
Full Day	\$22.00	\$22.00
Part Day	\$15.00	\$15.00
3 Years < 6 Years		
Full Day	\$20.00	\$22.00
Part Day	\$15.00	\$13.95
6 Years < 13 Years		
Full Day	\$18.00	\$17.00
Part Day	\$14.00	\$13.95
Certified Family Homes And In-Home Providers		
0 – 1 Year		
Full Day	\$20.00	\$18.00
Part Day	\$14.00	\$10.00
1 Year < 3 Years		
Full Day	\$20.00	\$17.00
Part Day	\$13.00	\$10.00
3 Years < 6 Years		
Full Day	\$18.00	\$16.00
Part Day	\$12.00	\$10.00
6 Years < 13 Years		
Full Day	\$17.00	\$16.00
Part Day	\$12.00	\$10.00

Source: Arizona Department of Economic Security (2007, 2009). DES Multidata pulled on May 4, 2010 from Database (Unpublished Data).

Exhibit 3-5 presents an analysis of the types of households in which children under 18 years reside. As shown:

- The Navajo Nation Reservation, Apache County, and Navajo County each have smaller proportions of children residing with their own parents than the statewide and national benchmarks.
- Primarily, the balance of these children appears to reside with grandparents, as these ratios within these geographies far exceed rates observed for the state or nation.

**EXHIBIT 3-5
POPULATION UNDER 18 YEARS IN HOUSEHOLDS BY TYPE OF
HOUSEHOLDER**

AREA	2008 ESTIMATED TOTAL POPULATION UNDER 18 YEARS IN HOUSEHOLDS**	PERCENTAGE BY TYPE OF HOUSEHOLDER**			
		Own child	Grand- child	Other relatives	Foster child or other unrelated child
Navajo Nation Reservation and Off-Reservation Trust Land, AZ--NM--UT	53,115	71.1%	24.1%	4.1%	0.7%
Apache County (AZ)	21,474	75.5%	20.1%	3.0%	1.4%
Coconino County (AZ)	32,830	82.3%	13.3%	2.7%	1.7%
Navajo County (AZ)	33,625	74.2%	20.3%	3.3%	2.2%
Arizona	1,665,468	87.6%	7.2%	3.3%	2.0%
United States	73,500,094	89.2%	6.5%	2.6%	1.8%

Source: U.S. Census Bureau, American Community Survey.

** – excluding householders, spouses, and unmarried partners. Values represent either the average estimate over the three years ending in 2008 (a more reliable estimate for small populations) or the single year estimate for 2008.

Exhibit 3-6 presents data relevant to children being raised by their grandparents who benefit from receiving services specific to their living situation, including public benefits. As shown:

- The Navajo Nation Reservation (12%), Apache County (11%), and Navajo County (9%) exhibit the highest proportions of young children (under 6 years) living with grandparents, each with proportions significantly larger than statewide and national averages (both less than 4%).

EXHIBIT 3-6
POPULATION UNDER 18 YEARS IN HOUSEHOLDS LIVING WITH
GRANDPARENTS

AREA	2008 ESTIMATED TOTAL POPULATION UNDER 18 YEARS IN HOUSEHOLDS**	PERCENTAGE OF POPULATION UNDER 18 YEARS			
		Living With Grand- parent: Under 6 Years	Living With Grandparent: 6 To 11 Years	Living With Grand- parent: 12 To 17 Years	Subtotal, Living With Grandparent
Navajo Nation Reservation and Off-Reservation Trust Land, AZ--NM--UT	53,115	12.0%	6.6%	5.6%	24.1%
Apache County (AZ)	21,474	10.7%	5.3%	4.1%	20.1%
Coconino County (AZ)	32,830	7.7%	2.8%	2.8%	13.3%
Navajo County (AZ)	33,625	9.4%	5.5%	5.4%	20.3%
Arizona	1,665,468	3.8%	2.0%	1.4%	7.2%
United States	73,500,094	3.1%	1.9%	1.5%	6.5%

Source: U.S. Census Bureau, American Community Survey.

** – excluding householders, spouses, and unmarried partners. Values represent either the average estimate over the three years ending in 2008 (a more reliable estimate for small populations) or the single year estimate for 2008.

Exhibit 3-7 presents Head Start's records on the number of enrolled children who are cared for by their grandmothers. As shown:

- Over 130 Head Start enrolled children were being cared for by their grandmothers, representing about 6 percent of total enrollments.
- The highest incidence across agencies occurred in the Eastern (9%) and Fort Defiance (8%) agencies.

EXHIBIT 3-7
NUMBER OF CHILDREN UNDER THE AGE OF FIVE UNDER
THE CARE OF A GRANDMOTHER BY AGENCY

CATEGORY	CHILDREN BY AGENCY					
	Total	Central Agency	Eastern Agency	Fort Defiance Agency	Northern Agency	Western Agency
2008-09 Children Under Care of Grandmothers	131	20	40	36	20	15
Percent of Total Program Enrollment (N=2,582)	5.8%	3.7%	8.8%	7.5%	5.6%	3.4%

Source: Navajo Nation Head Start.

Exhibit 3-8 presents an analysis of public school preschool programs and their enrollment levels. As shown:

- Eight different public providers offer preschool services in the area.
- Many of these programs have seen strong growth in the last year, including Mesa View (95%) and Kayenta (67%).
- Waiting lists exist for at least two of these entities (Mesa View and Kayenta).

**EXHIBIT 3-8
PUBLIC SCHOOL PRESCHOOL PROGRAMS AND ASSOCIATED
ENROLLMENT LEVELS**

SCHOOL	PRESCHOOL	ENROLLMENT			WAITING LIST
		2008-09	2009-10	Percent Change	
Mesa View CUSD	Yes	40	78	95%	Yes
Kayenta Primary	Yes	24	40	67%	Yes
Pinon Elem	Yes	?	?	-	Unknown
Tuba City Primary	Special Ed & Pre K	?	?	?%	?
Cameron Elem	Yes	?	9	-	No
Window Rock ES	Yes	?	28	-	No
Leupp	Yes	13	?	-	Unknown
Jeddito	Yes	?	?	-	Unknown

Source: Information provided by each of the public preschool education programs.

? – data were not available or could not be validated for specific time period.

Exhibit 3-9 presents a summary analysis of all Head Start programs for two consecutive years, 2008 and 2009. As shown:

- Total pre-kindergarten enrollments declined slightly (6%) between the 2008 and 2009 school years while early childhood enrollments increased by nearly 15 percent during this period.
- Due to respective shifts in enrollments between agencies, the Central, Fort Defiance, and Western agencies represented larger proportions of total enrollments in 2009 as compared to the prior year.

EXHIBIT 3-9
HEAD START ENROLLMENTS BY AGENCY AND LEVEL

YEAR	PRE-KINDERGARTEN	EARLY CHILDHOOD	DISTRIBUTION OF REGIONAL PROGRAM ENROLLMENTS BY AGENCY/LEVEL (AS OF APRIL)					
			Central Agency	Eastern Agency	Fort Defiance Agency	Northern Agency	Western Agency	Early Childhood
2007-08	3,047	83	22.5%	21.6%	18.3%	16.8%	19.0%	1.8%
2008-09	2,852	95	23.1%	19.6%	20.7%	15.5%	19.2%	1.9%
Trend	-6.4%	14.5%	0.6%	-2.0%	2.4%	-1.3%	0.2%	0.1%

Source: Head Start Program Information Reports.

Exhibit 3-10 presents an analysis of Head Start enrollments by age and level. As shown:

- Total counts include all children ever enrolled in the program over the course of the school year.
- Regional program counts include only those children enrolled during the month of April, providing a clearer picture of the caseloads by region at a give point in time.

EXHIBIT 3-10
HEAD START ENROLLMENTS BY AGE AND LEVEL

AGE	PRE-KINDERGARTEN			EARLY CHILDHOOD		
	2007-08	2008-09	Percent Change	2007-08	2008-09	Percent Change
Pregnant Women	N/A	N/A	N/A	9	17	88.9%
Under 1 year	N/A	N/A	N/A	18	18	0.0%
1 year old	N/A	N/A	N/A	26	11	-57.7%
2 years old	84	54	-35.7%	30	34	13.3%
3 years old	950	1,107	16.5%	N/A	15	N/A
4 years old	1,558	1,218	-21.8%	N/A	N/A	N/A
5 years and older	455	473	4.0%	N/A	N/A	N/A
Total	3,047	2,852	-6.4%	83	95	14.5%

Source: Head Start Program Information Reports.

N/A – data not available or calculation not applicable due to lack of data.

Exhibit 3-11 presents the distributions of Head Start enrollments according to assorted socioeconomic characteristics of enrolled children and their families. As depicted in the exhibit:

- Enrollments of children below the Federal Poverty Level (FPL) have remained relatively static.

- Alternately, enrollments of children receiving public assistance (NNPSR, SSI, or other) declined substantially (21%) among pre-kindergarten enrollments but more than doubled (127%) among early childhood enrollments.
- The number of enrolled foster children declined by over 40 percent.
- The statistics in this table show that the vast majority of students served by the Navajo Nation Head Start Program are from low income households.

EXHIBIT 3-11
HEAD START ENROLLMENT BY SOCIOECONOMIC CHARACTERISTIC

CATEGORY	PRE-KINDERGARTEN			EARLY CHILDHOOD		
	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09
Income below 100% of Federal Poverty Level (FPL)	1,662	1,650	-0.7%	66	65	-1.5%
Receipt of public assistance (NNPSR, SSI, etc.)	852	672	-21.1%	11	25	127.3%
Foster children	43	25	-41.9%	0	0	N/A
Homeless children	0	17	N/A	0	0	N/A
Income between 100% and 130% Federal Poverty Level (FPL)	N/A	292	N/A	N/A	N/A	N/A
Over income**	490	196	N/A	6	5	N/A

Source: Head Start Program Information Reports.

** Includes all families over 100% of FPL in 2007-08 and all families over 130% of FPL in 2008-09.

N/A – data not available or calculation not applicable due to lack of data.

Exhibit 3-12 depicts Head Start enrollments by the number of years a child has been enrolled in the program. As shown:

- First-year enrollments grew modestly at the pre-kindergarten level (about 9%) while expanding significantly (856%) at the early childhood level.
- Segments of all other enrollees (second-year and beyond) declined at both the pre-kindergarten and early childhood levels.

EXHIBIT 3-12
HEAD START ENROLLMENTS BY YEARS IN PROGRAM

TENURE IN PROGRAM	PRE-KINDERGARTEN			EARLY CHILDHOOD		
	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09
First-year	1,512	1,653	9.3%	9	86	855.6%
Second-year	1,311	985	-24.9%	58	5	-91.4%
Third-year or more	224	214	-4.5%	16	4	-75.0%
Total	3,047	2,852	-6.4%	83	95	14.5%

Source: Head Start Program Information Reports.

Without additional survey or interview data, there is not much more that can be said about this important indicator. It is difficult to know why students or families drop out of the program after one year of service – though this may raise questions about the quality of services received. Moreover, any evidence of program effects is enhanced by multiple years of service. Therefore, it seems like these findings raise fundamental concerns that deserve more extensive investigation.

Head Start enrollments divided by race and ethnicity are included in **Exhibit 3-13**. As shown:

- Less than one percent of enrollments fall into any racial category other than American Indian.
- The statistics in this table simply confirm that the vast majority of students served by the Navajo Head Start program are, indeed, of Navajo descent.

EXHIBIT 3-13
HEAD START ENROLLMENTS BY RACE/ETHNICITY

RACE	PRE-KINDERGARTEN			EARLY CHILDHOOD		
	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09
American Indian	3,044	2,764	-9.2%	83	95	14.5%
Asian	1	0	N/A	0	0	N/A
Black or African American	0	2	N/A	0	0	N/A
Pacific Islander	0	0	N/A	0	0	N/A
White	2	4	100.0%	0	0	N/A
Biracial/Multi-racial	0	82	N/A	0	0	N/A
Other	0	0	N/A	0	0	N/A
Unspecified	0	0	N/A	0	0	N/A
Total	3,047	2,852	-6.4%	83	95	14.5%

Source: Head Start Program Information Reports.

N/A – data not available or calculation not applicable due to lack of data.

Exhibit 3-14 presents data related to the number of children enrolled in a nursery or preschool program. As shown:

- Poverty affects half of the enrolled children in the broader Navajo Nation Reservation.
- Local areas also exhibit high poverty rates among school children, led by Apache County, which reported a rate of almost 58 percent. While much lower than Apache County, Coconino and Navajo counties also had higher rates of poverty than the statewide average.

EXHIBIT 3-14
PERCENTAGE OF CHILDREN (AGE 3 AND OVER) ENROLLED IN
PRESCHOOL/NURSERY SCHOOL WHO FALL BELOW THE FEDERAL
POVERTY LEVEL (FPL)

AREA	PERCENT ENROLLED BELOW FPL	PERCENT CHANGE:
	2008 Estimate*	2005 - 2008
Navajo Nation Reservation and Off-Reservation Trust Land, AZ--NM--UT	50.4%	-20.6%
Apache County	57.8%	-26.7%
Coconino County	19.9%	-22.7%
Navajo County	26.0%	3.8%
Arizona	19.1%	-0.5%
United States	17.6%	-2.2%

Source: U.S. Census Bureau, American Community Survey.

* – values represent either the average estimate over the three years ending in 2008 (a more reliable estimate for small populations) or the single year estimate for 2008.

Although some parents face little economic burden from child care costs due to Head Start and the Child Care Development Fund, care can be exceedingly costly for the limited private providers that may be available within a closer proximity to families living in isolated communities.

Large proportions of local children live in their grandparents' households. This phenomenon is particularly prevalent in Eastern Agency (8.8% of Head Start enrollees) and the Fort Defiance Agency (7.5%). Consistent with earlier findings, large segments of Head Start enrollees' families have incomes below the Federal Poverty Level. These circumstances represent additional challenges relating to the well-being of children in the area.

3.2 Supporting Families

This section presents an overview of assistance available to children and families in the region.

Exhibit 3-15 shows the number of children and families receiving Navajo Nation Program for Self Reliance (NNPSR). This benefit is monthly cash assistance (welfare) as well as other services for parents and children who have extremely low incomes. The benefits are time-limited and parents must meet specific requirements to obtain the benefits. As shown:

- The state saw increases in the number of NNPSR cases for both families served (10%) and the number of children served (14%).

- Alternately, Navajo Nation saw declines in the numbers of NNPSR cases for families served (16%) but saw an increase of 9 percent in the number of children served.

EXHIBIT 3-15
NAVAJO NATION PROGRAM FOR SELF RELIANCE (NNPSR)

AREA	NNPSR CHILDREN (AGE 0 - 5)			NNPSR FAMILIES WITH CHILDREN (AGE 0-5)		
	January 2007	January 2010	Percent Change	January 2007	January 2010	Percent Change
Navajo Nation	22	24	9.1%	19	16	-15.8%
Arizona	20,867	23,866	14.3%	16,511	18,129	9.8%

Source: Arizona Department of Economic Security (2007, 2009). DES Multidata pulled on May 4, 2010 from Database (Unpublished Data).

Exhibit 3-16 shows the number of children and families who qualify for and receive Child Care Assistance. The assistance, which functions like a voucher, is available to parents with children (12 and younger) who need childcare and meet certain income and other requirements. Parents can use the voucher to pay for any childcare service they choose. Parents have to pay an amount in addition to the voucher that depends on their income and their childcare. The value of the voucher, however, is still based on the actual costs of childcare in 2000, so parents and providers have to pay to make up the difference. Since February 2009, no qualified, low-income parents have been able to sign up for the subsidy because of budget cuts. This has led to a 38 percent drop in the number of children receiving assistance statewide between 2007 and 2010. As shown:

- Arizona experienced a decrease in the number of families and children who received Child Care Assistance in 2010, in which 13,014 families and 17,891 children were served as opposed to in 2009 when 21,377 families and 29,089 children received assistance.
- From 2009 to 2010, the number of families who received assistance decreased from 41 to 11. The number of children who received assistance also decreased from 56 to 11.

EXHIBIT 3-16 CHILD CARE ASSISTANCE

AREA	JANUARY 2009				JANUARY 2010			
	Number of Families Eligible	Number of Children Eligible	Number of Families Who Received Assistance	Number of Children Who Received Assistance	Number of Families Eligible	Number of Children Eligible	Number of Families Who Received Assistance	Number of Children Who Received Assistance
Navajo Nation	45	68	41	56	18	30	11	19
Arizona	26,257	38,126	21,377	29,089	15,833	23,244	13,014	17,891

Source: Arizona Department of Economic Security.

Exhibit 3-17 shows the number of mothers, babies, and children participating in the Women, Infants, and Children (WIC) program. This federally funded service is available to pregnant women and mothers with their children (from birth through age four) who meet specific income guidelines. As shown:

- The number of women and children receiving WIC benefits increased substantially between 2005 and 2009.
- The number of women receiving benefits more than doubled (139%) while the number of children increased by 64 percent.

EXHIBIT 3-17 WOMEN, INFANTS, AND CHILDREN (WIC) PARTICIPATION 2005 AND 2009

AREA	2005		2009		PERCENT CHANGE: 2005-09	
	Women	Children	Women	Children	Women	Children
Navajo Nation	28	64	67	105	139.3%	64.1%

Source: Arizona Department of Health Services.

Exhibit 3-18 presents the availability of quality childcare in the Navajo Nation Region. This exhibit displays the number of childcare providers that are regulated by the State. The Department of Health Services (DHS) licenses and inspects childcare centers. DHS also certifies home-based childcare businesses with five to ten children, called “childcare group homes”. The Department of Economic Security (DES) certifies and monitors home-based childcare businesses with four or fewer children that participate in the childcare subsidy program. There are many home-based childcare providers that are not certified by DES or DHS and are not included here. As shown:

- Licensed centers include only Department of Health Services (DHS) licensed programs providing fee-paying childcare services.

- There were not any DHS licensed group homes or Department of Economic Security (DES) certified homes in the Navajo Nation.
- Only two DHS licensed centers operated in the area (down from 4 in 2006), while 4 tribal authority entities were in operation.

Participation in public assistance programs (including NNPSR, CCA, and WIC) is remarkably low in the region considering associated poverty levels. Additionally, very few DHS licensed or tribal authority centers operate in the area. These aspects of localities continue the theme of poor access to community resources and support programs in the area.

EXHIBIT 3-18
NUMBER OF LICENSED/CERTIFIED CENTERS/HOMES

AREA	DHS LICENSED CENTERS			DES CERTIFIED HOMES			GROUP HOMES			TRIBAL AUTHORITY			TOTAL		
	2008	2010	2008-10 Change	2008	2010	2008-10 Change	2008	2010	2008-10 Change	2008	2010	2008-10 Change	2008	2010	2008-10 Change
Navajo Nation	4	2	-2	0	0	0	0	0	0	N/A	4	N/A	N/A	6	N/A
Arizona	N/A	1,309	N/A	N/A	311	N/A	N/A	232	N/A	N/A	7	N/A	N/A	1,852	N/A

Source: Arizona Department of Health Services (2005, 2007, 2009). Arizona Women, Infants & Children data pulled April 22, 2010 Database (Unpublished Data).

N/A indicates that the data were not available or could not be calculated due to sub-components unavailable.

3.3 Health

This section presents assorted indicators relating to the local healthcare system and the provision of healthcare services in the region.

Exhibit 3-19 presents data on enrollments in the Arizona Health Care Cost Containment System (AHCCCS) and KidsCare. As shown:

- The number of Arizonans enrolled in AHCCCS statewide has increased by nearly one third since 2005.
- During the same period, the percentage of Arizonans enrolled in the KidsCare program has decreased by one third.
- Because the number of people enrolled in AHCCCS significantly exceeds those enrolled in KidsCare, the overall number of Arizonans enrolled in the programs has increased by 29.2 percent since 2005.
- The enrollment trends in Apache, Coconino, and Navajo Counties closely mirror those of the state; however, Apache County has seen the smallest decrease in KidsCare enrollment during this period, at approximately 25 percent.

EXHIBIT 3-19 KIDSCARE OR AHCCCS HEALTH COVERAGE ENROLLMENT 2005 THROUGH 2010

AREA	AHCCCS			KIDSCARE			TOTAL PARTICIPANTS ENROLLED IN AHCCCS OR KIDSCARE		
	2005	2010	Change	2005	2010	Change	2005	2010	Change
Apache County	32,129	34,371	7.0%	694	526	-24.2%	32,823	34,897	6.3%
Coconino County	27,578	31,793	15.3%	1,061	749	-29.4%	28,639	32,542	13.6%
Navajo County	36,845	42,822	16.2%	1,207	818	-32.2%	38,052	43,640	14.7%
Arizona	962,690	1,275,892	32.5%	50,948	33,707	-33.8%	1,013,638	1,309,599	29.2%

Source: AHCCCS Reports dated May 2005 and May 2010. Data limited to county level only and covers enrollment for all ages.

Children with disabilities who receive an early diagnosis fare better than those children who receive a late or no diagnosis. As shown in **Exhibit 3-20**:

- From 2007 to 2009, the number of children served by the Arizona Early Intervention Program (AZEIP) in the Navajo Nation Region decreased from 187 to 106, a decrease of 43.3 percent. However, the number of children served by AZEIP increased for the state of Arizona from 3,450 to 5,078, an increase of 47.2 percent.

EXHIBIT 3-20
ARIZONA EARLY INTERVENTION PROGRAM DEVELOPMENT (AZEIP)
SCREENINGS AND SERVICES TO CHILDREN WITH DISABILITIES/AT-
RISK FOR DISABILITIES

AREA	AZEIP COUNTS		PERCENT CHANGE
	2006-07	2008-09	2007-09
Navajo Nation	187	106	-43.3%
Arizona	3,450	5,078	47.2%

Source: Arizona Department of Economic Security (2007, 2009). DES
Multidata pulled on May 4, 2010 from Database (Unpublished Data).

The numbers of births paid for either by the Arizona Health Care Cost Containment System (AHCCCS) or by Indian Health Services (IHS) are depicted in **Exhibit 3-21**. As shown:

- The incidence of public-paid births is significantly higher across all localities than the state average (presumably due to the prevalence of IHS in the area).
- The number of localities exceeding 90 percent has increased to four communities in 2008, with the Chinle, Fort Defiance, Kayenta, and Tuba City communities all exceeding this threshold.

EXHIBIT 3-21
PUBLIC PAYER BIRTHS

AREA	PERCENT OF PUBLIC PAYER BIRTHS**		
	2006	2008	Percent Change
Chinle	92.0%	91.7%	-0.3%
Fort Defiance	91.2%	90.3%	-0.9%
Kayenta	85.1%	90.9%	6.8%
Tuba City	95.6%	93.2%	-2.5%
Winslow	71.7%	79.4%	10.7%
Apache County	82.4%	81.8%	-0.8%
Coconino County	66.4%	65.0%	-2.1%
Navajo County	79.1%	78.9%	-0.3%
Arizona	53.8%	54.4%	1.1%

Source: Arizona Department of Health Services. Arizona Primary Care Area Program Data Sets. <http://www.azdhs.gov/hsd/profiles/datasets.html>.

** Percent of total births paid for by Arizona Health Care Costs Containment System (AHCCCS) or Indian Health Service (IHS).

Quality early prenatal care is helpful in successfully raising a healthy child. As shown in **Exhibit 3-22**:

- From 2005 to 2008, the percentage of pregnant women in Arizona who had five or more prenatal visits increased by 1.3 percent. Pregnant women who had no prenatal visits or who had between one and four prenatal visits decreased by 24.6 percent and 14.5 percent, respectively.
- During this time period, both Apache and Coconino Counties experienced an increase in the percentage of pregnant women who did not have any prenatal visits (44.1% and 13.8%, respectively). The proportion of women in Navajo County that did not have a prenatal visit declined by 2.1 percent.

**EXHIBIT 3-22
NUMBER OF PRENATAL VISITS**

AREA	TOTAL			NO VISITS			1-4 VISITS			5+ VISITS		
	2005	2008	Percent Change	2005 Percent of Total	2008 Percent of Total	Percent Change	2005 Percent of Total	2008 Percent of Total	Percent Change	2005 Percent of Total	2008 Percent of Total	Percent Change
Arizona	95,798	99,215	3.6%	2.3%	1.8%	-24.6%	4.2%	3.6%	-14.5%	93.3%	94.5%	1.3%
Apache County	1,283	1,211	-5.6%	1.9%	2.8%	44.1%	10.0%	9.1%	-9.0%	87.8%	87.4%	-0.4%
Coconino County	2,070	1,985	-4.1%	1.1%	1.2%	13.8%	4.5%	4.4%	-2.4%	92.9%	94.2%	1.4%
Navajo County	1,903	1,944	2.2%	2.2%	2.1%	-2.1%	8.8%	10.0%	13.7%	88.5%	87.7%	-0.9%

Source: Arizona Department of Health Services. Arizona Primary Care Area Program Data Sets. <http://www.azdhs.gov/hsd/profiles/datasets.html>.

Children who have health problems early in life are more likely to face other challenges not experienced by their healthier counterparts. **Exhibit 3-23** shows neonatal data for the region. As shown:

- From 2005 to 2008, the total number of newborns admitted to newborn intensive care units in Arizona increased from 5,479 to 5,931, an increase of 8.2 percent.
- There was also an increase in the number of newborns admitted in Navajo County. The number increased from 92 in 2005 to 112 in 2008, an increase of 22 percent.
- For Navajo County, the admittance of newborns less than 37 weeks old increased by 4.4 percent while the admittance of newborns of at least 37 weeks decreased by almost 8 percent.

EXHIBIT 3-23
NUMBER RECEIVING NEONATAL INTENSIVE SERVICES

AREA	2005			2008			PERCENT CHANGE (2005-08)		
	Total	Gestational Age		Total	Gestational Age		Total	Gestational Age	
		Preterm, <37 Weeks Percent of Total	37 Weeks or More Percent of Total		Preterm, <37 Weeks Percent of Total	37 Weeks or More Percent of Total		Preterm, <37 Weeks Percent of Total	37 Weeks or More Percent of Total
Arizona	5,479	60.5%	39.5%	5,931	59.1%	40.9%	8.2%	-2.2%	3.4%
Navajo Nation	385	54.3%	45.7%	209	66.5%	33.5%	-45.7%	22.5%	-26.7%
Apache County	43	74.4%	25.6%	49	71.4%	28.6%	14.0%	-4.0%	11.7%
Coconino County	250	47.2%	52.8%	48	60.4%	39.6%	-80.8%	28.0%	-25.0%
Navajo County	92	64.1%	35.9%	112	67.0%	33.0%	21.7%	4.4%	-7.9%

Source: Arizona Department of Health Services. Arizona Primary Care Area Program Data Sets. <http://www.azdhs.gov/hsd/profiles/datasets.html>.

Dental care can improve a child's health. A summary of responses to the FTF Family and Community Survey addressing oral health from all tribal areas throughout Arizona is depicted in **Exhibit 3-24**. It should be noted that these data are not specific to the Navajo Nation but encompass all tribal areas surveyed. As shown:

- The majority of children (under five) in the tribal regions have regular visits with the same dental provider.
- Fifty-six percent of parents in this region drive 10 miles or less for their child's dental care, but nearly one-fourth of residents must drive over 20 miles to access dental care.

EXHIBIT 3-24
ORAL HEALTH CARE CHILDREN 0 – 5

My child/children age 5 and under have regular visits with the same dental provider.	SUM OF FTF TRIBAL REGIONS	STATEWIDE	DIFFERENCE
Strongly agree	52.5%	62.5%	-16.0%
Somewhat agree	16.9%	9.1%	84.9%
Somewhat disagree	8.9%	5.6%	60.7%
Strongly disagree	16.3%	13.1%	24.4%
Not sure	5.4%	9.8%	-44.3%
Total	100%	100%	0%
How many miles do you have to go to get dental care for your children age 5 and under?	SUM OF FTF TRIBAL REGIONS	STATEWIDE	DIFFERENCE
Less than 5 miles	41.1%	39.8%	3.3%
5-10 miles	14.9%	23.6%	-36.6%
10-20 miles	12.9%	13.5%	-4.3%
More than 20 miles	24.7%	12.8%	92.4%
None available	6.4%	10.3%	-38.3%
Total	100%	100%	0%

Source: First Things First: Medical Questions. (FY 2008). Community Survey in Data Base (Unpublished Data).

Children receiving the proper immunizations are more likely to be in better health than those children that do not receive the required immunizations. As shown in **Exhibit 3-25**:

- 12-24 month vaccination (3:2:2:2) rates for have dropped approximately 2 percent from 2005 to 2009.
- 19-35 month vaccination (4:3:1:3:3:1:4) rates have increased approximately 12 percent from 2005 to 2009.

EXHIBIT 3-25 IMMUNIZATION RECORDS

AREA	VACCINATIONS 12-24 MONTHS (3:2:2:2)		
	2005	2009	Percent Change
Navajo Nation	94%	92%	-2%
Apache County	94%	90%	-4%
Coconino County	85%	86%	1%
Navajo County	86%	82%	-5%
Arizona	70%	67%	-6%
United States	73%	68%	-7%
AREA	VACCINATIONS 19-35 MONTHS (4:3:1:3:3:1)		
	2005	2009	Percent Change
Navajo Nation	83%	84%	0%
Apache County	79%	81%	2%
Coconino County	63%	66%	4%
Navajo County	68%	67%	-2%
Arizona	46%	42%	-8%
United States	75%	72%	-4%
AREA	VACCINATIONS 19-35 MONTHS (4:3:1:3:3:1:4)		
	2005	2009	Percent Change
Navajo Nation	69%	77%	12%
Apache County	62%	75%	20%
Coconino County	42%	61%	46%
Navajo County	49%	57%	17%
Arizona	26%	38%	48%
United States	N/A	65%	N/A

Source: Arizona Department of Health Services (2005, 2007, 2009). Arizona State Immunization Information System Data Base (ASIIS) data pulled on May 4, 2010 (Unpublished Data).

Notes: CDC data is from July 2005- to June 2006 and July 2008 to June 2009. CDC data covers all vaccinations 24 months and prior. The smallest rate of vaccinations was used as the U.S. rate.

3:2:2:2 is 3 DTaP, 2 Polio, 2 Hib, and 2 Hepatitis B vaccines

4:3:1:3:3:1 includes 4 doses diphtheria and tetanus toxoids and acellular pertussis vaccines, 3 doses poliovirus vaccine, 1 dose measles, mumps, and rubella vaccine, 3 doses *Haemophilus influenzae* type B vaccine, 3 doses hepatitis B vaccine, 1 dose varicella.

4:3:1:3:3:1:4 is 4:3:1:3:3:1: plus ≥4 doses of pneumococcal conjugate vaccine.

N/A indicates that the data were not available.

Exhibit 3-26 presents the percentage of children (under five) in Navajo Nation that have disabilities as well as the percentage of children (under five) with disabilities whose household income levels are below Federal Poverty Level (FPL). As shown:

- Almost four percent (3.6%) of Navajo County children (under five) have disabilities, approximately one-third of whom are in households whose income levels are below the FPL. Both of these ratios far exceed state and national averages.

**EXHIBIT 3-26
CHILDREN UNDER FIVE WITH DISABILITIES,
TOTAL PERCENT AND PERCENT BELOW FPL**

AREA	PERCENT OF CHILDREN UNDER 5 WITH DISABILITIES	PERCENT OF CHILDREN UNDER 5 WITH DISABILITIES, BELOW FPL
	2008 Estimate**	2008 Estimate**
Navajo Nation Reservation and Off-Reservation Trust Land, AZ--NM--UT	*	0.8%
Navajo County	3.6%	1.1%
Arizona	0.8%	0.2%
United States	0.7%	0.2%

Source: U.S. Census Bureau, American Community Survey.

* – indicates sample size too small to estimate specific demographic component.

** – values represent either the average estimate over the three years ending in 2008 (a more reliable estimate for small populations) or the single year estimate for 2008.

Exhibit 3-27 presents the percentage of children under 18 with and without health insurance coverage. As shown:

- Nearly half of the children in the Navajo Nation Reservation do not have health insurance (45.5%).
- Likewise, Apache, Coconino, and Navajo counties all fall significantly below state and national rates of insurance coverage.

EXHIBIT 3-27
HEALTH INSURANCE COVERAGE FOR CHILDREN UNDER 18

AREA	2008 ESTIMATED PERCENT OF CHILDREN UNDER 18 BY INSURANCE COVERAGE/TYPE		
	Insured-Private	Insured-Public	Not Insured
Navajo Nation Reservation and Off-Reservation Trust Land, AZ--NM--UT	18.0%	37.6%	45.5%
Apache County	20.8%	35.8%	44.0%
Coconino County	49.3%	26.3%	26.3%
Navajo County	44.2%	42.6%	19.7%
Arizona	56.5%	29.1%	16.2%
United States	64.1%	28.3%	9.9%

Source: U.S. Census Bureau, American Community Survey.

* – values represent either the average estimate over the three years ending in 2008 (a more reliable estimate for small populations) or the single year estimate for 2008.

Note: Total in excess of 100 percent due to overlap between public/private insurance segments.

Exhibits 3-28 and 3-29 present the number of services available to families who have children that do not have health insurance. As shown:

- Twenty-two sliding fee scale clinics are located in the Navajo Nation Region.
- The broader counties of Apache, Coconino, and Navajo (outside of what is encompassed by the Navajo Nation FTF Region's boundaries) include substantially more clinics than what is observed specifically within the FTF region.
- In 2009, there were eight school-based clinics located in Navajo Nation while there were only 82 statewide.
- The number of clinics across the state declined over the last seven years while the number in Navajo Nation expanded rapidly.

EXHIBIT 3-28
NUMBER OF SLIDING FEE SCALE CLINICS

AREA	2010
Navajo Nation	22
Apache County	23
Coconino County	19
Navajo County	30
Arizona	659

Source: Arizona Department of Health Services.

Note: 2008 numbers from FTF Regional Profiles.

EXHIBIT 3-29
NUMBER OF SCHOOL-BASED CLINICS

AREA	2002	2009	Percent Change
Navajo Nation	1	8	700.0%
Arizona	97	82	-15.5%
Percent of State Total	1.0%	9.8%	846.3%

Source: Arizona Department of Health Services, 2009; University of Arizona Rural Health Office, 2002.

Note: Caution should be exercised in comparing 2002 numbers with 2009 numbers, as they were assembled by two different entities, and the criteria for inclusion were not apparent.

Exhibit 3-30 presents an account of the major healthcare facilities serving the region. While these entities represent strong assets to the communities they serve, successive analyses suggest that they are faced with addressing considerable needs relative to the resources they have available:

EXHIBIT 3-30 PROFILES OF AREA HEALTH CARE FACILITIES

CHINLE COMPREHENSIVE HEALTH CARE FACILITY (AZ)

The Chinle Comprehensive Health Care Facility (CCHCF) is based in Chinle, Arizona (Northeast Arizona near Canyon De Chelly National Monument). The CCHCF is a 60 bed hospital which serves as the health care hub for the region. The medical staff includes Family Physicians, Internists, Pediatricians, General Surgeons, OB/GYN's, Anesthesiologists, and a Psychiatrist.

In addition to routine outpatient and inpatient primary care, services available to patients include: Adult Intensive Care (4 bed unit), General Surgery (including laparoscopic surgery), routine and operative Obstetrics (700 deliveries/year), and 24-Hour Emergency Room Services (25,000 patients per year).

FORT DEFIANCE INDIAN HOSPITAL (AZ)

Fort Defiance Indian Hospital, a 245,000 square foot facility, is a state of the art rural hospital that opened in August 2002. The hospital is located in the beautiful high-desert climate of Northeastern Arizona, about 8 miles north of Window Rock, Arizona (the capitol of the Navajo Nation). Fort Defiance Indian Hospital boasts a 24/7 Level 2 Emergency Room, and is licensed for 56 inpatient beds including: an Intensive Care Unit; a Medical-Surgical Unit; a Pediatric Ward; an OB/GYN Ward; and an inpatient Adolescent Psychiatric Care Unit. In 2004, FDIH accumulated over 235,000 outpatient visits to its 65-exam room Ambulatory Care Center and 24 chair Dental Clinic. Currently the facility employs over 850 staff.

INSCRIPTION HOUSE HEALTH CENTER (AZ)

The Inscription House Health Center is part of the Kayenta Service Unit in the Western most part of the Navajo Nation. Inpatient needs are met by referral to the Tuba City Indian Medical Center, which is 65 miles South of Inscription House, Arizona. The Inscription House facility provides 40 hour per week ambulatory care for approximately 7,000 nearby residents. The facility is closed after 5 p.m. on weekdays and is closed on weekends. Most staff live in housing provided by the Indian Health Service.

The facility is staffed by three physicians and one physician's assistant. In addition to pediatrics, internal medicine and family medicine ambulatory care, services provided include laboratory, pharmacy, dental, public health nursing, mental health, health education, x-ray, and optometry care. As is true for other Navajo Area Indian Health facilities, leading reasons for outpatient visits include Respiratory illness, preventive health activities, Diabetes, Well Child exams and Prenatal care.

KAYENTA HEALTH CENTER (AZ)

The Kayenta Service Unit population of 20,000 is spread across a remote and sparsely populated area. Kayenta is in a traditional part of the reservation. Services are provided to 200 patients each day in continuity or walk-in clinics and in a 24 hour/day, 7 day/week emergency room. The clinic has on site lab, x-ray and pharmacy services. Current medical staff is made up of Family Practice, Pediatrics, Internal Medicine and Psychiatry specialties.

TSAILE HEALTH CENTER (AZ)

Tsaile Health Center is located in Northeast Arizona as a part of the Chinle Service Unit. This ambulatory care center is situated at the base of the Lukachukai Mountain range with local elevations of 7,000 to 8,000 feet. Two lakes are within 10-15 minute drive which offer camping, fishing, and non-motorized boating.

The Tsaile Health Center has 9,031 registered clients. Clinic hours are 8:00 a.m. to 5:00 p.m. Monday through Friday (closed on holidays). Weekend work is limited to two 13 hour emergency room shifts per month at the main hospital (Chinle Comprehensive Health Care Facility), 25 miles west of the Health Center.

TUBA CITY REGIONAL HEALTH CARE CORPORATION (AZ)
(SACRED PEAKS HEALTH CENTER; TUBA CITY REGIONAL HEALTH CARE)

Tuba City Regional Health Care Corporation, a Joint Commission accredited health center, provides services to a 4,400 square mile area and serves as a referral center for the western part of the Navajo and Hopi Reservations.

The hospital was constructed in 1975 with a bed capacity of 73. Services provided to the community include comprehensive inpatient/outpatient emergency services; dental and ophthalmology services; orthopedics; OB/GYN; oral surgery; eye surgery; and urological procedures. Approximately 49% of the surgeries performed are out patient/ambulatory surgical procedures.

The staff of medical providers includes surgeons, general medical officers, internal medicine, psychiatrists, pediatricians, family practice physicians, obstetricians, ENT specialists, orthopedic surgeons, and urologists. Dental staff includes general dentists, endodontists, oral and maxillofacial surgeons, pediatric dentists, dental assistants and hygienists. The nursing staff includes registered nurses, licensed practical nurses, nursing assistants, community health nurses, nurse practitioners, nurse midwives, CRNA, and community health medics.

Source: Arizona Department of Health Services.

EXHIBIT 3-30 (Continued)
PROFILES OF AREA HEALTH CARE FACILITIES

WINSLOW INDIAN HEALTH CARE CENTER**(WIHCC OPERATES TWO OUTLYING CLINICS - ONE IN DILKON, THE OTHER IN LEUPP) (AZ)**

Winslow Indian Health Care Center is an ambulatory health center that serves an estimated 17,000 Native Americans - mostly Navajo.

The main clinic building in Winslow was originally constructed in 1932 as a tuberculosis sanatorium. In 1948 it was converted to a hospital. In 1977 the in-patient wing was closed and the facility was converted to an ambulatory health center.

Inpatient care of some Winslow area patients is now performed at Winslow Memorial Hospital by WIHCC doctors. In 1980, infants were once again delivered at Winslow Memorial Hospital by IHS staff. In 1986 patients began to be admitted once again under the care of Winslow Indian Health Service physicians.

WIHCC operates two outlying clinics - one in Dilkon, the other in Leupp. A mobile van was purchased and outfitted to reach out the entire Winslow service area in 2001.

With the signing of a contract between Navajo Area Indian Health Service and Winslow Indian Health Care Center (WIHCC) on Friday, August 16, 2002, in the Navajo Nation capital of Window Rock, AZ, WIHCC became an independent corporation - The Winslow Indian Health Care Center, Incorporated.

Source: Arizona Department of Health Services.

Exhibit 3-31 provides data on the medically underserved areas and the health professional shortage areas. As shown:

- Both primary care areas in the Navajo Nation Region listed by the state are medically underserved areas and have health professional shortages.
- Both primary care areas in the Navajo Nation Region are also listed by the federal government as medically underserved.

EXHIBIT 3-31
MEDICALLY UNDERSERVED AREAS AND HEALTH PROFESSIONAL
SHORTAGE AREAS

PRIMARY CARE AREA	PRIMARY CARE SCORE*	ARIZONA MEDICALLY UNDERSERVED AREA (AZMUA)	HEALTH PROFESSIONAL SHORTAGE AREA (HPSA)	FEDERAL MEDICALLY UNDERSERVED AREA/POPULATION (MUA/P)	MUA/P SCORE**
Navajo Nation	64	Geographic, (Holbrook), Geographic, (Hopi), Geographic, (Navajo East Service Area)	Geographic, (Holbrook), Geographic, (Hopi), Geographic, (Navajo East Service Area)	MUA (Navajo County)	38.1
				MUA (Apache County)	35.9

Source: Arizona Department of Health Services.

*Higher scores indicate greater levels of medical underservice. The Primary Care Score is the sum of the values for a given area in terms of the following components: population to provider ratio, travel time to the nearest primary care facility, percent of the population with income less than 200% of poverty level (and 100-200%), percent of uninsured births, ratio of hospital admissions with ambulatory sensitive condition's per 1000 population less than age 65, percentage of low birth rates, the sum of the percentage of births receiving no prenatal care or prenatal care begun in the second or third trimester, and the percentage of births reporting four or less prenatal care visits, premature mortality, infant mortality, percent minority, and the percent elderly, and an unemployment rate above the statewide average. The values for the components of the Primary Care Score can be found at: <http://www.azdhs.gov/hsd/profiles/pcuindex.pdf>.

** Higher MUA/P scores indicate greater levels of medical service (or less severe underservice). The MUA/P score is based on four variables: ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 or over. For more on the MUA/P scores, see: <http://bhpr.hrsa.gov/shortage/muaguide.htm>.

Assorted healthcare issues also represent significant challenges to children and their families in the region, with most support provided by AHCCCS or IHS – very few families possess private insurance.

Despite high rates of disability among children, developmental screenings declined in recent years. A large proportion of disabled children were found to reside in homes with incomes below the Federal Poverty Level.

Regarding other aspects of community health, the vast majority of births in the region are paid for by public funds (either AHCCCS or IHS). While the proportion of mothers that sought no prenatal care is lower than the statewide average, a smaller percentage received at least five visits. The number of births requiring neonatal intensive care services increased in recent years.

Concerning dental care, a significant portion of residents feel their children do not have access quality care. This also appears to be a function of geographic isolation, as over 30 percent indicated that there is no dentist available within 20 miles.

One positive finding regarding local healthcare related to vaccination rates. These exceeded statewide averages in the region by substantial margins, doubling the statewide average among 19 to 35 month-olds.

Despite substantial assets in the form of the healthcare facilities serving the area, the confluence of challenging circumstances lead to negative ratings by federal and state regulators. Portions of the region are designated as both Medically Underserved Areas and as Health Profession Shortage Areas, as determined by resources availability as well as other risk factor considerations documented in local communities.

Clearly, the Navajo National Regional Partnership Council has recognized the importance and long-term benefit of healthcare by approving the following strategies during the SFY2011:

- Reducing dental disease among children ages 0-5 by providing dental varnish and nutrition/health information.
- Implementing nutrition education and obesity prevention programs that target nutrition, healthy weight, and physical exercise.
- Increasing children's access to preventative health care through a medical home model.

Additionally, the Navajo Nation Regional Partnership Council has planned for advancing the following strategies to expand and improve options related to healthcare:

- Develop age-appropriate, health education curriculum that focuses on wellness and nutrition.
- Limit access to unhealthy competitive foods and increase access to nutritious foods and drinks in center- or home-based early care and education settings.
- Create connections with community organizations and business that support child wellness.
- Implement oral hygiene measures no later than the time of eruption of the first primary tooth.
- Establish a dental home within six months of eruption of the first tooth and no later than 12 months of age to conduct a risk assessment and provide parental education including anticipatory guidance for the prevention of oral diseases.
- Create a multidisciplinary health care team that is collectively responsible for providing for a child's longitudinal health needs and making appropriate referrals to other providers.
- Foster an expanded focus on quality and safety.

4.0 SUMMARY AND FUTURE DIRECTION

The Navajo Nation Region has both strengths and challenges for young children and their families. Young child populations across the broader Navajo Nation Reservation (stretching between Arizona, New Mexico, and Utah) have declined in recent years, though these populations in the Arizona counties overlapping the region have remained relatively stable.

Economically, many additional challenging circumstances are present, median income levels in localities are lower than state and national benchmarks. Household incomes of single-parent females fall well below median values of married couples and single-parent, male householders. Contributing to this, unemployment rates are universally high across localities encompassed by the region, with a large proportion of communities exhibiting unemployment rates exceeding 20 percent.

As a result, poverty rates across the Navajo Nation Reservation and within encompassed counties in Arizona exceed statewide and national benchmarks. Fortunately, incidence of poverty among preschool and kindergarten enrollees showed declines in several encompassed localities (though rates remain very high).

Large percentages of local children are reported to be under the care of a grandparent. According the American Community Survey estimates, about 12 percent of children under the age of six live in a grandparent's household across the entire Navajo Nation Reservation, and over nine percent in Navajo County. These ratios are more than two to three times the state and national benchmarks (both between three and four percent).

The physical infrastructure of some communities is also of serious concern, as more than 21 percent of occupied housing units across the reservation and nearly eight percent in Navajo County lack complete plumbing facilities.

Despite poor and often deteriorating economic conditions, the numbers of families in the area receiving benefits from the Navajo Nation Program for Self Reliance (NNPSR) and Child Care Assistance (CCA) declined in recent years, which may indicate difficulties in administering or accessing these programs. Women, Infants, and Children (WIC) participation increased substantially, however, as assistance increased by 139 percent among women and 64 percent among children.

With economic hardships forcing parents to seek additional sources of income, childcare needs are emphasized. The capacities of local childcare providers are not entirely clear, as some data suggest declining availability in the broader region containing Navajo, Apache, Coconino, and Yavapai counties, while more localized data suggest expanding availability specifically within the Navajo Nation region. Local Head Start centers represent a definitive asset to the region in this capacity; nonetheless, waiting lists and home-based enrollments in these centers appeared to show needs extending beyond the current resources that are available.

Preschool enrollment in Head Start centers declined between 2007 and 2009 among one segment of children (age 3 to 5), but increased among younger children (age 0 to 2). Estimates of overall participation rates by young children in Head Start programs varies widely, from over 70 percent of young children in the Central Agency to less than 40 percent in the Western Agency.

Though these statistics in isolation do not demonstrate capacity needs (negative enrollment trends could reflect population dynamics), other indicators seem to point towards significant barriers to access due to capacity or other reasons. Home-based enrollments – usually associated with capacity shortages – represent as much as a quarter of total Head Start preschool enrollments in some communities. Where wait lists are available, some include a volume of children in excess of 48 percent of total enrollments. Proximity to programs may represent one barrier to accessing preschool programs. About 15 percent of communities in the area were estimated to be in excess of 20 miles from the nearest Head Start program.

Aside from capacity constraints, Head Start programs appear to be performing well. According to a prekindergarten assessment administered within the region (Creative Curriculum), preschool programs are providing valuable contributions to the future of student success. As an example, preschool students in the Central Agency rated as “not ready” for more advanced educational programs declined from 19 percent to 2 percent between the fall and winter 2008-09 terms. The proportion rated as “ready” increased from just 8 percent to 49 percent over this time period. Tailored assessment tools of this nature are also an asset to the region, as they can be used to analyze circumstances and promote improvements if properly utilized.

The healthcare facilities serving the region represent additional substantial assets in the area. However, the two primary care areas overlapping the region (Navajo and Apache counties) score very poorly based on combined measures of accessibility and assorted ratios gauging the availability of healthcare services and providers relative to local needs.

A related instance of need is the large proportion of local children that are reported to be disabled, which far exceeds state and national benchmarks (over four to five times the rate of incidence, respectively). Additionally, nearly one-third of these disabled children in the area may reside in households with incomes below the Federal Poverty Level (FPL). Screenings and services provided to disabled children declined between 2007 and 2009.

The numbers of mothers seeking prenatal care increased in Navajo County but decreased in Apache and Coconino counties. Between 2005 and 2008, there was an increase in the need for neonatal intensive care for preterm births. Fortunately, the number of low birth weight newborns decreased in Navajo County. Another positive aspect of the local early childhood health care system is that vaccination rates far exceed state and national averages for 12- through 35-month vaccinations.

The total rates of uninsured for the broader Navajo Nation Reservation as well as all local counties in Arizona (Navajo, Apache, and Coconino) far exceed state and national rates.

Participation in Arizona Health Care Cost Containment System (AHCCCS) increased significantly in recent years in all Arizona counties partially or fully overlapping the region. Simultaneously, KidsCare enrollment declined. Though the availability of Indian Health Service (IHS) mitigates these concerns, state and federal designations of primary care service needs and shortages of health care professionals are areas of concern.

The majority of children in tribal areas throughout the state appear to have adequate access to dental care, though a large segment still lacks access and their frequency of visits lags behind statewide averages. Nearly a quarter of residents in all tribal areas throughout the state must drive more than 20 miles to a dentist. Local conditions suggest substantial access barriers for pediatric dental care with limited facilities available through IHS.

Future Direction

The evidence presented in this report suggests both great areas of need in the region as well as community organizations that have been effective in their missions of serving the children and families in the region.

Economic and infrastructural investments are persistent needs that affect all aspects of society. Upgrading utilities so that families have access to clean, running water is a paramount need for the health and welfare of local communities.

Strong results from preschool assessments by Head Start suggest these programs can be a powerful catalyst for growth and improvement in the region. However, a number of barriers to access inhibit the scope of the impact that these programs are able to realize. Foremost among barriers appears to be capacity, as evidenced by extended waiting lists and home-based enrollments. Another potential barrier to accessing childcare and preschool programs, but also with broader implications, is the remote locale of many communities combined with lacking available transportation. These types of barriers must be overcome to maximize the impacts of other investments into community services.

Related to the above, but also of broader interest, would be continuing previous efforts to enhance the reporting and tracking mechanisms associated with the administration of social service programs in the area. To illustrate, if outcomes associated with home-based Head Start enrollments proved to be as robust as center enrollments, the program could address some of the perceived access issues via the expansion of this model. However, no data appear to be available that would track the outcomes by particular service group. Similar distinctions in reporting for other programs might help to isolate the most acute areas of concern, as well as to assist in developing strategies to overcome unique circumstances in this region.

Another area of need appears to include the disabled child population. Despite much higher incidences of disability, 43 percent fewer young children were reached by the

Arizona Early Intervention Program (AZEIP) in the latest year of data. Investments must be made to identify and support those populations most in need.

A final direction of necessity for the area is to overcome the pronounced rates of uninsured in the area. Regardless of changes stemming from broader health care reform initiatives, attention should be focused to reaching the uncovered populations with the programs already available.

It is evident by data in this report that the Council has recognized priorities needed for the region. As previously indicated the following are priorities established by the council that should be implemented to better the children and families of Navajo Nation:

- Increasing quality of early care and education programs that include: state of the art facilities, transportation, research-based data, trained staff, and culturally responsive with the native language.
- Enhancing family support, education, and outreach and/or support and expand community awareness.
- Increasing the numbers of highly skilled and well-prepared early childhood development workforce.
- Expanding public awareness of early childhood development and health efforts.
- Decreasing dental disease among children six months through age five.
- Increasing education and guidance on nutrition and prevention of childhood obesity and diabetes.
- Developing access to comprehensive health and support services for children birth to age five.