February 7, 2012

FIRST THINGS FIRST

Ready for School. Set for Life.

School Readiness Indicators

INDICATOR	BASELINE DATA SOURCE AND STATUS	ACTUAL OR ANTICIPATED LEVEL OF DATA AVAILABILITY AND REGULARITY	BASELINE DATA	TIMELINE FOR OBTAINING BASELINE OR ONGOING DATA COLLECTION	COST
1. #/% children demonstrating school readiness at kindergarten entry in the development domains of social-emotional, language and literacy, cognitive, and motor and physical	ADE, in partnership with FTF and Head Start is developing measures for this indicator	Anticipated - School district Anticipated - annual	---	TBD	TBD
2. #/% of children enrolled in an early care and education program with a Quality First rating of 3-5 stars	FTF – in process	FTF Regions Annual with periodic updates	Preliminary -- As of June, 2011, statewide, 711 or 16% of licensed and certified providers were enrolled in Quality First. They serve about 36,000 children or 30% of those in regulated care or 7% of all children zero through five. 90% of these providers were Rising Stars or Progressing Stars (one or two star).	Available in summer 2012 upon calculation of formal star ratings	No anticipated additional costs beyond current QF development and staffing
3. #/% of children with special needs/rights enrolled in an inclusive early care and education program with a Quality First rating of 3-5 stars	FTF – in process	FTF Regions Annual with periodic updates	Preliminary – QF profile reports 1/31/12, Quality First enrolled	Available in summer 2012 upon calculation of formal star ratings	No anticipated additional costs beyond current QF development

			providers reported serving 2149 children with special needs/rights, this is approximately 6% of the children served by Quality First providers.		and staffing
4. #/% of families that spend no more than 10% of the regional median family income on quality care and education (those receiving a star rating of 3-5)	FTF – data requirement change DES Market Rate Survey – unconfirmed	FTF Regions Annual with periodic updates DES regions or FTF regions Every two years – released end of each even year	Preliminary – Statewide the median cost for a full day of child care is $38.75 for infants, $34.80 for toddlers, and $30.00 for preschoolers. At these rates, care for a preschool child is about 11% of the median income for a two-parent family and 30% of the income of a single mother.	Available in summer 2012 upon calculation of formal star ratings Include parent fee/payment information as part of QF and QF Scholarship data collection Work with DES to incorporate QF rating into 2012 Market Rate Survey and/or make data available by provider	TBD TBD
5. % of children with newly identified developmental delays during the kindergarten year	Arizona Department of Education – in process	Anticipated - School district Anticipated - annual	Statewide- 4.5%	Annual data delivered for previous fiscal year in September	No anticipated additional costs beyond agency staffing
6. # of children entering kindergarten exiting Part B special education to regular education	Arizona Department of Education - in process	Anticipated - School district Anticipated - annual	Statewide- 9868	Annual data delivered for previous fiscal year in September	No anticipated additional costs beyond

					agency staffing
7. #/% of children ages 2-5 at a healthy weight (BMI)	Pediatric Nutrition Surveillance System **(WIC – ages 2-4)**	Current – statewide Regional Partnership Council – unconfirmed Anticipated -- annual	Statewide - 14.2% obese 15.7% overweight	Collaborate with WIC and DHS to exchange data annually in August	No anticipated additional costs beyond agency staffing
8. #/% of children receiving timely well child visits	AZ Health Survey	Regional Behavioral Health areas – geographic service areas Anticipated -- Every two or three years	Visited a doctor for a routine checkup or well-child visit in one year or less: State 95% GSA 1 95% GSA 2 89% GSA 3 93% GSA 4 98% GSA 5 95%	Continue to partner with SLHI in the conduct of the AHS or develop approach for FTF independent data collection	$270,000 to conduct in partnership with SLHI; estimated $600,000 to conduct independently by FTF
9. #/% of children age 5 with untreated tooth decay	ADHS Office of Oral Health	Statewide County – unconfirmed Every three years – unconfirmed	Statewide - 50% with decay experience 35% with untreated decay, at kindergarten (1999-2003) Provisionary regional data from the AHS – Percentage of children who already have teeth who have never been to the dentist: State 40% GSA 1 42% GSA 2 41% GSA 3 43% GSA 4 36% GSA 5 40%	Collaborate with DHS to conduct Oral Health Survey regularly (every three years) beginning 2015	TBD
10. % of families who report they are	FTF Family	All FTF regions	Preliminary—	Development	Family and

competent and confident about their ability to support their child's safety, health and well being	and Community Survey	with over 2000 children under six Every two years	statewide- 20% of Arizona parents are not aware that their child's first year impacts later school performance. 27% are not aware that children sense and react to parent emotions from birth. 21% are not aware that play is crucial for children under 10 months of age. 47% of parents believe that a child's language benefits equally from watching TV versus talking to a real person.	of baseline (2008) and follow-up (2012) composite variable by spring 2012	Community Survey costs are $150,000 - $175,000 every two years

Background Information on Quality First Measurement (Indicators 2-4)

School Readiness Indicator 2: Number/percent of children enrolled in an early care and education program with a Quality First rating of 3-5 stars

School Readiness Indicator 3: Number/percent of children with special needs/rights enrolled in an inclusive early care and education program with a Quality First rating of 3-5 stars

School Readiness Indicator 4: Number/percent of families that spend no more than 10% of the regional median family income on quality care and education (those receiving a star rating of 3-5)

EXERPTED FROM: Quality First Implementation Guide. First Things First, 2012.

An important component of Quality First is the assignment of a quality rating which identifies the quality of early care and education which providers are delivering to young children and their families. First Things First is committed to improving access to high quality care and education across the state.

Ratings will be assigned on a scale of one to five and will be designated with stars. One star indicates a participant is participating in Quality First, and has demonstrated a commitment to examine practices and improve the quality of care beyond regulatory requirements. Three stars demonstrates a level of quality that provides access to developmentally appropriate materials, a curriculum aligned with state standards and enhanced interactions between adults and children. Five stars indicate the highest level of quality attainable, where families will find low staff-child ratios and group sizes, higher staff qualifications, and strong curriculum which optimizes children's comprehensive development.

INITIAL STAR RATING

1. All initial assessments will be announced. For participants enrolled **after July 1, 2011**, upon completion of assessments, an initial Star Rating will be assigned and only used for quality improvement planning.
   For grandfathered participants **(enrolled before July 1, 2011)**, an initial Star Rating will be assigned upon completion of the 3rd assessment. This assessment will be unannounced.
2. If the ERS Average Program Score is below 3.0, a participant's initial Star Rating will be determined (see Quality First Rating Scale) and a coach will be assigned.
3. If the ERS Average Program Score is 3.0 or above (with no individual classroom score below a 2.5), an assessor will call the participant to schedule the CLASS assessment.
4. If the CLASS Average Program Score meets the 3, 4, or 5 Star Rating scores (see Quality First Rating Scale), a coach will be assigned and the Quality First Points Scale evidence will be collected within 6 months. A participant will be rated at the 3, 4, or 5 star levels if their ERS, CLASS, and Points Scale scores meet those indicated on the Quality First Rating Scale.
5. If the CLASS Average Program Score does not meet the 3, 4, or 5 Star Rating scores, the participant will receive a 1 or 2 Star Rating based on their ERS Average Program Score.

CALCULATING AVERAGE PROGRAM SCORES

1. The ERS Average Program Score will be calculated by averaging the raw scores from each classroom assessment completed.
    a. For example, if a participant has 1 ITERS and 2 ECERS assessments completed, the raw scores from all three assessments will be averaged together.

2. The CLASS Average Program Score will be calculated by averaging the scores from each classroom assessment completed by domain.
    a. For example, if a participant has more than 1 CLASS assessment:
        i. the scores from the Emotional Support Domain will be averaged together to total an Average Emotional Support Score
        ii. The scores from the Classroom Organization Domain will be averaged together to total an Average Classroom Organization Score
        iii. The scores from the Instructional Support Domain will be averaged together to total an Average Instructional Support Score.

QUALITY FIRST RATING SCALE

The scale below details the necessary scores in each of the assessments for each Quality Star Rating. For each Star Rating level, a participant must meet the scores indicated for all assessments required. One and two Star Ratings only require the ERS Average Program Score. Three, four, and five Star Ratings require the ERS Average Program Score, the CLASS Average Program Score and the Quality First Points Scale Scores.

Re-rating:
A participant will be re-rated annually if they have a 1 or 2 Star Rating. A participant will be re-rated every two years if they have a 3, 4, or 5 Star Rating. The assessment visit for re-rating is unannounced.

1. Participants will be contacted by an assessor, who will provide a three week time frame in which an ERS assessment will be completed.
   a. Participants will have an opportunity to provide the assessor with dates that would prohibit an assessment visit (participant closure days, planned field trips, etc.).
   b. The actual date of the visit will be unannounced.

2. If the ERS Average Program Score is below 3.0, a participant's initial Star Rating will be determined (see Quality First Rating Scale below) and a coach will be assigned.

3. If the ERS Average Program Score is 3.0 or above (with no individual classroom score below a 2.5), an assessor will call the participant to schedule the CLASS assessment within a 3 week time frame.
   a. Participants will have an opportunity to provide the assessor with dates that would prohibit an assessment visit (participant closure days, planned field trips, etc.).
   b. The actual date of the visit will be unannounced.

4. If the CLASS Average Program Score meets the 3, 4, or 5 Star Rating scores (see Quality First Rating Scale)

Additional Background Information on Indicator 4

School Readiness Indicator 4: Number/percent of families that spend no more than 10% of the regional median family income on quality care and education (those receiving a star rating of 3-5)

EXERPTED FROM: Arizona Department of Economic Security. Child Care Market Rate Survey. 2010. https://www.azdes.gov/InternetFiles/Reports/pdf/MarketRateSurvey2010.pdf

METHODOLOGY:

Federal CCDF regulations require that states develop a State Plan, which is to be submitted to the Secretary of the DHHS. The Plan shall contain a biennial local market rate survey. The preamble to the regulations indicates DHHS believes that surveys will show variations in rates among categories of child care and will also reflect sub-state variations in rates, which States must consider.

DES has designated six such sub-state areas, or districts. Each district represents a county or group of counties. The Department utilizes these districts for planning, service delivery and in conducting its field operations. Each district is an area with unique needs based upon geographic proximity or other common characteristics. They are also similar to those used by the Arizona Council of Governments. The following counties define these districts:

District I	-	Maricopa
District II	-	Pima
District III	-	Apache, Coconino, Navajo & Yavapai
District IV	-	La Paz, Mohave & Yuma
District V	-	Gila & Pinal
District VI	-	Cochise, Graham, Greenlee & Santa Cruz

DES contracted with the Maricopa County Office of Research and Reporting to conduct the Child Care Market Rate Survey. The Maricopa County Office of Research and Reporting is an independent credentialed organization with strong survey research skills. They are recognized by the American Association of Public Opinion Researchers and are also a member of the National Field Director's Association, which is a scientific data collection forum with members such as the U.S. Census Bureau, National Institute of Health and many major universities.

Due to the complexity of the survey, to help ensure that the most accurate data was obtained and to attain a high response rate a telephone survey methodology was used. Interviewers read a questionnaire and responses were entered into a data base. This method of surveying allowed for the collection of necessary data as reported by providers and corresponded with the need to gather complex rate information by age categories and by category of care. The Maricopa County Office of Research and Reporting conducted the market rate survey in both English and Spanish.

Consistent with past surveys, all identifiable providers were surveyed rather than selecting a random sample. The basis for this approach is because a complete census is more reliable than a sample as

there is no chance of a sampling error. Additionally, in some areas of the state, obtaining a sufficiently large and representative sample is not possible.

Sources of provider names and telephone numbers which were utilized included: 1) The DES database of certified family homes that provide child care services to families eligible for child care assistance; 2) The Department of Health Services' (DHS) database of licensed child care centers (including "preschools" required to be licensed as child day care centers) and certified child care group homes; 3) Listings obtained from non-profit sponsors who approve child care homes to participate in the Arizona Department of Education's (ADE) federal Child and Adult Care Food Program (CACFP); and 4) Lists of otherwise unregulated homes registered with the state contracted Child Care Resource & Referral (CCR&R) agencies.

Initially the various sources identified 6,741 possible child care providers in the state. Providers that were listed on more than one list, not providing care, not charging for their services, or were unable to be interviewed due to invalid and non-existent telephone numbers were eliminated from this total. This resulted in a list of 4,660 childcare providers, of which 99% were interviewed.

A total of 4,625 child care providers (1,885 licensed centers, 2,099 approved family homes, 374 certified group homes and 267 unregulated homes listed with CCR&R) were interviewed for this survey. The survey was conducted between March and June 2010**.** As with any survey, there is a margin of error due to reasons such as the respondent's interpretations of the questions asked and their understanding of the purpose of the survey and resultant usage of the data compiled.

Prior to the start of the survey, all sources that supplied provider information were notified that they could direct any questions that came to them, regarding the survey, to DES. At the onset of each telephone interview, providers were advised that specific individual information would be kept confidential and would not be used for any purpose other than identifying local market information. Individual providers were given a telephone number, which they could use to call the surveyor back if necessary. They were also provided with a telephone number of a DES contact if they had any other questions.

The major findings of the 2010 survey are summarized on the following four pages. Specific details of this survey are found in four sets of tables, which follow the major findings. The first set is for centers, the second for approved family homes, the third for certified group homes and the fourth for unregulated homes listed with a state contracted CCR&R agency. In each set, Tables 1 and 2 address capacity and attendance reported by providers surveyed. Tables 3-6 provide market and market rate information. Tables 7 and 8 provide other related market rate considerations. Market rate information is given as: 1) The 50th percentile (the median) i.e., the rate at which at least 50% of the market is at or below and 2) The 75th percentile i.e., the rate at which at least 75% of the market is at or below.

Percentages cited in the report may not total 100% due to rounding.

Background Information on Calculation of Indicators 5 and 6

School Readiness Indicator 5: Percent of children with newly identified developmental delays during the kindergarten year

School Readiness Indicator 6: Number of children entering kindergarten exiting preschool special education to regular education

Key Definitions: Article 4. Special Education for Exceptional Children.

15-761. Definitions

2. "Child with a disability":

(a) Means a child who is at least three years but less than twenty-two years of age, who has been evaluated pursuant to section 15-766 and found to have at least one of the following disabilities and who, because of the disability, needs special education and related services:

(i) Autism.
(ii) Developmental delay.
(iii) Emotional disability.
(iv) Hearing impairment.
(v) Other health impairments.
(vi) Specific learning disability.
(vii) Mild, moderate or severe intellectual disability.
(viii) Multiple disabilities.
(ix) Multiple disabilities with severe sensory impairment.
(x) Orthopedic impairment.
(xi) Preschool severe delay.
(xii) Speech/language impairment.
(xiii) Traumatic brain injury.
(xiv) Visual impairment.

Agency/Program: Arizona Department of Education (ADE)

Description: As of September 2011, the Arizona K-12 public education system is comprised of the following:

- The Arizona Department of Education, the State Board of Education, 15 County School Districts and hundreds of district and charter governing boards225 School Districts, 374 charter holders and 13 Joint Technological Education Districts
- Over 2200 public schools
- Over 60,000 certified teachers
- Over 1,000,000 students

Agency Contact:

Arizona Department of Education
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602-542-5393
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Robert Weiss (Robert.Weiss@azed.gov); or
Peggy Staples (pstaple@ade.az.gov)
Data Management Specialist
Exceptional Student Services

Population: ADE reported that as of October 1, 2010 there were:

- 1659 Kindergarteners identified as being newly identified with a developmental delay in the Arizona school system.
- This makes up 27% of all kindergarteners receiving SPED and related services on the child count date.

Data Pull Methodology for Detecting Developmental Delays: Data on Indicators 5 and 6

Indicator 5: *Percent of children with newly identified developmental delays during the kindergarten year*

- Data will be requested by First Things First from the Arizona Department of Education in July/August annually and
- Data will be for the previous State Fiscal Year which is finalized on June 30 of each year.
- Data will reflect all children *newly eligible* for the following services: eligibility Categories
    1. Hearing Impairment (HI)
    2. Developmental Delay (DD)
    3. Speech/Language Impairment (S/LI)
    4. Visual Impairment (VI)
    5. Preschool Severe Delay (PSD) - Note: for preschool severe delay count and percent should reflect only those children NOT eligible for PSD services in preschool.
    6. Indicator #5 is calculated by the formula: F/D (see chart below)

A	B	C	D	E	F
Universe of Preschoolers (total count of all unduplicated preschoolers for the SFY as of 6/30)	Number of Preschoolers **Identified** with any of the 5 eligibility categories	Number of **Identified** preschoolers at the end of the school year (total unduplicated count) going into the general education (within X days of beginning kindergarten); reported by category	Universe of Kindergartners (KG) - (total count of all unduplicated KG for the SFY as of 6/30)	Number of KG receiving Special Education	Number of KG **NEWLY Identified** (within X days of beginning kindergarten) with any of the 5 impairments category; reported by category

Indicator 6: *Number of children entering kindergarten exiting preschool special education to regular education*

- Data will be requested First Things First from the Arizona Department of Education in July/August annually and
- Data will be for the previous State Fiscal Year which is finalized on June 30 of each year.
- Data will reflect children moving *to* general education from the following: eligibility Categories
    - Hearing Impairment (HI)
    - Developmental Delay (DD)
    - Speech/Language Impairment (S/LI)
    - Visual Impairment (VI)
    - Preschool Severe Delay (PSD) - Note: for preschool severe delay count and percent should reflect only those children NOT eligible for PSD services in preschool.

Indicator #6 is calculated by the formula: C/A (see chart above)

Background Information on the Calculation of Indicator 7

School Readiness Indicator 7: Number/percentage of children ages 2-5 at a healthy weight (Body Mass Index-BMI)

Key Definitions: Body mass index (BMI) is a measure used to determine childhood overweight and obesity. It is calculated using a child's weight and height. BMI does not measure body fat directly, but it is a reasonable indicator of body fatness for most children and teens. [1]

A child's weight status is determined using an age- and sex-specific percentile for BMI rather than the BMI categories used for adults because children's body composition varies as they age and varies between boys and girls. [1]

For children and adolescents (aged 2—19 years):

- **Overweight** is defined as a BMI at or above the 85th percentile and lower than the 95th percentile for children of the same age and sex.[2]
- **Obesity** is defined as a BMI at or above the 95th percentile for children of the same age and sex.[2]

Agency/Program: Arizona Department of Health Services, Women, Infants, and Children (WIC)

Description: Arizona Women, Infants & Children (WIC) is a federally funded program providing residents with nutritious foods, nutrition education, and referrals. WIC serves pregnant, breastfeeding, and postpartum women, and infants and children under age five who meet WIC eligibility guidelines.[3]

WIC is available to Arizona's pregnant, breastfeeding, and postpartum women, infants and children under the age of five who are at nutritional risk and who are at or below 185 percent of the federal poverty guidelines.[3]

WIC income guidelines are available at:
http://azdhs.gov/azwic/documents/eligibility/WIC_Income_Guidelines2011-2012_English.pdf

Agency Contact:

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Bureau of Nutrition and Physical Activity, Arizona Department of Health Services
150 N. 18th Ave., Suite 330, Phoenix, AZ 85007-3242
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Population: There are a total of 105,968 children, ages 2 to 4, in the entire data pull. Some were eliminated including those who were out of state and those who could not be classified into a RPC (i.e. 2,979 in 179 different zip codes).

Data Pull Methodology:

- Count data are aggregated at the RPC level
- There are four weight categories: underweight, normal, overweight, and obese
- Totals are also given
- There may be several data points for a child in one year. The age and classifications in the dataset we receive reflect the last time that child was weighed and measured for the time period being pulled (e.g. last measurement point in the calendar year 2010)
- Some data were removed because of the small sample sizes (< 25 cases) for a particular RPC (i.e. 7 RPCs had fewer than 25 children in the sample)

Data File View Example

RPC Short Name	**WEIGHT**				
	Under	**Normal**	**Over**	**Obese**	**Total**
-RPC 1 name here -	165	1,893	196	180	2,434
-RPC 2 name here -	26	503	114	71	714
-RPC 3 name here -	31	674	120	133	958

[1] Centers for Disease Control and Prevention (CDC): http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html

[2] Barlow SE and the Expert Committee. Expert committee recommendations regarding the prevention, assessment, and treatment of child and adolescent overweight and obesity: summary report. *Pediatrics* 2007;120 Supplement December 2007:S164—S192.

[3] Arizona Women, Infants & Children (WIC) Program: http://azdhs.gov/azwic/

Background Information on the Arizona Health Survey (Indicators 8 and Provisionary 9)

School Readiness Indicator 8: Number/percent of children receiving timely well child visits

School Readiness Indicator 9: Number/percent of children age 5 with untreated tooth decay

EXCERPTED FROM: DESIGN AND METHODOLOGY OF THE 2010 ARIZONA HEALTH SURVEY. SEPTEMBER 2010. Westat. Prepared for St. Luke's Health Initiatives.

The Arizona Health Survey (AHS), sponsored by St. Luke's Health Initiatives (SLHI), is a population-based random-digit dial telephone survey of Arizona's population conducted in the first half of 2010. It was designed to collect data on individual indicators of health status, health care access, health-related behaviors and various demographic and social/environmental factors related to health. Results will be used to inform and improve public policy and community health/health care program planning decisions at the local, regional and state levels. In addition, it was designed to enable service providers and funders to:

- plan resource allocation and target intervention activities to increase access to care for high-risk, underserved and uninsured populations;
- determine community strengths, resources, barriers and needs;
- increase understanding of attitudes toward prevention and utilization; and,
- establish a mechanism by which to evaluate efforts to improve community health and quality of life.

The AHS sample is representative of Arizona's non-institutionalized population living in households with landline telephones.

This report describes the AHS sample design, data collection and processing procedures, and weighting and variance estimation. These details are summarized here.

To achieve its objectives, AHS employed a multi-stage sample design, described in Chapter 1. Landline residential telephone numbers were selected within six geographic strata defined by counties or groups of counties. Within each household, one adult (age 18 and over) respondent was randomly selected. In those households with children (under age 6), one child was randomly selected, and the adult most knowledgeable about the child's health completed

the child interview. For operational efficiency, the RDD sample was supplemented by listed telephone numbers for households expected to have eligible children. No adults were sampled in these households; if the household did not have an eligible child, it was considered ineligible. The samples were selected so as to complete about 8,100 interviews with adults and 2,000 interviews about children, with separate targets for each stratum. Table ES-1 shows the number of completed interviews by type and stratum (as reported by the respondent).

Table ES-1. Number of completed AHS interviews by self-reported location and instrument

Stratum Number, Counties Included	Adult	Child
Total	8,215	2,148
1. Mohave, Coconino, Navajo, Apache, Yavapai	1,059	362
2. Yuma, La Paz	759	416
3. Graham, Greenlee, Cochise, Santa Cruz	770	571*
4. Pinal, Gila	777	
5. Pima	2,168	400
6. Maricopa	2,682	399

*Strata 3 and 4 were combined for the child sample

Table ES-3 at the end of this summary shows the major topic areas for each of the survey instruments (adult and child). Chapter 2 describes the structure and content of the survey instruments. The average adult interview took about 35 minutes to complete in English 46 minutes in Spanish; the average child interview took about 24 minutes in English, 30 minutes in Spanish. In households where an adult interview had not been completed at the time the child interview was completed, selected questions from the adult interview were included in the child interview. There was little difference in the length of the two kinds of child interviews.

Westat, a private firm that specializes in statistical research and large-scale sample surveys, conducted AHS data collection under contract with SLHI. Interviews were conducted in English and Spanish using Westat's computer-assisted telephone interviewing (CATI) system. Interviewer recruitment and training are described in Chapter 3, and Chapter 4 presents details of data collection procedures and results.

Adults who completed at least approximately 80 percent of the questionnaire (i.e., through Section K (on employment, income, poverty status, and food security), after all follow-up attempts were exhausted to complete the full questionnaire, were counted as "complete."

The overall AHS response rate is a composite of the screener completion rate (i.e., success in introducing the survey to a household and randomly selecting an adult to be interviewed) and the extended interview completion rate (i.e., success in getting one or more selected persons to complete the extended interview).

The overall AHS screener response rate was 46 percent for the adult sample and 39 percent for the child sample. The adult extended response rate was 42 percent, resulting in an overall adult response rate of 19 percent. The rates were slightly higher in the remainder of Arizona than in Maricopa County. The child extended response rate was 42 percent, resulting in an overall adult response rate of 19 percent.

Westat conducted a variety of data preparation, coding, and cleaning operations to enhance the quality and utility of the survey data. These included resolving problems identified during data collection, coding text strings, including race and ethnicity and converting the survey responses to SPSS. These operations are described in Chapter 5.

To produce population estimates from AHS data, weights are applied to the sample data to compensate for the probability of selection and a variety of other factors, some directly resulting from the design and administration of the survey. The sample is weighted to represent the non-institutionalized population for each sampling stratum and statewide. AHS weighting procedures accomplish the following objectives:

- Compensate for differential probabilities of selection for households and persons;
- Reduce biases occurring because nonrespondents may have different characteristics than respondents;
- Adjust, to the extent possible, for undercoverage in the sampling frame and in the conduct of the survey; and
- Reduce the variance of the estimates by using auxiliary information.

As part of the weighting process, a household weight was created for all households that completed the screener interview. This household weight is the product of the “base weight” (the inverse of the probability of selection of the telephone number) and a variety of adjustment factors. The household weight is used to compute a person-level weight, which includes adjustments for the within-household sampling of persons and nonresponse. The final

step is to adjust the person-level weight using a raking method so that the AHS estimates are consistent with population control totals. Raking is an iterative procedure that forces the AHS weights to sum to known totals from an independent data source. The sources used were 2007 Arizona Department of Commerce Population Estimates, 2010 Arizona Department of Commerce Projections (State of Arizona, Department of Commerce, 2006, 2006b), and the 2006 American Community Survey estimates for Arizona. The procedure requires iteration to make sure all the control totals, or raking dimensions, are simultaneously satisfied within a specified tolerance.

A complex survey design such as that used for the 2010 AHS increases the variance of survey estimates because of the variability in the survey weights. The increase in variance is called the *design effect*. Table ES-2 shows the estimated design effect by type of interview (child and adult) for the state and the sampling strata. The design effect shows the effect on variance of a complex sample design compared to a simple random sample of the same size. The design effect for the 2010 AHS reflects several factors, notably (at the state level) different probabilities of selection across strata, and oversampling of telephone numbers associated with Hispanic surnames in some strata. For the child sample, the dual frame design increased the design effect substantially.

Table ES-2. Estimated design effects by sample and stratum

Stratum Number, Counties Included	Adult	Child
State	2.95	5.91
1. Mohave, Coconino, Navajo, Apache, Yavapai	2.22	5.89
2. Yuma, La Paz	1.81	2.00
3. Graham, Greenlee, Cochise, Santa Cruz	2.30	5.87*
4. Pinal, Gila	3.22	
5. Pima	2.44	4.88
6. Maricopa	2.13	2.34

*Strata 3 and 4 were combined for the child sample

Missing values in the AHS data files were replaced for a handful of variables used in the weighting process, using random allocation and hot-deck methods.

AHS weighting procedures are described in detail in Chapter 6.

Table ES-3. AHS survey topic areas by instrument

Health status and functioning	Adult	Child
General health status	✓	✓
Height and weight	✓	✓
Limitations of activity	✓	✓
Health conditions	**Adult**	**Child**
Asthma	✓	✓
Diabetes	✓	
Heart disease, high blood pressure	✓	
Arthritis, gout, lupus, fibromyalgia	✓	
Gastrointestinal disorders	✓	
Bi-polar disorder, anxiety disorder, depression	✓	
Developmental disorders		✓
Mental health	**Adult**	**Child**
Mental health status	✓	
Psychological distress	✓	
Experiences of stress	✓	
Emotional functioning	✓	✓
Interpersonal relationships	✓	
Perceived need, use of behavioral health services	✓	
Reasons for not seeking treatment	✓	
Parent's behavioral and developmental concerns		✓
Behavioral and developmental concerns of school, doctor		✓
Health behaviors	**Adult**	**Child**
Dietary intake	✓	✓
Physical activity and exercise	✓	✓
Alcohol and tobacco use	✓	
Illegal drug use	✓	
Abuse of prescription drugs, steroids	✓	
Dental health	**Adult**	**Child**
Last dental visit	✓	✓
Not getting needed care		✓
Days missed from school due to dental problems		✓
Unmet needs		✓
Usual source of dental care		✓
Access to and use of health care		
Personal doctor	✓	
Visits to medical doctor, specialist in past year	✓	✓
Barriers to care	✓	
Unmet needs for care or prescriptions	✓	✓
Communication with doctor	✓	✓

Table ES-3. AHS survey topic areas by instrument (continued)

Health insurance	Adult	Child
Current health insurance coverage and source	✓	✓
Coverage of prescription drugs, dental and behavioral health services	✓	✓
Coverage over past 12 months	✓	✓
Availability of coverage through employment	✓	*
Medical debt and its effects	✓	
Housing and neighborhood	**Adult**	**Child**
Type of housing	✓	
Neighborhood safety	✓	✓
Family nearby	✓	
Availability of food shopping, cultural facilities	✓	
Characteristics of neighbors	✓	
Use of parks	✓	
Volunteer service	✓	
Social interactions	✓	
Parental involvement	**Adult**	**Child**
Parental presence after school		
Marital status of parents		
Child's activities with family		✓
Child care and school attendance	**Adult**	**Child**
Current child care arrangements		✓
Difficulty finding care		✓
Quality of child care		✓
Employment	**Adult**	**Child**
Employment status, spouse's employment status	✓	*
Work in last week	✓	*
Hours worked at all jobs, spouse hours	✓	*
Tenure	✓	*
Employer size, spouse employer size	✓	*
Income	**Adult**	**Child**
Household income (annual before taxes)	✓	*
Number of persons supported by household income	✓	*
Food, housing insecurity	✓	
Receipt of Social Security disability, SSI	✓	
Participation in TANF	✓	✓
Participation in food stamps, WIC		✓
Respondent characteristics	**Adult**	**Child**
Age, gender	✓	✓
Race and ethnicity	✓	✓

Marital status	✓	
Education	✓	
Sexual orientation	✓	
Household composition	✓	
First language, English proficiency	✓	
Languages spoken at home		✓
Country of birth	✓	✓
Military service	✓	
County of residence	✓	✓

Background Information on the DHS Oral Health Survey (Indicator 9)

School Readiness Indicator 9: Number/percent of children age 5 with untreated tooth decay

EXCERPTED FROM Arizona Department of Health Services. Office of Oral Heath. The Oral Health of Arizona's Children: Current Status, Trends and Disparities. November 2005. http://www.azdhs.gov/phs/owch/ooh/pdf/OOH_AZSchoolChildrenReport-pagebypage.pdf.

In this report, data from the 1999-2003 survey are compared to data from Arizona's 1987- 1990 dental health survey. Readers should be aware that the methods for the two surveys differed in terms of sample selection, case definition, and protocol. The 1987-1990 survey sampled school districts based on stratification by school fluoride mouth rinse participation, community water fluoridation levels and socioeconomic background. Letters were sent to 300 school districts; 146 schools consented, and from these, 74 schools were selected for the survey. The 1987-1990 sample included 6,469 children six to 15 years of age. Dental explorers were used in this survey.

The 1999-2003 Arizona School Dental Survey sampled children in public schools in kindergarten through third grades. Schools were selected from communities with a population of 1,000 or more (U.S. 1990 Census). Schools in communities on Indian Reservations were not included. The survey was conducted from 1999 to 2003. Communities were stratified as either rural or urban.

In rural communities, one school was randomly selected. Of the 73 rural communities in Arizona, 70 participated. The goal was to screen at least 30 students per grade, per community. Independent random samples of students were drawn from each grade. Twelve communities in Arizona were designated as urban. Urban community schools were stratified into three categories (low, middle, high) based on percent of the student body on the free and/or reduced price meal program, and one school from each category was selected. In the State's two major metropolitan communities (Phoenix and Tucson), additional schools were selected based on the community's population. In urban communities, two classes per grade were randomly selected for a minimum of 60 students per grade.

Written parental consent was obtained. Each parent/guardian was asked to complete an eight-item questionnaire. The questionnaire collected information on dental insurance, race/ethnicity, medical and dental history, plus household income. Teams consisting of one screener (a licensed dental hygienist) and one recorder were trained, standardized and calibrated to conduct screenings using a dental mirror and portable dental light. Consistent with recommendations developed by the National Institute of Dental and Craniofacial Research, each tooth surface was scored for decay, restorations, sealants, fluorosis, trauma, premature loss, and eruption status. Additional information was gathered to determine treatment urgency and referral needs.

More than 13,000 children received dental screenings; approximately 4% of all children enrolled in kindergarten through third grade. The data were weighted to account for the complex sampling scheme and non-response. Data analysis was completed using SAS and Epi Info™ statistical software.

Background Information on the FTF Family and Community Survey (indicator 10)

School Readiness Indicator 10: Percent % of families who report they are competent and confident about their ability to support their child's safety, health and well being

What is the First Things First *Family and Community Survey*?

The *Family and Community Survey* is FTF's primary method for gathering consistent data on parent and caregiver knowledge of early childhood development. These data will be used to benchmark and target our Early Childhood indicators, be included in regional needs and assets reports, inform strategic planning at the state and local levels, as well as help craft messages in our communications efforts.

This survey was conducted for the first time in 2008 and results in 2012 will help us determine change and growth over the past four years. Two related surveys will be conducted; the first will assess early childhood knowledge, views, and practices of parents with young children aged birth to five years old, and the second will consist of a general population survey, to assess views related to early childhood health and development, current issues, and familiarity with FTF. FTF will share the results throughout our organization and with our partners. The survey results will be used in a myriad of ways which can have a ripple effect, communicating to, and educating, the public about early childhood care, education, and health.

The survey was developed by FTF in collaboration with the national organization Zero to Three. About half of the items on the *Survey* were developed and tested by Zero to Three and FTF has obtained permission to use them for the purposes of this survey. The other questions are either items from national surveys such as the National Survey of Children's Health or have been developed by FTF staff in consultation with FTF Advisory Committees and stakeholders. All questions have been pilot tested in the past or – for the small number of new items – will be pilot tested at the beginning of the 2012 survey.

Below are examples of the kind of information we will receive from the Family and Community Survey:

- ✓ What do parents and caregivers of children under the age of five in Arizona know about early childhood development, quality early care and education, and the development of literacy?
- ✓ From what sources do parents and caregivers of children under the age of five receive information about child development?
- ✓ To what degree do parents and caregivers of children five and under perceive the early childhood system to be coordinated?
- ✓ How do families of young children, as well as all Arizonans, support early childhood efforts? For example, do they advocate for policy change or participate in a parent group?

- ✓ Does knowledge, behavior, and/or opinion about early childhood vary between different FTF Regions or subgroups of Arizonians (based on ethnicity, income, and other family and community variables)?
- ✓ How familiar are Arizonans with the name FIRST THINGS FIRST and its mission in the State?

Who will be part of the data collection and what data will be available?
The purpose of this project is to conduct a statewide and region-specific telephone survey which gathers information such as the questions above. Results will be available for all FTF regions with the exception of those regions where reporting of results may compromise individual anonymity. Because of the small number of families in some regions, in a few cases, results will be aggregated to a larger area than the First Things First Regional Partnership Council Region. Standards for the protection of individuals in research indicate that results should only be reported from groups of 20,000 or larger. Because of the size of some First Things First regions, data will be pooled for the protection of respondents.
For data that is pooled, results may be available only at the Regional Area level (for example, results may need to be pooled for the Cocopah Tribe, the Colorado River Indian Tribes, the Hualapai Tribe, La Paz/ Mohave region, and Yuma region), county level, or other larger grouping.

This is a very large survey, designed to provide data for all of FTF's regional partnership councils. For the parent survey, the final sub-sample will consist of a minimum of 3,850 *completed* surveys, randomly selected according to a predetermined minimum number of responses by region, using a 95 % confidence level, and a margin of error estimated at plus or minus 1.57%. For the general population survey, the final sample will consist of a minimum number of 1500 *completed* surveys, according to a predetermined minimum number of responses by region, using a 95% confidence level and a margin of error estimated at plus or minus 2.52%.

Will the survey include all communities?
This is a very large survey, it is designed to provide data for all of FTF's regional partnership councils including those on or including tribal lands. The table below sets out the contracted number of phone interviews to be conducted in each Region. Survey targets are based on the number of households in the community with children zero through six and the sample size required to meet the confidence levels described above. These targets assure that callers from each of these FTF regions will be included in the survey; however, as stated above, for some analyses, data may be reported only for larger areas.

Region	***Parent/Caregiver Survey***	***General Population Survey***	***Total***
Navajo Nation	150	-	150
Cochise County	150	30	180
Coconino County and Tribal	150	30	180

Lands			
Gila County and Tribal Lands	100	15	115
Graham & Greenlee Counties	100	10	110
Las Paz County, Mohave County, Fort Mojave Tribe	150	55	205
Southwest Maricopa	150	90	240
Northwest Maricopa	200	120	320
Northeast Maricopa	150	90	240
Central Maricopa	200	120	320
Southeast Maricopa	200	120	320
North Phoenix	200	120	320
Central Phoenix	200	120	320
South Phoenix	200	120	320
Navajo & Apache Counties	110	40	150
North Pima	150	70	220
Central Pima	200	95	295
South Pima	150	70	220
Pinal County, Ak-Chin Indian Community, Town of Apache Junction	200	75	275
Santa Cruz County	100	10	110
Salt River Pima Maricopa Indian Community	50	-	50
Yavapai County (Yavapai Prescott Indian Tribe; City of Sedona)	150	55	205
Yuma County; Quechan Tribe	150	45	195
Pascua Yaqui Tribe	30	-	30
Hualapai Tribe	15	-	15
Tohono O'odham Nation	50	-	50
Gila River Indian Community	50	-	50
White Mountain Apache Tribe	50	-	50
San Carlos Apache Tribe	40	-	40
Colorado River Indian Tribe	50	-	50
Cocopah Tribe	5	-	5
Total	***3,850***	***1,500***	***5,350***

Who will conduct the survey?

LeCroy and Milligan Associates Inc., will partner with Fohr Media Research Associates, Inc. (FMR), in conducting the parent and general population surveys. LeCroy and Milligan Associates, Inc. will be responsible for project oversight through all phases of the project and FMR Associates, Inc. will conduct the phone interviews.

Who will be called?
Sampling methodology will be designed to obtain a statistically representative random sample of families with children birth to five as well as the general population in each of the First Things First regions, with the sampling plan based on current census data, and divided proportionately (by population) across Arizona and the thirty-one First Things First regions.
Final regional samples will reflect current regional and statewide census-based proportions in key demographic categories (i.e. education, socio-economic status, and ethnicity.)

What techniques will be used to encourage diverse participation?
Calls to schedule and conduct interviews will be made throughout the week and on the weekend, and during morning, afternoon and evening hours.
Seventy-five percent of completed interviews with be with landline users, and a minimum of 25% of completed interviews will be with cell phone users.
An accurate record will be kept of: rates of non-contact (e.g. phone is busy, no answer etc.,) contacts, refusal rates, screening terminates, and full and partial interview completion rates. These items will be examined periodically during survey administration to identify any potential bias.

Will the survey be translated?
The survey will be administered in Spanish or English, based on the preference of the respondent.

When will calls begin?
The survey will begin in early 2012 and end in spring 2012.