

Technical Bulletin #12 AFCARS State Frequency Report Utility Version 1.0 April 2004

This technical bulletin provides guidance for installing and executing the AFCARS Frequency Report Utility, Version 1.0. It also provides information on how to properly use the utility and interpret the data reports generated by the utility.

This document is organized into the following sections:

- 1. Introduction
 - 1.1 Overview
 - 1.2 AFCARS Background
- 2. Using the Frequency Reports
 - 2.1 General Considerations
 - 2.2 Interpreting the Frequency Reports
 - 2.3 Questions to Consider
- 3. Installing the Frequency Utility
 - 4.1 The AFCARS Frequency Utility Files
 - 4.2 Installing the Software

Appendix A Foster Care Frequency Report
Appendix B Adoption Frequency Report

1. Introduction

1.1 Overview of the Technical Bulletin

This technical bulletin describes the State Adoption and Foster Care Analysis and Reporting System (AFCARS) Frequency Report Utility provided by the Children's Bureau. It provides examples of how to read the frequency report and how to use it to monitor the accuracy of the State's data. Additionally, instructions are provided on how to install and execute the utility.

The Frequency Report Utility was created as part of the ongoing technical assistance provided to States by the Children's Bureau for AFCARS. The Frequency Report Utility produces reports for both the AFCARS adoption and foster care data. The report will be most useful to child welfare program staff to assess the overall view of the data collected on children in foster care and those who were adopted.

This utility will yield the most information when run on a "raw" AFCARS data file that has not yet undergone data quality control checks. From the "raw" AFCARS data file, the Frequency Report Utility produces a report which lists the "frequency" or number of children's records for each type of response reported for each AFCARS element. The Frequency Report Utility reports all of the actual responses, whether or not these responses are "valid" AFCARS values. The report also includes what percentage each frequency is of all the actual responses, including the invalid or missing responses. Finally, this utility reports the "mean" and the "median" for some data elements. The appendices include examples of an adoption and a foster care frequency report.

The Children's Bureau has also made available to States the Data Compliance Utility (DCU) and the Data Quality Utility (DQU)). We recommend that States use these utilities to review the AFCARS data on an ongoing basis and prior to submitting the data file to the Federal AFCAR system. When a State uses all three utilities to analyze and correct any problems in the AFCARS data, the State may have more confidence that the AFCARS data accurately reflect the child welfare program operations in that State and meets the AFCARS data standards.

If there are questions on how to execute this program, contact the Office of Information Services at (202) 401-1402. If there are questions on how to interpret the report, contact the Children's Bureau at (202) 205-7240.

1.2. AFCARS Background

AFCARS is designed to collect uniform, reliable information on children who are under the responsibility of the State title IV-B/IV-E agency for placement, care or supervision. The collection of adoption and foster care data is mandated by section 479 of the Social Security Act. The requirements for AFCARS are codified in Federal regulation at 45 CFR 1355.40. As of October 1, 1994, States are required to collect and submit the AFCARS data semi-annually, in May and November. ¹

¹ AFCARS report periods are based on the Federal fiscal year. Report periods are October 1 – March 31 (data are due by May 15) and April 1 – September 30 (data are due by November 14).

AFCARS was established to provide data that would assist in policy development and program management at both the State and Federal levels. The data can assist policymakers in assessing the reasons why children are in foster care and developing strategies to prevent their unnecessary placement into foster care. Specifically, the data include information about foster care placements, adoptive parents, and length of time in foster care, and make it possible to identify trends in particular geographic areas. Also, the data enable the Administration for Children and Families (ACF) to administer the Federal title IV-E foster care and adoption assistance programs more effectively. ACF uses these data for a number of purposes, including:

- responding to Congressional requests for current data on children in foster care or those who have been adopted;
- responding to questions and requests from other Federal departments and agencies, including
 the General Accounting Office (GAO), the Office of Management and Budget (OMB), the
 DHHS Office of Inspector General (OIG), national advocacy organizations, States, and other
 interested organizations;
- developing short and long-term budget projections;
- developing trend analyses and short and long-term planning;
- targeting areas for greater or potential technical assistance efforts, for discretionary service grants, research and evaluation, and regulatory change; and
- determining and assessing outcomes for children and families.

Additionally, the AFCARS data are used specifically in the:

- Adoption Incentives Program;
- Child Welfare Outcomes Report;
- Child and Family Services (CFS) Reviews;
- Title IV- E Eligibility Reviews; and
- Allotment of funds in the Chafee Foster Care Independence Program (CFCIP).

2. Using the Frequency Reports

2.1. General Considerations

The frequency report is useful because it provides the person reviewing the AFCARS data with a quick overview of the number and type of responses being generated. By reviewing the "frequency" response to a particular data element, a person can assess whether the information is an under or over-reported count, if there are too many missing responses, or if there are problems with data entry. In order to investigate specific problems in the data, a more detailed report needs to be generated, such as the detailed report of the DQU.

Exhibit 1 is an example of how the report is structured. Each report contains a heading identifying it as either a foster care or adoption file and the appropriate AFCARS report period. The element number and name are listed above four columns of information. The first column identifies the AFCARS value, the second column lists the number of records or "frequency" for that value, the third column lists the percentage, and the fourth indicates the cumulative

percentage. Each row consists of the appropriate AFCARS value, or dates. After the AFCARS values are the totals for not reported (missing data), records that have data reported, the total number of records submitted, invalid data (if applicable), and the means and medians (not all elements have the means and median calculated).

EXHIBIT 1

Foster Care Element #07: Child's Sex

Value	Frequency	Percentage	Cumulative Pct	
1 Male	1792	55.02	55.02	
2 Female	1465	44.98	100.00	
Not Reported	0	0.00		
Reported	3257	100.00		
Total:	3257			

The following should be considered when reviewing the frequency reports:

Total number of records.

The total number of records equals the number of children served during the report period. It is necessary to know the AFCARS requirements for each data element before reviewing the frequency reports. For instance, some elements will have <u>valid</u> "missing" data. This is because information on some elements is not required until after a specified time has passed, or is not required if the child was in care for 30 days or less. Exhibit 2 is an example of the way in which missing or "Not Reported" data can still be valid. In this case, the unreported data represent children who do not have a TPR date.

EXHIBIT 2

Foster Care Element #47: Mother's Parental Rights Termination Date

Value	Frequen	cy Percentage	Cumulative Pct	
1987	1	0.03	0.03	
1988	3	0.09	0.12	
1991	4	0.12	0.25	
1992	7	0.21	0.46	
1993	5	0.15	0.61	
1994	14	0.43	1.04	
1995	6	0.18	1.23	
1996	15	0.46	1.69	
1997	6	0.18	1.87	
1998	34	1.04	2.92	
1999	40	1.23	4.14	
2000	51	1.57	5.71	
2001	58	1.78	7.49	
2002	178	5.47	12.96	
Not Reported	1 2835	87.04		
Reported	422 12	96		
T-4-1.	2257	·	·	

Total: 3257

Invalid Data

For each AFCARS element, excluding those requiring a date, there are values that are used to respond to the AFCARS question. For instance, for a child's sex, the only acceptable values are "1, male" or "2, female." If the response to the element is a "3," it will be listed below the valid AFCARS values as "invalid data." This information must be corrected by the State. If it is not corrected, then the Federal AFCARS will label this information as "missing data."

Dates

For data elements that include dates, the frequency report provides a summary of the frequencies for each year reported to AFCARS. The report does not include the day and month. The invalid category for date elements describes out-of-range dates such as February 30 or March 32. Dates that occur in the future are also listed as invalid.

Dollar Amounts

For those elements that require a monthly payment, the amounts have been grouped together in various dollar increments. This is to minimize the length of the frequency report. Exhibit 3 is an example of groupings of dollar amounts in various increments.

EXHIBIT 3Foster Care Element #66: Amount of Monthly Subsidy

Frequency	Percentage	Cumulative Pct
99	3.04	3.04
0	0.00	3.04
0	0.00	3.04
107	3.29	6.32
229	7.03	13.36
1028	31.56	44.92
97	2.98	47.90
0	0.00	47.90
44	1.35	49.25
738	22.66	71.91
915	28.09	100.00
0	0.00	
3257	100.00	
	99 0 107 229 1028 97 0 44 738 915 0	99 3.04 0 0.00 0 0.00 107 3.29 229 7.03 1028 31.56 97 2.98 0 0.00 44 1.35 738 22.66 915 28.09 0 0.00

Total: 3257 Median: 2438

Means and Medians

The definition of each is:

Mean: Describes the average value calculated as the sum total of all of the reported valid values, divided by the total number of responses. **Note:** The mean is calculated for foster care elements: #19, "total number of removals" and #24, "total number of placement settings."

Median: Describes the number in the middle of a set of ordered numbers: that is, half the numbers have values that are above or greater than the median, and half have values that are less. Otherwise known as the 50th percentile, the median is a better descriptor of the midpoint of a set of values when there are very high or low extreme values. **Note:** The median is calculated for foster care elements: #19, "total number of removals"; #24, "total number of placement settings"; #66, "amount of monthly subsidy" and adoption element #36, "amount of monthly subsidy."

Percentages

For each AFCARS value or date, the percentage of responses for that value are calculated as a percentage of the total number of reported cases. In addition to individual percentages for each response, there is a cumulative percentage. This adds together the percentage of each response. If an element has no missing data, then the total cumulative percentage will equal 100 percent.

EXHIBIT 4

Foster Care Element #55: Hispanic Origin (2nd Foster Caretaker)

Value	Frequency	Percentage	Cumulative Pct
0 Not Applicable	2340	71.85	71.85
1 Yes	66	2.03	73.87
2 No	812	24.93	98.80
3 Unable to Determine	39	1.20	100.00
Not Reported	0	0.00	
Reported	3257	100.00	

Total: 3257

• Total, "Reported" and "Not Reported"

The frequency report will include the number of records that were "not reported," "reported," and the "total." The "not reported" number was added to provide a quick summary of those records that were blank. For those elements that contain no missing data, the frequency for "not reported" will equal zero and the "reported" frequency will equal the overall total number of records submitted.

2.2 Interpreting the Frequency Reports

2.2.A General Analysis

Review each individual data element to assess whether the number being reported for each value seems accurate and note the distribution of the responses. You should check for:

- whether the total number of cases accurately reflects the total population served by the State during the report period;
- whether there are elements that have invalid data;
- whether years of births are appropriate for the category (e.g., one-year-old foster parents or 99-year-old foster children); and
- whether there are elements that have a high number of "not reported" or "unable to determine."

It is also useful to note whether there is a high frequency of responses for a certain value. For example, if there are several records with the response of "not yet determined" for case plan goal, it may indicate that caseworkers are not updating the information or that there is a problem in the State's programming logic.

EXHIBIT 5Foster Care Element #43: Most Recent Case Plan Goal

Value	Frequency	Percentage	Cumulative Pct
1 Reunify with Parent(s) or Principal Caretaker(s)	1723	52.90	52.90
2 Live With Other Relative(s)	2	0.06	52.96
3 Adoption	464	14.25	67.21
4 Long-Term Foster Care	245	7.52	74.73
5 Emancipation	426	13.08	87.81
6 Guardianship	14	0.43	88.24
7 Case Plan Goal Not Yet Established	1	0.03	88.27
Not Reported	382	11.73	
Reported	2875	88.27	

Total: 3257

The Frequency Report can also be used to determine data entry or procedural errors. For example, a number of foster care records may indicate that the date of the latest periodic review is 1979, but after further investigation the reviews were found to be conducted in 1997. This may be a result of data entry errors when the numbers were transposed from "97" to "79".

2.2.B Questions to Consider

Questions similar to those listed below can be used as an aid for assessing the accuracy of the Frequency Report data.

- Does the "child's date of birth" data accurately describe the State's foster care or adoption population? It may be an indication of suspicious data if the Frequency Report data indicates that children twenty-five years of age were adopted during the last reporting period.
- Does the racial distribution reflect the reviewer's understanding of the State's foster care or adoption population? If the report indicates that the State has a large proportion of "Native Hawaiian/Pacific Islander" children and there are very few or no children of this race category in the State, then there may be a mapping problem in the extraction code.
- Is the "foster care mother's year of birth" realistic? If the report indicates the "foster care mother's year of birth" as 1901, the data are suspicious.
- Do the circumstances associated with removal accurately reflect the reasons children are entering foster care in the State? If the report indicates that large proportions of the State's foster care population were removed for "physical abuse" only, it may be an indication of case workers not entering all relevant information into the system.
- Can changes in data between reporting periods be explained by policy or system changes? If the changes in the data can be explained by policy and/or system changes, the State should consider adding appropriate footnotes in the State's AFCARS data file submission.

2.3. Groupings

Another way of analyzing the information provided in the frequency report is to assess relationships between elements. Certain elements should have frequency responses that are similar. For instance:

- Does the number of children in non-foster home settings (foster care element #41, values 4 8) equal the number of responses for "not applicable" or "not reported" in foster care element #49, "foster family structure"?
- Does the number of responses for dates of birth, race and Hispanic origin in foster care elements #50 55, equal the total of "married" and "unmarried couples" in foster care element #49?
- What is the number of children that were removed with a circumstance associated with a disability versus the number of children reported with a disability.

Other examples of elements that should be compared for having similar responses are:

- Foster care element # 44 (caretaker family structure) and foster care elements #45 46 (caretaker date of birth).
- Foster care element #56 (date of discharge) and foster care element #58 (reason for discharge).
- Foster care element #58, discharge reason of adoption and the number of records submitted for the adoption file.

- Foster care element #59 (child received title IV-E foster care) and foster care element #63 (child is receiving Medicaid).
- Adoption element #22 (adoptive parents family structure) and adoption elements #22 28 (adoptive parents date of birth, race and Hispanic/Latino origin).

3. Installing the Frequency Utility

3.1 The AFCARS Frequency Utility Files

The frequency utility files may be downloaded from the Children's Bureau's web page at http://www.acf.dhhs.gov/programs/cb/dis. The files can be accessed through the "AFCARS Resources" page. The filenames are:

- xfreq_n.exe (executable)
- county_names (listing of valid 5 digit Federal Information Processing Standards (FIPS) county codes²)
- elements_race (listing of AFCARS data elements)

NOTE: The source code (in C+) is available upon request.

3.2 Installing the Software

Copy the files "xfreq_n.exe," "county_names" and "elements_race" to a directory in a PC.

The "county_names," "elements_race" and an AFCARS data file must be located in the same directory as the executable file, "xfreq_n.exe," in order for the frequency utility to work properly.

The utility program may be executed by using one of the two methods described below:

Windows Explorer

- 1. Click on the "Start" button on the desktop window and select "Programs."
- 2. Select "Windows Explorer" from the "Programs" list.
- 3. Select the drive name where the executable file has been loaded (i.e.: C:).
- 4. Select the appropriate directory name (i.e.; AFCARS).
- 5. Select the executable file name (i.e. xfrq_n.exe).
- 6. Double click to execute the utility.

² You may check the "county_name" file to make sure it has the current FIPS county codes for your State.

Windows Run Function

- 1. Press the "Start" button located on the desktop window and select "Run."
- 2. Select the "Browse" button within the "Run" box.
- 3. Locate and select the drive and executable file name for the utility (i.e.: C:\AFCARS\xfrq_n.exe).
- 4. Click on the OK button once the executable file name appears in the run box.

Once the executable file has been initiated, the program will request that the user enter three file names:

- Input data file: The AFCARS data file name. Type in the name of the data file and press Enter.
- Output Foster Care frequency report file: The Foster Care frequency report file name. Type in the name for the foster care frequency report file and press Enter.
- Output Adoption frequency report file: The Adoption frequency report file name. Type in the name for the adoption frequency report file name and press Enter.

The name of the output frequency report files for foster care and adoption cannot exceed 20 characters. Spaces cannot be used in the file names of the input and output files.

The executable file will read the input AFCARS data file and generate the Foster Care and Adoption frequency report file. It is important that the input AFCARS data file is created using the format as stated in AFCARS Technical Bulletin #2: File Format, revised March 2000.

The frequency report file may be viewed using a text editor or a word processing tool, such as WordPerfect or Microsoft WORD. A non-scaleable font, Courier 12 CPI, is recommended to print the reports, so that the columns are correctly aligned, making it easier to read.