

# **TOWARD ROUTINE AVAILABILITY AND RESEARCH USE OF FOOD STAMP PROGRAM ENTRY AND EXIT FLOW INFORMATION**

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## INTRODUCTION

The direction and magnitude of change of the Food Stamp Program (FSP) caseload are determined by concurrent entry and exit flows. Policy and program management decisions can affect either or both of these flows. Accurate information about FSP entry and exit flows is needed to inform these policy and management decisions.

This paper describes how confidential FSP micro-records can be transformed into a public-use format. Public-use availability encourages researchers to study FSP caseload dynamics. In many respects, the best data for research on FSP entry and exit are administrative records from the State program agency. However, these administrative records contain private and confidential information that must be protected from misuse or public release. Our goal is to offer states a step by step guide for creating and releasing information about FSP entry and exit flows in a fashion that protects privacy and confidentiality.

In a joint project with the USDA, the JFI used individual records from the State administrative database to create a longitudinal data set. Using this data set, an aggregate data set was constructed that was used to effectively address most of the key questions on caseload dynamics that were addressed using the longitudinal data set. We will show how both data sets were created. We will describe the FSP records that were used to study how aggregation for public-use release affects basic findings expected to interest policy and program

management decision makers. This is followed by examples of how aggregated data can be used to address important policy and program management issues.

Flow charts of the data acquisition and processing steps followed to transform the Client Automated Resource and Eligibility System (CARES) micro-records into an aggregated format appear as Figures 1, 2, 4 and 6. The Jacob France Institute at the University of Baltimore prepared the flow charts to describe how the file used in this paper was created. This is intended to serve as a guide to how the state agency that owns and maintains FSP micro-records can create a public-use data file for internal and external use.

As shown in Figure 2, the Maryland Department of Human Resources maintains a Client Automated Resource and Eligibility System (CARES). FSP micro-records were extracted from CARES and delivered to The Jacob France Institute at the University of Baltimore under an Interagency Agreement between the Department and the Institute.

The raw data elements used in this study are summarized in Figure 3. The time coverage is August 1998 through March 2001. A detailed explanation of this coverage is contained in *The Dynamics of Food Stamp Program Entry and Exit in Maryland*, by Jane Staveley, David Stevens, and Parke Wilde, National Association for Welfare Research and Statistics, 42<sup>nd</sup> Annual Workshop, Albuquerque, New Mexico, August 23, 2002. Here, peculiarities of the time coverage are irrelevant. Documentation of the steps taken to produce a public-use data set and preparation of illustrative uses of these aggregated data are unaffected by the historical period covered.

For our purposes:

- A FSP *participant* in a reference month is someone who received a Food Stamp Electronic Benefit Transfer for that month.
- FSP *entry* in a reference month is defined by a participant's receipt of a Food Stamp Electronic Benefit Transfer for that month, but not for the previous month.
- FSP *exit* in a reference month is defined by a participant's receipt of a Food Stamp Electronic Benefit Transfer for that month, but not for the following month.

These definitions of FSP *entry* and *exit* do not adopt the convention, frequently used with survey data, requiring a two-month absence of Food Stamp benefit to define a break in spell.

Figure 4 shows how we constructed a longitudinal data set and Figure 5 displays the file layout of the data set.

Figure 6 shows how we constructed the aggregate data set and Figure 7 is an extract from the aggregate data set in Excel. The data elements in the aggregate data set are:

- Jurisdiction—County or County Equivalent (Baltimore City) in Maryland.
- Year/Month—The date reference for describing FSP entry and exit flows.
- Spell Length—A derived variable calculated from first and last benefit months in a Food Stamp spell, as these are defined below.
- Number of Households—A derived variable that is the unduplicated sum of the number of Food Stamp Electronic Benefit Transfer payments in a cell

defined by other available descriptors, such as jurisdiction, year/month and spell length.

- Number of Households by Gender of Household Head—A derived variable specific to a chosen sub-population of households using gender information contained in the CARES micro-record file.
- Number of Households by Race/Ethnicity of Household Head—A derived variable specific to a selected sub-population of households using information contained in the CARES micro-record file.
- Number of Households by Age Range of Household Head—A derived variable specific to a selected sub-population of households using information contained in the CARES micro-record file on date of birth.
- Number of Households by Program Type—A derived variable specific to a selected sub-population of households using information contained in the CARES micro-record file on whether the household was a public assistance household or a non public assistance household.
- Mean Household Size—A derived variable specific to a sub-population of households as defined in the previous bullets, calculated from household membership information contained in the CARES micro-record file.
- Mean Number of Adults—A derived variable calculated in the same way as the mean household size variable defined in the previous bullet.
- Mean Number of Children—A derived variable calculated in the same way as the mean household size variable.

- Mean Benefit Amount—A derived variable calculated using the Electronic Benefit Transfer amount contained in the CARES micro-record file.
- Mean Gross Income—A derived variable calculated using the household's total, non-excluded income, before any deductions have been made, and contained in the CARES micro-record file.
- Mean Net Income—A derived variable calculated using the household's gross income minus allowable deductions, and contained in the CARES micro-record file.

Readers are referred to (Staveley, Stevens and Wilde, 2002) for an analysis of FSP caseload dynamics using the CARES micro-records and additional variables derived from the data elements contained in CARES. This report contains tables showing entry and exit dynamics of the Maryland Food Stamp caseload, by region; cumulative exit rates for selected entry cohorts, by region; and Food Stamp program exits from first spell, for a selected cohort, by selected variables. We were able to replicate the data in these tables using the aggregate data set. (see Tables 1, 2 and 3).

Table 4 provides examples of research questions that can be answered using the aggregate data set and those that can only be answered using the longitudinal data set.

## ANALYSIS

FSP caseloads and entry and exit flows are not distributed uniformly within a state. Diagnostics that are intended to provide useful information to state-level policy and management decision-makers should be limited to the sub-state jurisdictions that contribute to FSP caseload dynamics in a meaningful way.

Figure 8 shows that three out of every four FSP participants in Maryland during the observation period were served in just five of the State's 24 counties, all in the Baltimore-Washington corridor. Figure 9 shows a wide range of FSP caseload decline in these counties during the 32-month observation period. The smallest decline was 11 percent in Montgomery County (a Washington, D.C. suburb). The largest decline was 51 percent in Prince George's County (also a Washington, D.C. suburb and adjacent to Montgomery County).

At this point, no information about the caseload level in each county has been presented. Caseload level is one of many possible descriptors one might want to have to continue the diagnostic of county-to-county differences in FSP caseload dynamics.

Figure 10 sets the stage for exploring FSP entry and exit flows as one contributing explanation for county-to-county differences in the FSP caseload profile over time. The Maryland statewide FSP caseload declined for almost two years, until April 2000, and then leveled out through the remaining months.

Figure 11 shows how FSP entry and exit flows contributed to this net result. FSP exits exceeded the stable entry flow until February 2000. After that, the entry and exit flows more or less paralleled each other. So, statewide in

Maryland during this historical period, the FSP caseload declined because the flow of exits exceeded the more or less constant month-to-month entry flow into the FSP.

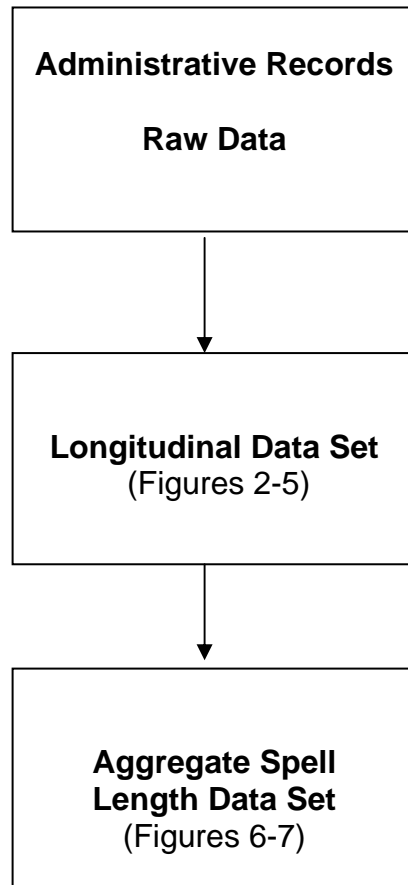
Hypothetically, but unobserved because these events did not occur, the same FSP caseload profile could have resulted from many combinations of rising and/or falling entry and exit flows. Figure 12 illustrates this point using aggregated Prince George's County FSP entry and exit flow data. Here, the Prince George's County FSP caseload declined continuously from August 1998 through February 2000, even though FSP exits decreased in eight of these eighteen months. This happened because the simultaneous decline of FSP entries in most of these months more than offset the decrease in exits.

Figures 13 and 14 illustrate how the aggregated flow data can be used to compare caseload profiles for different cohorts of FSP entrants. Figure 13 compares the profiles of duration of completed Food Stamp spell for two cohorts of FSP entrants in the same month (August) but sequential years (1998 and 1999). Figure 13 shows that there was a more rapid pace of exit for the August 1999 FSP entrants than for their counterparts a year earlier. Without additional information there are many possible explanations for this difference, including different economic conditions, different demographics of the respective sub-populations of Food Stamp recipients, or even different FSP rules applicable at the different times.

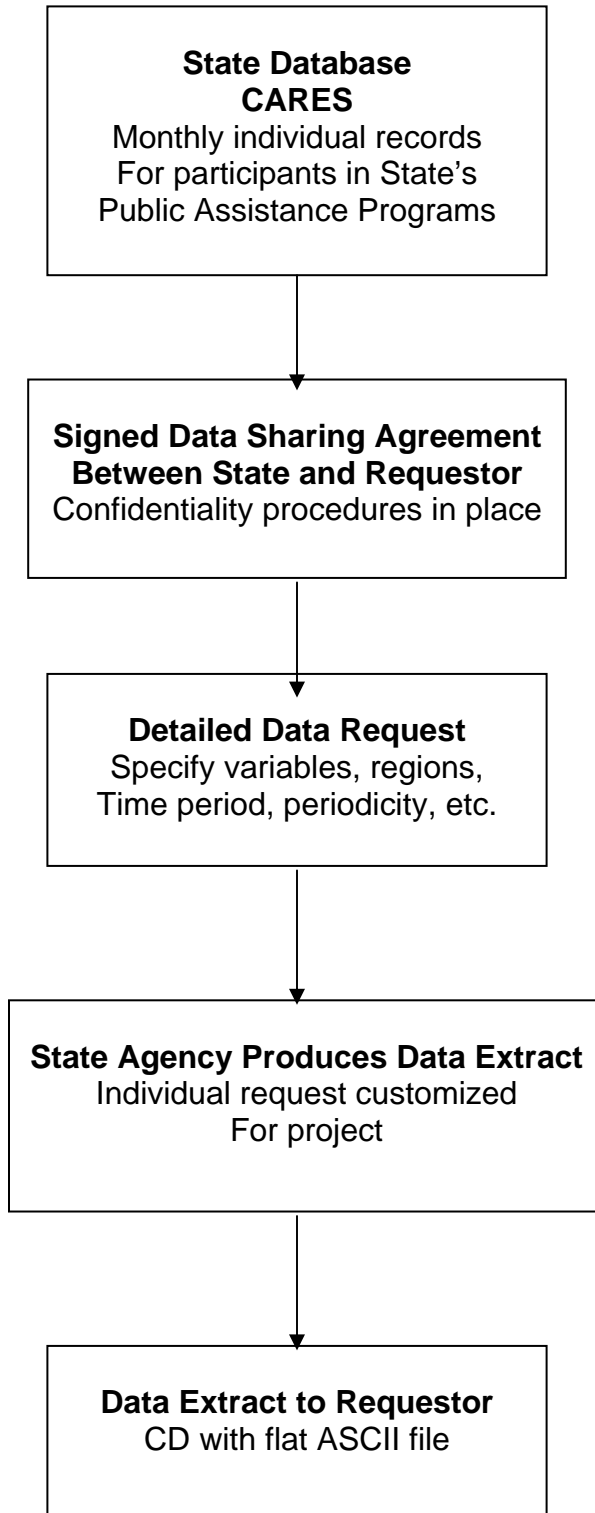
Figure 14 illustrates the relevance of FSP rules. 'Spikes' appear in the exit rates at the four, eight and twelve month Food Stamp spell duration points.

These 'spikes' are explained by the practice of requiring FSP participants to appear in a local Department of Social Services office to review the status of their FSP case. Failure to appear or documentation of ineligibility result in termination of the Electronic Benefit Transfer.

**Figure 1: Constructing the Longitudinal and Aggregate Data Sets**



**Figure 2: Obtaining Administrative Data**



### Figure 3: Monthly Food Stamp Raw Data File Variables

District Office Number  
AU Number (Assistance Unit or Case Number)  
AU\_Program\_Type Code<sup>1</sup>  
Year & Month Paid  
ISSN Type Code<sup>2</sup>  
Head of Household IRN<sup>3</sup>  
Head of Household Date of Birth  
Head of Household Race  
Head of Household Gender  
Amount Paid  
Number of Adults  
Number of Children  
Head of Household SSN  
Gross Income  
Net Income

The monthly Food Stamp data were collected by the Maryland Department of Human Resources. The file, consisting of 36 months of data, was sent to us as a text file. We uploaded the data to a UNIX platform, and used the SAS Language Software to do the necessary programming to generate the appropriate files and report. The output from the reports was then loaded to the PC platform and loaded into an EXCEL spreadsheet.

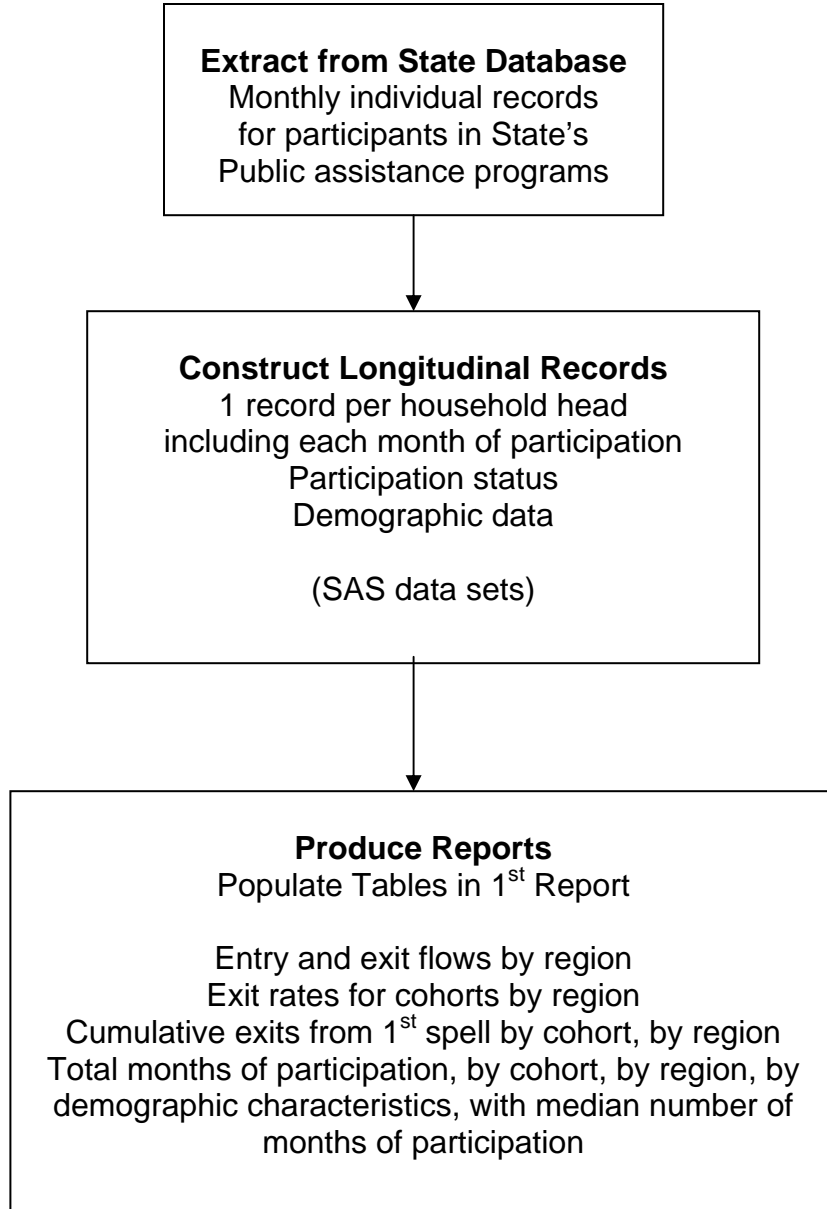
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<sup>1</sup> Identifies whether the assistance unit (case) is “public assistance” or “non-public assistance”, i.e. is participating in other public assistance programs.

<sup>2</sup> Issuance Type Code identifies the status of the Food Stamp case, e.g. whether it is an ongoing case or a new case.

<sup>3</sup> Individual Record Number is the unique identifier assigned to each recipient in a public assistance program.

**Figure 4: Constructing Longitudinal Data Set**



**Figure 6: Constructing Aggregate Data Set**

