THE SURVEY OF INCOME AND PROGRAM PARTICIPATION

WELFARE RECIPIENT AS OBSERVED IN THE SIPP

No. 65

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Survey of Income and Program Participation

Reservation Wages and Subsequent Acceptance Wages Of Unemployment Persons

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Welfare Recipiency as Observed in the SIPP

John Coder and Patricia Ruggles

I. Introduction

Welfare programs serve an important role in providing both short and long term assistance to families whose incomes fall below levels needed for subsistence. The Aid to Families with Dependent Children (AFDC) program, the basic cash assistance program for low-income families with children, provides assistance to about 11 million people each month, while the General Assistance (GA) program provides benefits to about one million. The impacts of these programs (and particularly, of AFDC) on work incentives and family composition have long been a topic of concern to policy makers and analysts.[1] More recently, the issue of welfare dependency--whether time spent on welfare in itself increases the likelihood of future participation--has also become a question of considerable interest.[2]

In order to examine these or similar issues, however, good data on welfare recipiency are needed, in conjunction with data on other income sources, family composition, and other personal and family characteristics. Ideally, these data should be longitudinal in nature, since analysis of many of these questions depends on the observation of welfare recipients' behavior over a period of time. And, because eligibility for these programs is based on monthly income and benefits are typically paid monthly, a database with a monthly accounting period would also be preferable.

This paper examines welfare recipiency as reported in the 1984 Panel of the Survey of Income and Program Participation (SIPP). The SIPP has many advantages for the analysis of welfare recipiency--most notably, it is a

longitudinal panel covering a 32 month observation period, and it has a monthly accounting period. The SIPP also focuses on a fairly large sample of households--about 20,000 in the first interview, declining to about 12,000 in the final interview--and it collects very detailed information on sources and amounts of income, as well as on family composition and related variables.

Because the SIPP is a relatively new database, however, and because the data were originally released on a cross-sectional basis, with longitudinal linkages typically being constructed by individual analysts, some reported data items in the SIPP are in need of substantial editing before meaningful results can be obtained from their analysis in a longitudinal context. As will be discussed in detail below, this problem appears to apply particularly to reported AFDC and GA recipiency. In some proportion of cases, respondents appear to have confused these two programs with each other, while in other cases one may have been confused with some other income source such as child support. As a result, a number of cases that do not meet the program's eligibility rules report recipiency for each of these programs. While it is certainly conceivable that this could happen in some cases, if recipients lie about their incomes or family status to the welfare office but not to the SIPP interviewers, it seems fairly unlikely that such a practice is widespread--especially where reported family characteristics are not even close to those needed for program eligibility.

In response to these problems, we have undertaken a fairly comprehensive program of longitudinal edits designed to assign cases to the correct welfare program where possible, and to remove from the recipient population altogether those cases that do not meet the eligibility

requirements for either program. Although we have attempted to be fairly conservative in our edit procedures and to allow any cases that appear borderline to remain, it should be stressed that these edits represent a preliminary approach to the problem of misreporting, and should not be considered official in any way.

The next section of the paper describes in detail the longitudinal SIPP database that was the starting point for this analysis, while the following section discusses the specific edits that were performed and their outcomes. The fourth section compares the edited SIPP data on AFDC recipiency with AFDC program administrative data, to allow some assessment of the relative strengths and weaknesses of the edited files. Finally, the fifth section of the paper uses the newly edited recipiency data to examine durations of welfare spells. While this analysis is again only preliminary in nature, we believe it illustrates the potential of this database for the analysis of spell durations and entry and exit determinants for the welfare-recipient population.

II. Description of the SIPP Longitudinal Data Set

The data set used in the study was the 1984 SIPP full-panel file created at the Bureau of the Census. This file is the only full-panel longitudinal data set currently available from SIPP that includes virtually all of the basic core data collected in the first SIPP panel. The heart of the SIPP core was a "fixed"group of questions that were repeated at each interview. These covered details on labor force participation, earning amounts, sources and amounts of unearned income, participation in both cash and noncash transfer programs, household composition, and demographics for

each member of the household. This section of the paper provides a general overview of the SIPP data collection process and summarizes key steps in creation of the first SIPP full-panel data set.[3]

The data collection operation for all SIPP panels to date has been based on a scheme that uses retrospective questioning and four-month reference periods. In order to accommodate this reference period and to provide a continuous monthly workload for the interviewing staff, the sample was divided into four sub- panels call "rotations". One rotation was scheduled for interview each month. Data collected in that four month period for all four rotation using the identical questionnaire were grouped together to form one "wave". Since the interviews in a given wave took place in a different month for each rotation, the calendar months covered within a wave were not the same for each sample household.

Interviewing for the 1984 panel was initiated in October of 1983, commencing with the first rotation of a nationally representative sample of about 20,000 households (5,000 per rotation) containing a total of 53,734 sample persons. Members of these households were interviewed over a period of approximately two and one-half years resulting in either eight or nine interviews depending on the rotation group (two rotations were interviewed eight times and two were interviewed nine times). At each interview questions were asked covering the basic core items described above. For some waves, additional questions concerning selected special topics, termed "topical modules," were also included. Most of the core data were collected separately for each month of each four-month reference period so that the basic building blocks for income, program participation and most other statuses were monthly observations.

The actual collection of the data was carried out by interviewers from the Bureau of the Census. Personal visits by the interviewers were required except in special situations. More than 95 percent of interviews were conducted in this manner. Telephone interviewing was used in the remaining situations. Detailed core information on labor force participation and income was collected separately for each household member age 15 years old and over at the time of interview. In approximately 60 percent of the interviews the sample persons answered for themselves. For the remaining 40 percent the responses were obtained from another household member who was judged by the interviewer as competent to answer for the other household member.

The persons present in the sample households as of the first interview constituted the population designated for subsequent interview. Attempts were made to follow all persons age 15 years old and over who moved from their original sample address (persons moving to institutions were not followed). Any person living in a household containing one or more of the original sample persons were also subject to interview for as long as they resided with an original member. These "new" sample persons were not followed and interviewed otherwise.

Until creation of the full-panel file (and its precursor the twelve-month research file) processing and dissemination of the SIPP data proceeded on a wave basis with the data collected in a complete wave being processed, weighted, and released independently. A total of nine wave files were created and released as public use data sets. The 1984 full panel file described here was created by merging the information collected in the first eight interviews for the entire SIPP sample (the ninth interviews for two of

the four rotation groups were not included to provide a consistent reference period for all cases). This merging of wave files for eight interviews produced a reference period spanning 32 months. The calendar period corresponding to this 32-month period differed since only one rotation group was interviewed each month and the reference period covered was the previous four months. For the first rotation interviewed in October 1983 the full panel file covered the calendar period from June 1983 through January 1986. The full reference periods for the other rotations begin and end at succeeding one-month intervals.

While a comprehensive longitudinal processing system has not been developed for SIPP, a rather extensive set of processing programs was required in the effort to built the first full panel data set. This system focused on three basic tasks. These were 1) to merge and restructure the data from the eight individual interviews, 2) to perform longitudinal consistency checks and edits, and 3) to assign survey weights that adjust for differential sample loss and thus permit development of weighted population estimates.

The longitudinal consistency edits were relatively simple in design and applied to a limited number of data items. In the labor force area consistency edits were developed to assure that the sum of weeks with individual employers was consistent with the total number of weeks of employment reported independently. This edit was not an integral part of the wave processing system. Also in the labor force area, a number of errors in recording the unique employer and business identification numbers were checked and an attempt was made to assure that the correct numbers were assigned throughout the life of the panel. Very few edits were applied to

income recipiency and program participation. First, a small number of errors in the processing of Wave one data were corrected. These mainly involved the reinstatement of Social Security receipt in the last month of the reference period for about 150 persons whose recipiency had been deleted incorrectly. Second, an edit was used to identify and remove multiple reporting of the same income type by husbands and wives. In this edit only one of the two persons was designated as the recipient. Of all income sources, food stamps were most likely to have been reported by both the husband and wife, although the edit was applied for all transfer income sources with a small number of cases requiring edit for AFDC, pension income, etc. (property income which is normally received jointly was not included in the edit). One longitudinal edit was applied to earnings and other income amounts. It was designed to "smooth" inconsistencies caused by the merging of imputed and reported data. Since the waves were collected and processed independently, income amounts from a particular source may have been reported in one wave and missing (and thus imputed) in the next. In this edit all imputed amounts were replaced by the amounts reported in the nearest months from another wave, if available. If no reported amounts were available for that income source in any wave, the individually imputed monthly amounts were replaced with the average of the imputed values across all waves.

The full panel file contains data for all persons with one or more months interviewed during the life of the panel. The data for any months in which a person was not in sample or not interviewed are missing. No attempt was made to "fill in" the holes left by persons missing a complete interview for a wave. Of the 53,734 original sample persons, only 32,306 were

interviewed in all waves of the 32 month period covered by the full panel file. This sample loss of 39.9 percent resulted from both the normal attrition common in longitudinal surveys, i.e. refusal to participate and loss of movers' households which could not be located, and a 17.8-percent sample reduction implemented in the fifth wave following reduced funding levels.

A longitudinal sample weight was assigned to a subset of the total number of persons interviewed in one or more of the 32 months. The groups receiving longitudinal weights included 1) original sample persons interviewed for all 32 months and 2) original sample persons interviewed in all months prior to death or entry into the institutionalized population. Both of these events are recorded in SIPP as of the month of occurrence.

A two-stage weighting scheme was employed. The first stage was designed to adjust for the differential loss of some population groups during the life of the panel. Weighting cells in the first stage were defined using characteristics such as household income, presence of specific income types, educational attainment, etc. Cells in the second stage were defined by age, race, and sex categories resulting in final adjustment of the weights to independent estimates of the population by age, race, and sex group as of December, 1983.

The quality of the AFDC data collected in SIPP is a major concern in this study. One major goal of the SIPP program was improvement and expansion of the data available on receipt of transfer income. While the SIPP survey has expanded the amount of data available and placed it in a longitudinal framework covering monthly observations over a relatively long period, some significant nonsampling error problems still exist. Careful

work is required to sort out the various reporting problems and to determine the most appropriate ways to edit and adjust for them. Some of these problems, such as misreporting of recipiency and amounts, have been addressed in the next section on development of edits for AFDC. Others, such as the "seam" problem which results in the largest number of changes in recipiency and amounts occurring between the last month of one reference period and the first month of the succeeding period, have not been investigated in this paper, although other projects are now underway to consider the impacts of this problem on reported income recipiency in general.

III. Description and Results of the Editing Procedures

Studies based on the information collected in the Income Survey Development Survey (ISDP) 1979 panel and now in SIPP have revealed significant response problems related to the classification of benefits received from the AFDC program. Specifically, AFDC payments are reported by some respondents incorrectly as some other source of cash welfare benefits. The most common problem was the misreporting of AFDC payments as General Assistance (GA). Evidence of this problem was obtained through a record check study carried out by the Social Security Administration, by detailed review of raw data on case by case basis by the staff at the Bureau of the Census, and by examination of weighted survey estimates that indicated overestimation of the General Assistance population and aggregate benefits received. The purpose of this section of the paper is to describe a system of computer edits that were developed and applied to the AFDC and GA information reported in the interviews of the 1984 SIPP panel. These edits

were originally designed to identify misreporting of AFDC as GA benefits but were later modified to identify situations in which some other income source was reported incorrectly as AFDC. The final goal of the edit system was creation of an AFDC data set from SIPP corrected for most major, identifiable misreporting problems on recipiency, amounts, and composition of recipient units.

The initial step in the edit process was identification of the universe of sample cases receiving either AFDC or GA. All sample cases reporting either or both of these income sources in one or more of the 32 reference months were selected as candidates for application of the edits. A search of the 1984 SIPP panel produced a total of 1,560 persons age 15 years old and over reporting the receipt of AFDC or GA at some time during the 32-month period. This count of recipients includes only those reporting amounts of benefits(excludes dependents within the transfer unit).

Following selection of the original recipient universe, a series of ten edits were applied separately to each month of benefit receipt. One of the edits was designed to eliminate a specific universe of noninterviewed individuals, eight were designed to test and edit monthly recipiency status, and one was used to identify and correct errors in reporting of amounts. Edits of recipiency status were applied independently so that a frequency count of each edit failure by type of edit could be derived. If no edit failures were detected in a month for either AFDC or GA, the month was placed into the final universe of AFDC recipient months. Following is a brief description of each of the edits developed and employed in creation of the data set used in this study.

1. Deletion of Type Z Noninterview Cases.-- The rules governing SIPP interviewing allow for both total household noninterviews and "partial" noninterviews. A partial noninterview situation occurs when one or more, but not all household members are interviewed in a particular wave. Those members of the partially interviewed household are termed "Type Z" noninterviews. Under such circumstances, the entire data set for each Type Z person is imputed in order to preserve their existence within the household and allow development of household-based measures such as total household income. The linkage of the wave data in creation of the panel file presented eight opportunities to encounter a Type Z situation for each person. Any person with one or more Type Z noninterviews were eliminated in this edit in order to remove any longitudinal inconsistencies created by the complete imputation of the data in one or more waves.

2. Monthly Benefit Less Than $50 and No Earnings.-- While receipt of AFDC payment amounts of less than $50 is possible, almost all such cases that actually occur are low benefit recipients because their potential benefits are offset by some earned income. Almost no cases with benefits this low and no reported earnings occur in the program data. Further, there was evidence, based on case by case reviews of the SIPP data, that most of the cases reporting low benefit amounts were probably misreporting some other type of income as AFDC. In this edit, AFDC receipt was eliminated for all months in which the reported amount was under $50 and the recipient had no earnings in that month. The test for the

existence of earnings helped take account of the fact that AFDC recipients with earnings have a more reasonable chance of receiving relatively low benefit amounts. Choice of the $50 limit on the amount was arbitrary, but was thought to provide a reasonable screen on this particular misreporting problem.

3. Non-Receipt of Food Stamps in Month of Benefit.-- With few exceptions the receipt of AFDC leaves the recipient categorically eligible for participation in the Food Stamp Program, and virtually all eligible AFDC recipients actually report receiving food stamps as well.[4] Studies of the SIPP data showed a significant group of welfare recipient units who were not in larger households (which might cause them legitimately to fail to qualify for food stamps) and who also did not report food stamp recipiency, however. Many of these households do not in fact appear to be welfare recipients, but rather seem to have confused some other income source such as child support with AFDC. An edit was devised that used the absence of food stamps as a basic indicator of misreporting for AFDC. In this edit, if the recipient was not a member of a subfamily (which could have made him or her legitimately ineligible for food stamps), and no monthly food stamp benefit was reported, the monthly AFDC receipt was eliminated.[5]

4. Adult Males Working Full Time Entire Month.-- Relative to program statistics, the SIPP data indicate significantly higher proportions of male AFDC beneficiaries. Review of the SIPP data indicated the presence of a number of adult male AFDC recipients

with full time employment. As these cases represent situations that are in complete conflict with program eligibility standards, all months of AFDC recipiency for men with full time employment in the month of receipt were eliminated in this edit.

5. Married Male Recipients in Non-UP States.-- All months of AFDC receipt reported by married males residing in States without an unemployed parent (UP) provision in their AFDC program were eliminated. This edit was applied regardless of the labor force participation of the recipient.

6. Married Female Recipient With Spouse Working Full Time for Entire Month.-- The review of AFDC cases showed a group of married women reporting AFDC during months in which their husbands worked full time for the entire month. Since this situation is virtually impossible under program regulations, these months were considered in error and AFDC receipt was eliminated.

7. Married Female Recipient in Non-UP State.-- Similar to the edit applied to men in non-UP States, an edit was applied to married, spouse present female AFDC recipients in states with no UP provision. The monthly receipt of AFDC was eliminated for cases in which the married recipient resided a State without this provision.

8. Earnings Amount of Recipient Greater Than $1,000.--Another indication of AFDC misreporting was the discovery of recipients reporting relatively high monthly earnings amounts. An edit was employed to remove months of AFDC receipt for those recipients having monthly earning in excess of $1,000 during the month of

benefit receipt. The $1,000 limit was chosen arbitrarily, but is in fact higher than would be possible for all but extremely large families in even the highest benefit States.

9. No Children in the AFDC Unit.-- The most extensive edit applied to the AFDC recipient universe was related to determination of the composition of the transfer unit covered by each monthly payment. While the SIPP questionnaire contained specific questions on which family members were covered by the AFDC benefit, examination of the coverage data reported in the survey revealed many inconsistencies, indicating the need for additional edits beyond the very simple checks applied by the SIPP wave processing system. In the edit process employed for this study recipient units were constructed by assigning dependency status to 1) all currently never married own children under age 18 of the recipient or recipient's spouse and 2) all other household members under age 18 who were never married and specifically linked to the recipient by both the "designated parent or guardian" indicator and the coverage field from the survey which identifies persons in the household covered by the benefits received by the adult household member. Spouses were also included as members of the recipient unit if the other spouse reported benefits. If no dependent member under age 18 was identified in the process of building the monthly AFDC unit, a search was made to identify the birth of a child occurring within the following year. If, after attempting to construct an AFDC unit using these rules, no dependent children

under age 18 were identified and no birth was detected, the AFDC receipt for the month was eliminated.

10. Adjustment for Errors in Amount Reporting.-- In the process of developing the edits to correct errors in AFDC recipiency a systematic error in reporting of AFDC payment amounts was discovered. It was found that in areas where AFDC recipients receive bi-weekly benefit checks respondents sometimes appear to report only the bi-weekly amount as the full monthly amount received rather than the sum of the two bi-weekly payments. Generally, this error when it occurred was consistent for all months of specific waves so that all four monthly amounts were approximately one-half of the amounts reported for the months in the adjacent waves. An edit was devised to correct these errors by replacing the erroneous amounts with correctly reported amounts from preceding or succeeding months. The edit accounted for situations in which the bi-weekly amount may have been legitimately reported for the entire month, such as at the start or end of a spell of AFDC receipt.

Outcome of the Editing Process. Results of the application of the edits described above are summarized in Tables 1 through 5. The first three tables contain results of the editing for all sample persons reporting receipt of AFDC or GA even though they may not have been interviewed for the entire period. This group includes original sample persons who left the sample for any reason and new sample persons entering the sample after the initial Wave 1 interview. Tables 4 and 5 are identical to Tables 1 and 2 but are restricted to the universe of persons interviewed for all 32 months

covered by the 1984 panel file (the data seen in Table 3 have not yet been tabulated for the fully interviewed group).

The number of AFDC and GA recipients affected by each type of edit is outlined in Table 1. Shown first in the table is the number of persons reporting either AFDC or GA during one or more of the 32 months of the panel file. There were a total of 1,560 such cases. Fifty-four percent of this group failed one or more of the first nine edits imposed (excluding the amount edit) in one or more months. Of these edits the food stamp edit and the edit for composition of the transfer unit were the most likely to result in failures. Specific information by type of benefit was available for the composition edit which shows that the overwhelming majority of these edit failures occurred for months of GA recipiency. In these cases the benefits reported were obviously something other than AFDC and were correctly eliminated from the final AFDC universe. As discussed earlier, the food stamp edit tends to pick up cases that are not actually welfare recipients at all, but rather have confused AFDC with some other income source. Many of those who failed this edit also failed one or more of the edits based on categorical AFDC eligibility.

Since the edits employed were applied to each month of recipiency, counts of both the actual number of months failing edits and the amount of benefits eliminated as a result of the loss of these months of recipiency are important diagnostic information in assessing the edit process and the magnitude of the various reporting problems. The data on months and amounts are summarized in Table 2 and specified by the source of the originally reported benefit type. In the first row of this table are the originally reported months of receipt and aggregate amount of benefits received before

Table 1 Number of Sample Persons with at Least One Month Failing the Specified Edit Situation: All Original Sample Persons from the SIPP 1984 Full Panel File

(Unweighted counts)

Edit situation	Number of persons	Percent
Total persons		
reporting AFDC or GA in at least 1 of the 32 months	1,560	100.0
failing an edit in one or more months	835	53.5
Number of persons undergoing specified edit:[1]		
with interview status of Type Z for at least one wave	112	7.2
with monthly payment amount of under $50, earnings = 0	73	4.7
not reporting food stamps in month of payment receipt[2]	375	24.0
adult male recipient working full time in all weeks of month of payment receipt	43	2.8
married male recipient in non-UP state	22	1.4
married female recipient with husband working full time in all weeks of month of payment receipt	139	8.9
married female recipient in non-UP state	68	4.4
earnings amount of recipient > $1,000 in month of payment receipt	48	3.1
no children in unit or recipient was identified as sole transfer unit member (and no subsequent child birth detected)	403 (311)[3]	25.8 (19.9)

[1] Edit counts are not additive. Counts are independent and reflect multiple edit failures for some sample persons.

[2] Edit did not apply to subfamily members.

[3] 311 of this total of 403 can be attributed to General Assistance cases.

editing. The last row shows the counts after editing for the final AFDC universe.

The final universe contained a total of 16,304 months of AFDC recipiency and about $5,388 thousand in benefits amounts. The monthly total is 71 percent of the original reported months and the amount is 79 percent of the original reported benefit value. About 10 percent of the final AFDC months and 9 percent of the final aggregate amount was added through inclusion and editing of the GA universe.

Based on the number of months deleted, the edit having the largest impact was the AFDC unit member check. As mentioned previously most of these failed edit cases can be attributed to the GA recipient universe. This edit resulted in 3,811 failures, 3270 of which occurred during editing of the GA recipiency months. If only those cases reporting AFDC are considered, this edit is invoked a total of 541 times. For AFDC most of the other edits proved to be more significant.

While the edits involving married males were relatively small in the number of months affected, the comparable edits for married women had a much greater impact, as expected. These edits on the work experience of the husband and residence of the recipient in a UP State affected about 3 percent of the original 23,032 months of AFDC or GA reported.

The end result of the this editing process was a "corrected" data set consisting of persons receiving AFDC in one or more months of the 32-month reference period. Some of the original group of recipients were eliminated completely because all of their months of receipt failed the edit testing. Other sample cases remained in the recipient group but experienced removal of some months of receipt. Finally, many of the group originally selected

Table 2 Number of Months Failing the Specified Edit Situation and Associated Payment Amounts by Type of Payment Reported: Based on Months for All Original Sample Persons from the SIPP 1984 Full Panel File

(Unweighted counts)

Edit situation	Total		AFDC		GA	
	Number of months	Aggregate payment amount (thous)	Number of months	Aggregate payment amount (thous)	Number of months	Aggregate payment amount (thous)
Total reported	23,032	$6,820.3	17,778	$5,753.4	5,254	$1,066.9
Number of Months with specified edit:[1]						
with interview status of Type Z for at least one wave	1,014	259.4	621	193.4	393	66.0
with monthly payment amount of under $50, earnings = 0	395	14.3	79	2.7	316	11.6
not reporting food stamps in month of payment receipt[2]	1,899	428.1	1,075	301.9	824	126.2
adult male recipient working full time in all weeks of month of payment receipt	209	52.5	158	42.8	51	9.7
married male recipient in non-UP state	176	27.9	105	18.8	71	9.1
married female recipient with husband working full time in all weeks of month of payment receipt	776	208.4	651	180.8	125	27.6
married female recipient in non-UP state	609	112.2	593	109.0	16	3.2
earnings amount of recipient > $1,000 in month of payment receipt	219	48.3	193	44.2	26	4.1
no children in unit or recipient was identified as sole transfer unit member (and no subsequent child birth detected)	3,811	635.3	541	137.7	3,270	498.1
Total AFDC accepted after application of edit	16,304	5,387.9	14,695	4,909.7	1,609	478.2

[1]Edit counts are not additive. Counts are independent and reflect multiple edit failures for some sample persons.
[2]Edit did not apply to subfamily members.

for edit were not affected, passing all edits in all months. The number of cases retained in the edited data set was 998 of the initial 1,560 persons identified as AFDC or GA recipients. Of these 998 cases, 301 failed edits in one or more months. As indicated in Table 3, these failures resulted in the elimination of 1,484 months of benefit receipt and almost $430 thousand in monthly payments, about 9 and 8 percent of the final numbers of months and aggregate benefits respectively.

The last step in the edit process was correction for the systematic error in reporting of monthly amounts. This edit check and adjustment was applied only to the final universe of persons with one or more of AFDC receipt after edits. Of the 998 sample persons in this group 120 required editing of at least one monthly amount. These edits, which could be characterized as specialized adjustment for underreporting of amounts, were applied to a total of 516 months and added a total of $108 thousand in benefits, about 2 percent of the total aggregate amount of $5,388 shown on the last row of Table 2. This aggregate does not include the additional amounts resulting from the amount correction phase. The average monthly adjustment was about $210 per month in cases where an adjustment was made.

The edit process described above was fairly conservative, in that our aim was only to eliminate those cases that clearly did not qualify for AFDC, rather than to model program eligibility precisely, eliminating all borderline cases as well. In general, the goal was to weed out those cases that resulted from confusion or inadvertent misreporting on the part of the recipient. As a result, the file still contains some reported recipients who have income levels somewhat above those that would allow them to qualify for the program on income grounds, but who otherwise meet categorical

Table 3 Effects of Edits on Final Edited AFDC Universe: All Original Sample Persons with AFDC from the SIPP Full Panel File

Edit status	
Number of persons with AFDC in on or more months after editing	998
Number with one or more months edited	301
Number of months of AFDC recipiency after editing	16,304
Number of months deleted by edit	1,484
Dollar amount of AFDC benefits after editing (thousands)	$5,387.9
Amount of benefits deleted by edit	$429.7

Table 4 Number of Sample Persons with at Least One Month Failing the Specified Edit Situation: Fully interviewed Sample Persons from the SIPP 1984 Full Panel File

(Unweighted counts)

Edit situation	Number of persons	Percent
Total persons		
reporting AFDC or GA in at least 1 of the 32 months	897	100.0
failing an edit in one or more months	493	55.0
Number of persons undergoing specified edit:[1]		
with interview status of Type Z for at least one wave	57	6.4
with monthly payment amount of under $50, earnings = 0	56	6.2
not reporting food stamps in month of payment receipt[2]	235	26.2
adult male recipient working full time in all weeks of month of payment receipt	28	3.1
married male recipient in non-UP state	15	1.7
married female recipient with husband working full time in all weeks of month of payment receipt	95	10.6
married female recipient in non-UP state		5.7
earnings amount of recipient > $1,000 in month of payment receipt		3.9
no children in unit or recipient was identified as sole transfer unit member (and no subsequent child birth detected)	217 (170)[3]	24.2 (19.0)

[1] Edit counts are not additive. Counts are independent and reflect multiple edit failures for some sample persons.
[2] Edit did not apply to subfamily members.
[3] 170 of this total of 217 can be attributed to General Assistance cases.

Table 5 Number of Months Failing the Specified Edit Situation and Associated Payment Amounts by Type of Payment Reported: Based on Months for Fullly Interviewed Sample Persons from the SIPP 1984 Full Panel File

(Unweighted counts)

Edit situation	Total		AFDC		GA	
	Number of months	Aggregate payment amount (thous)	Number of months	Aggregate payment amount (thous)	Number of months	Aggregate payment amount (thous)
Total reported	16,071	$4,731.8	12,601	$4,034.7	3,470	$697.1
Number of Months with specified edit:[1]						
with interview status of Type Z for at least one wave	567	142.9	331	101.7	236	41.2
with monthly payment amount of under $50, earnings = 0	431	15.5	99	2.8	332	12.7
not reporting food stamps in month of payment receipt[2]	2,371	531.9	1,427	376.3	944	155.6
adult male recipient working full time in all weeks of month of payment receipt	163	41.9	142	36.1	21	5.8
married male recipient in non-UP state	114	16.1	46	8.2	68	7.9
married female recipient with husband working full time in all weeks of month of payment receipt	544	139.7	464	120.7	80	19.0
married female recipient in non-UP state	482	117.1	466	85.6	16	31.5
earnings amount of recipient > $1,000 in month of payment receipt	197	43.5	178	40.0	19	3.5
no children in unit or recipient was identified as sole transfer unit member (and no subsequent child birth detected)	2,434	385.8	245	55.7	2,189	330.1
Total AFDC accepted after application of edit	11,374	3,744.1	10,379	3,443.8	995	300.3

[1]Edit counts are not additive. Counts are independent and reflect multiple edit failures for some sample persons.
[2]Edit did not apply to subfamily members.

eligibility criteria and have the characteristics generally associated with AFDC recipients.

IV. Comparison of the Edited SIPP with Administrative Data

One way to assess the quality of the data on AFDC recipiency produced by the edits is to compare the resulting data with AFDC program administrative data across a variety of characteristics, to see if the data being produced look generally as if they apply to the same program. This can be slightly problematic, in that the administrative data are by no means perfect themselves, as will be discussed further below. Nevertheless, such a comparison may help to illuminate the comparative strengths and weaknesses of the SIPP data.

Before turning to a discussion of the administrative data, however, the SIPP data with which they are to be compared should be more fully described. As discussed above, two output files were produced as part of the edit process--an unweighted file containing all cases with apparently valid AFDC receipt--998 cases in all--and a longitudinal panel file, containing only fully interviewed edited AFDC cases, of which there were 571. Experimental panel weights are available for this second file, and a few tables have been produced for illustrative purposes using the weighted panel data. These tables are shown in Appendix A.

However, use of this file involves excluding almost 43 percent of the valid AFDC cases found, and it seems likely that those excluded differ in some important ways from those who remain. While the weights should adjust for this, at least to some extent, these weights are still experimental and we have not yet had an opportunity to assess their impacts on the

characteristics of the AFDC population. Further, excluding these cases exacerbates the problems caused by the relatively small size of the total AFDC population sampled. For example, even in the larger file only about 540 cases are present in an average month (with months at the end of the period having substantially smaller samples), and only 513 entries onto AFDC are observed over the 32 month period as a whole. If the fully interviewed sample is used, the number of spell entries declines to 318.

For these reasons, most of the analysis shown here focuses on the larger, unweighted file. Because weights are not available, however, and because there is substantial attrition in this file over time, the results reported here should be regarded as illustrative and experimental rather than as final. The file is limited to 100-level persons--i.e., those present at the first interview--so that, other than the attrition problem, it is approximately representative of the population observed in month one.[6] As time goes on, however, the cross-sectional files become less representative, which can affect not only cross-sectional estimates for the later months but also welfare spell analyses, as is discussed in more detail below.

As mentioned above, any problems with the SIPP AFDC data are mirrored in the administrative data. The major source of program data on the characteristics of the AFDC population is now the AFDC Quality Control (QC) sample. This database collects information on about 65,000 AFDC cases over the course of the fiscal year.[7] The major purpose of this data collection effort is to review the quality of states' performances in issuing benefits, and to calculate error rates for each state. Thus, the information collected focuses on those variables needed to verify AFDC eligibility and

calculate benefit levels. States are given a minimum number of cases they must collect (usually between 300 and 2400 cases per twelve months, with variations depending on the size of the state and the characteristics of its caseload).

Design of the state's sample frame and implementation of the data collection effort are the responsibility of each individual state or jurisdiction, however, and there may be some substantial variations in design and sampling methods across jurisdictions. Standard errors have been produced by the Office of Family Assistance (OFA) for the 1986 QC file (although not, so far as we are aware, for the 1985 file, used here), but it is not clear whether these standard errors adjust for differences in sampling methodology across states.[8] For example, if states use some sort of stratification system to chose cases, or if they sample offices within the state on a rotating basis, standard errors for the state sample should be adjusted accordingly. It is not clear from the QC documentation that this has been done. Unfortunately, documentation on the design of specific states' sampling methodology is also unavailable, so that calculation of adjusted standard errors is not currently possible.

Sampling errors are by no means the only data problem associated with the QC files. Even a fairly cursory scan of the data by state would indicate that different states put varying amounts of effort into collecting information on specific data items. For example, in five states data on race is missing for a third or more of recipient children. In three states data on the employment status of adult recipients is missing for at least half the cases, and in one state, Texas, it is missing for 95 percent of cases. Other important information, such as the marital status of the unit

head, is not even collected, and must be inferred from information on children's reasons for deprivation (i.e., causes of categorical eligibility for AFDC). Even this variable, which is basic to the determination of eligibility, is missing for four to six percent of units in fifteen states.[9]

Since national estimates for caseload characteristics are derived simply by summing the weighted state estimates, problems of the types discussed above will obviously have some impacts on figures reported at the national level. Further, the QC data make it clear that there are very large differences across states in the characteristics of their AFDC caseloads. These differences presumably result, at least in part, from differences in AFDC program rules, eligibility standards, and payment standards at the state and local levels. While the weighted SIPP is a nationally representative sample of the U.S. population as a whole, its weights have not been adjusted to be representative of the AFDC population, whose characteristics clearly vary geographically in some important ways. Because the SIPP is a geographically stratified sample, these variations will affect estimated errors for AFDC-related estimates, but the degree of this effect has not been calculated.

For all these reasons, we do not think it would be meaningful to use formal statistical tests to assess the significance of the differences between the QC and SIPP AFDC samples reported below. Instead, the purpose of these comparisons is to provide general background information on the distributions seen in the two samples. Although the similarity of the two samples is discussed, and the existence of definitional or sampling differences that may account for particularly large discrepancies is noted, the general purpose of these tables is illustrative only. If possible, a

more rigorous evaluation of the differences between the samples may be undertaken at some point in the future, if the needed information on state by state sample designs in the QC can be obtained.

In spite of these caveats, the results seen in Tables 6 through 10 are of some interest. Table 6 reports on some basic characteristics of the AFDC population as observed cross-sectionally in the two samples. The first panel of the table reports on marital status, which has been found by many researchers to be a key determinant of AFDC spell durations.[10] As discussed above, marital status information in the QC must be inferred from the reason for deprivation, causing some problems of comparability with the SIPP. The distribution shown for the QC is for the inferred marital status of the youngest child's caretaker in each unit. Although units with more than one adult female are rare (and the caretaker is almost always female), this is slightly different from the distribution shown for the SIPP data, which includes all adult females in AFDC units.

A second potential definitional difference has to do with the term "not married". For the SIPP data, this line includes only those who report that they have never been married. It is less clear what this means in the QC data, although a likely possibility appears to be that the caretaker was not married at the time of the birth of this child. In some cases, however, the caseworker or the respondent may have given this reason for deprivation if the caretaker was not currently married at the time of the case opening. In either case, it appears that the QC definition is broader than the SIPP definition--for example, an out of wedlock birth to a divorced woman would result in a marital status of "divorced" in the SIPP, but the child's reason for deprivation would most likely be coded as "not married" in the QC.

Table 6 Characteristics of AFDC Recipients as Reported in the Edited SIPP and in Administrative Data

	AFDC QC FY'85 Data	SIPP Data				
		Month 1	Month 8	Month 16	Month 24	Month 32
Marital Status of Adult Females in Unit:[1]						
Percentage who are:						
Married, Spouse Present	6.9	5.3	5.2	5.9	6.9	4.9
Divorced or Separated	33.0	48.6	48.4	44.6	47.1	47.4
Not Married	51.2	41.9	42.3	44.0	41.5	43.5
Other, including unknown	8.8	4.2	4.0	5.5	4.5	4.2
Race						
Percentage of Adult Recipients who are:						
Black	41.3	38.4	38.0	39.8	40.8	42.0
White	39.7	56.7	56.3	54.7	55.8	54.3
Other, including unknown	19.1	4.8	5.6	5.5	3.5	3.7
Age of Youngest Child:						
Percentage of Units with Youngest Child Aged:						
0-2 years	37.8	40.6	40.2	37.3	29.5	27.1
3-5 "	22.6	22.8	23.8	24.2	28.8	29.3
5-11 "	23.6	22.8	22.2	23.7	24.5	28.5
12-15 "	11.2	10.5	10.5	10.5	10.3	10.4
16-18 "	3.7	2.8	3.2	4.1	5.3	3.7
unknown	1.1	0.5	0.3	0.4	1.8	1.1

Note:

1. These estimates are only rough approximations for the QC data. They have been inferred from information on the youngest child's reasons for deprivation, and thus refer to the youngest child's mother, not all adult females in the unit (as for the SIPP data). Reasons for deprivation that could be associated with more than one marital status are classified as "unknown".

Bearing in mind these various problems, it can be seen from Table 6 that the incidence of divorced or separated AFDC recipients appears to be higher in the SIPP than in the QC, while the incidence of "not married" cases is correspondingly lower. Some of this may of course be due to the definitional problems discussed above. Some may also result from sample selection problems in the SIPP, however. Because the SIPP is a household based sample, it does not collect information on those living in shelters for the homeless or other institutional situations, where an increasing proportion of the worst-off AFDC recipients are now to be found. Like other broad based surveys, it may also undercount the most deprived among non-institutionalized households. These households may be less stable than middle-income households, and thus both harder to find and more likely to drop out of the sample before the end of the panel when they are found. On the whole, never-married women with children are considerably more likely to be poor (and, within the poverty population, to be among the poorest) than are those who report themselves as divorced or separated, and may thus be under-represented in the survey.[11]

The importance of this point is difficult to assess with regard to marital status, since reporting of this variable is particularly problematic. We will return to this point with regard to some of the other, better-reported variables discussed below.

The second panel of Table 6 shows race of adult AFDC recipients. In both the QC and the SIPP, blacks make up approximately 40 percent of the AFDC population. The totals reported for whites, however, are quite different. This largely results from the fact that "Hispanic" is considered a separate race in the QC data, while Hispanics in the SIPP are classified

as either black or white, most typically white. Of the 19.1 percent reported as "other" in the QC data, 13.4 percent are Hispanics. The non-Hispanic "other" population is therefore about 5.7 percent of the total, which is comparable to the percentages seen in the SIPP data.

The final panel of Table 6 focuses on the age of the youngest child in the unit. This is again a key AFDC variable, since the presence of infants and preschoolers increases potential child care costs (where child care for this age group is available at all) and decreases the probability that the mother will find employment. Hence, the presence of very young children might also be expected to increase spell durations and the probability of spell entries, all else held constant.

As this panel shows, a substantial proportion of the caseload appears to have very young children in both the QC and the SIPP. About 38 percent of the QC sample and about 40 percent of the first month SIPP sample have children under the age of two, and three to five year olds account for about 23 percent of each group. Since adults in the SIPP panel have by definition been in the panel since the first month, their existing children naturally get older as the panel goes on, and younger children are added only through births (except in the rare case where an under-two-year-old moves in with an existing household.) As a result, the age structure of children in the panel departs from a representative cross-section as time goes on--a phenomenon that can be seen in the declining proportion of under-twos (and rising proportion of older teen-agers) across the months.

Table 7 focuses on the size of the household and of the assistance unit as reported in the QC and in the SIPP. This table makes clear one definitional difference between the two samples. About 437,000 children, or

Table 7 Size of Assistance Unit and of Household: Comparison of Administrative Data with Edited SIPP Data for Selected Months

		Percentage of Units with:						
	Mean	1 persons	2 persons	3 persons	4 persons	5 persons	6 persons	7 or more persons
Size of Household:								
SIPP								
month 1	4.4	-	17.3	24.0	23.1	13.6	8.7	13.3
month 8	4.5	-	16.2	23.3	24.4	13.0	8.8	14.3
month 16	4.6	0.2	16.1	23.3	21.8	13.6	9.2	15.8
month 24	4.3	0.3	15.0	27.0	23.3	14.3	8.8	11.5
month 32	4.4	-	15.4	22.3	26.3	13.8	10.4	11.7
QC data average, Oct '84 Sept '85	3.7	0.7	24.3	28.0	21.8	12.3	6.5	6.3
Size of Assistance Unit:								
SIPP								
month 1	3.2	0.5	36.4	30.1	21.3	5.7	3.5	2.5
month 8	3.2	0.3	36.0	30.3	21.5	5.9	2.9	3.0
month 16	3.2	0.4	37.8	27.7	22.6	6.1	2.6	2.9
month 24	3.1	1.8	35.8	32.3	19.5	6.0	3.0	1.8
month 32	3.1	1.1	35.6	30.1	22.9	5.3	3.5	1.6
QC data average, Oct '84 Sept 85	2.9	6.8	37.4	28.2	16.3	6.9	2.6	1.6

about 4 percent of all AFDC recipients, are in "child only" AFDC units, and about 250,000 of these children are the only person in their units. These units can include foster children and others living in some type of alternative care situation rather than with their own families; children born in the United States to parents who are illegal aliens; and children whose caretakers have lost eligibility as a result of fraud or other abuses.

These children account for the vast majority of one-person AFDC units seen in the QC data, but for various reasons they are unlikely to be found in the SIPP.[12] To the extent that one is interested in analyzing the impacts of AFDC on the behavior of adult recipients--e.g., issues such as the incidence of welfare dependence--exclusion of these cases is not a major problem. In comparing SIPP estimates of the total population size and the total amount of benefits paid to those derived from administrative data, however, the probable exclusion of this group should be borne in mind.

Other than the discrepancy in the proportion of units with one member, the QC and SIPP distributions on size of assistance unit appear generally similar. Household size, however, appears to be somewhat smaller on average in the QC than in the SIPP.[13] To some extent, this may represent reporting problems for this variable in the QC file. Since details on other household members are not required to verify eligibility or to compute benefits, failure to report this information is not a sanctionable error. As a result, states and localities put varying amounts of effort into collecting household-level data. In states where this information is not used for any particular purpose in the state's own reporting and verification system reporting on this set of variables may be particularly weak.

Employment status is another key variable in determining AFDC benefits (and, as will be seen, spell durations). As Table 8 demonstrates, the SIPP finds a somewhat higher proportion of female AFDC recipients reporting employment than does the QC, although in both cases the proportion employed is under 10 percent.[14] (The figures shown for adult males are based on a very small sample--about 50 recipients in all--and are given simply to illustrate the post-edit categories available for such cases.) The proportions looking for work and out of the labor force are also similar across the files, although there are some small differences across the months in the SIPP file.

As discussed in the section on the welfare edits, eligibility for the Food Stamp Program--e.g., gross income under 130 percent of the poverty line--was one of the edit criteria. This edit was used mostly as a way of eliminating cases the clearly could not have met welfare program income eligibility criteria, which vary across states but are lower than the FSP criteria in all states. This edit did not apply to subfamily members, however, since for them the AFDC unit and the food stamp unit would differ, and they could be part of a household with a higher total income level.

The bottom panel of Table 8 shows the outcome of this edit in terms of the proportion of AFDC cases participating in the FSP.[15] After the edits, the proportion of cases receiving food stamps appears to be quite close in the two files. Virtually all the "unknown" cases in the QC are in three states that apparently do not record food stamp recipiency (or do not do so uniformly); if they are excluded, the proportion reporting recipiency in the QC rises to about 84 percent.

Table 8 Employment Status and Food Stamp Recipiency For Selected Months in the Edited SIPP and in AFDC Administrative Data

	AFDC QC FY'85 Data	SIPP Data				
		Month 1	Month 8	Month 16	Month 24	Month 32
Recipient's Employment Status - Percentage of:						
Adult females						
Employed	5.7	8.3	8.7	8.5	8.5	9.8
Looking For Work*	22.8	26.9	20.3	18.3	19.9	20.4
Other (not in LF)	64.9	64.8	71.0	73.2	71.5	69.7
Unknown	6.5	-	-	-	-	-
Adult Males						
Employed	7.5	2.0	2.0	2.6	4.2	10.5
Looking for Work*	61.6	52.0	58.8	52.6	62.5	47.4
Other (not in LF)	28.0	46.0	39.2	44.7	33.3	42.1
Unknown	2.7	-	-	-	-	-
Food Stamp Recipiency:						
Percentage of AFDC Units						
Participating in FSP	81.2	87.0	85.2	84.4	85.0	86.4
Not participating in FSP	15.8	13.0	14.8	15.6	15.0	13.3
Unknown	3.0	-	-	-	-	-

*includes those on lay off

Finally, Tables 9 and 10 focus on the incomes available to AFDC recipients. AFDC payment levels are shown in Table 9, while Table 10 shows total income available to the household, and non-AFDC income received directly by the recipient unit. AFDC payment levels as a whole are quite similar in the QC and in the SIPP; the overall means across all units are within 3 to 4 percent of each other in all months. The means also track fairly well across family sizes, too, although there are some variations across months in the SIPP, and the means for two child families do appear to be consistently lower in the SIPP than in the QC. (Means for family sizes through three children are based on at least 100 cases. For larger family sizes, however, the total number of cases is typically below 50, which probably accounts for some of the month to month variation seen in these categories.)

As the top panel of Table 10 shows, total household income is typically quite a bit higher, on mean, than is AFDC income. Overall, mean household income is higher in the SIPP than in the QC, although this may simply reflect the relatively poor reporting of household-related information in the QC files that was discussed earlier. For smaller households, which are of course less likely to contain members who are not also assistance unit members, mean incomes are much closer in the two files than they are for the larger households. This supports the hypothesis that some of the differential may be related to under-reporting of income in the QC files for those not in the assistance unit.

The remainder of Table 10 shows income by source for the assistance unit alone. Even at the assistance unit level, a substantially higher proportion of SIPP than of QC cases report non-assistance income. This is

Table 9 Average AFDC Payment (as Dollars per Month) by Number of Children in the Unit: Edited SIPP Data Compared to Administrative Data

	AFDC QC Data FY'85[1]	SIPP Data				
		Month 1	Month 8	Month 16	Month 24	Month 32
Mean AFDC Payments						
All Units	340	329	328	333	330	342
Units with:						
one child	278	272	274	266	270	277
two children	345	301	303	321	304	331
three children	408	388	389	380	412	407
four children	453	406	370	435	471	469
five children	504	517	495	482	433	422
six or more children	596	587	558	616	400	415
Mean Number of Children per Unit	2.0	2.1	2.1	2.1	2.1	2.1

Note:

1. Averages shown for the QC sample are for units with one adult recipient only. These units account for almost 80 percent of the recipient population. Child-only units account for about 12 percent, and units with two or more adults for almost 9 percent.

Table 10 Amounts and Sources of Income for AFDC Recipients: Edited SIPP vs Administrative Data

	AFDC QC Data FY'85	SIPP Data				
		Month 1	Month 8	Month 16	Month 24	Month 32
Average Monthly Cash Income of AFDC Households						
All Households[1]	419	690	712	765	776	749
Two Person Households	323	326	329	349	372	380
Three Person Households	393	432	418	431	410	427
Four Person Households	451	600	595	588	676	726
Five Person Households	498	956	839	816	934	816
Six Person Households	502	919	927	1178	1185	1255
Seven or More Person Households	577	1365	1577	1647	1875	1374
Percentage of Recipient Units with Non-AFDC Income						
Total, All Sources	13.9	30.0	26.0	27.3	32.3	30.9
Earned	6.6	11.1	10.3	9.7	12.3	11.2
Unearned	7.9	22.1	18.5	19.4	22.5	22.3
Average Monthly Amount of Non-AFDC Income Received by Those with Income						
Total, All Sources	221	209	260	266	270	309
Earned	264	254	267	282	277	250
Unearned	168	154	217	233	234	353

Notes:

1. One Person Households excluded because of small sample size

true of all income types, although the differential is most striking for unearned income. Some of this difference may be definitional--certain income types, such as income from the Supplemental Security Income (SSI) program and the first 50 dollars of child support income, are not counted in computing AFDC benefits, and as a result they may also be excluded from the income recorded in the AFDC case records.[16] Also, of course, assistance units have more incentive to under-report income to their AFDC caseworkers than to the SIPP data collectors.

On the whole, the mean amounts of income received by those with income from the various sources are relatively close in the QC and in the first month of the SIPP, although there are some slightly puzzling increases in unearned income in particular across the subsequent months of the SIPP. The number of cases with unearned income is 115 in month one, and declines fairly steadily to 84 in month 32. The standard deviation for unearned income is typically about two thirds of the reported mean. Given this relatively high variance and relatively small number of cases, therefore, even the fairly large differences in the dollar values of unearned income would not appear to be significant at a 90 percent level of confidence.

In summary, although the QC and SIPP data do not match perfectly in every regard, overall generally similar patterns are seen in the two data sources. The largest differences (other than those associated with definitional discrepancies) relate to data on the larger households containing the assistance unit--an area where the SIPP might reasonably be expected to produce better data than the QC.

The SIPP has one other obvious advantage over the QC files--it is a longitudinal panel that allows some examination of recipients' behavior and

characteristics over time, not just in cross-section. As has been shown by Bane and Ellwood, use of cross-sectional data to generalize about total spell durations or about the characteristics of the population entering spells can be quite misleading.[17] The final section, therefore, briefly presents some preliminary findings on spell durations for AFDC recipients of various types.

V. The Duration of AFDC Spells as Observed in the SIPP

This section presents some very preliminary results on the duration of AFDC spells as observed in the SIPP. Life table techniques have been used to estimate the probability of remaining on AFDC from month to month for a sample of 513 cases with observed spell openings.[18] Table 11 presents some summary information on these estimates both for the population as a whole and for some sub-groups of particular analytic interest.[19]

Perhaps the most striking finding to appear from Table 11 is the relatively short spell durations that are experienced by a high proportion of spell entrants. After adjusting for censored spells, it can be seen that the probability of leaving AFDC within the first year is over 50 percent, while the probability of leaving within the first two years is over 70 percent. This finding reinforces the importance of using monthly rather than annual data to study the determinants of spell durations, since clearly participation is frequently a very short-term phenomenon. Indeed, these data imply that annual data are likely to considerably over-estimate the mean spell duration, since for example a twelve month spell can easily fall into two annual measurement periods, and a sixteen month spell could fall into as many as three.

Table 11 Life Table Survival Estimates For AFDC Spells, by Various Characteristics of Recipients

	All Recipients	Marital Status		Employment Status		Race		Age of Youngest Child	
		Never Married	Other	Had Earnings	Other	Non-White	White	3 or less	4 or more
Total Number of Cases	513	167	346	155	358	194	319	276	237
Percentage of Cases Remaining (Survival Rate) After:									
4 months	76.0	85.1	71.5	69.4	78.9	81.0	73.0	78.6	72.9
	(1.9)	(2.8)	(2.5)	(3.8)	(2.2)	(2.9)	(2.5)	(2.5)	(3.0)
8 months	56.4	68.1	50.5	46.7	60.8	66.5	50.3	60.2	51.7
	(2.3)	(3.8)	(2.9)	(4.2)	(2.8)	(3.6)	(3.0)	(3.1)	(3.5)
12 months	47.0	61.9	39.8	34.6	52.9	57.0	41.2	49.6	44.0
	(2.5)	(4.1)	(3.0)	(4.2)	(3.0)	(4.0)	(3.1)	(3.4)	(3.6)
16 months	38.8	55.1	30.8	27.7	44.0	49.5	32.6	39.5	38.0
	(2.6)	(4.5)	(3.0)	(4.2)	(3.2)	(4.4)	(3.1)	(3.5)	(3.8)
20 months	33.5	46.7	27.1	22.6	38.6	41.4	28.9	33.1	34.4
	(2.7)	(5.0)	(3.1)	(4.3)	(3.3)	(4.8)	(3.2)	(3.6)	(3.9)
24 months	29.1	41.3	23.0	18.1	34.0	36.1	24.9	30.1	27.3
	(2.8)	(5.3)	(3.2)	(4.5)	(3.5)	(5.0)	(3.3)	(3.7)	(4.4)
28 months	26.9	41.3	19.3	14.1	32.5	33.2	23.2	28.5	24.1
	(3.0)	(5.3)	(3.6)	(5.0)	(3.7)	(5.4)	(3.5)	(3.8)	(5.0)

Note: Survival standard errors are shown in parentheses under each estimate. Caution should be used in interpreting these standard errors, however -- see note 19.

Overall, then, the median spell length for new entrants would appear to be in the neighborhood of 12 months. There are also some substantial variations across the characteristics of entrants, however. Marital status--particularly, never having been married--appears to be the factor associated with the longest spell durations among those examined. Although the probability of leaving AFDC within the first four months is almost one fourth for the sample as a whole, it is only about 15 percent for never-married mothers. The median duration for this group would appear to be about 18 months, and the probability of remaining after twenty-eight months is about 41 percent, compared to about 27 percent for all cases and about 20 percent for those in any other marital status.

Employment status--having had earnings at some point during the spell--is associated with the lowest probability of remaining on AFDC among the factors examined in Table 11. Those with earnings had a probability of about 30 percent of leaving AFDC within the first four months, and over 50 percent of leaving within the first 8 months. Their probability of remaining on the program after 28 months was only 14 percent.

There also appears to be substantial variation in the probability of remaining on AFDC associated with differences in race. Whites have a probability of leaving the program of almost 50 percent in the first 8 months, and their probability of remaining after 28 months is only about 23 percent. For non-whites, however, it takes about 16 months to reach a 50 percent probability of leaving, and the probability of remaining at 28 months is about 33 percent.

The characteristic that appeared to affect duration probabilities the least among those examined was the age of the youngest child. Given costs

of day care, the presence of very young children might be expected to inhibit exits, at least exits through earnings. While the findings shown here do not contradict this hypothesis, they do not strongly support it either. The probability of leaving AFDC was higher at every spell duration for those with older children than for those with preschoolers, but the differences were in most cases not large enough to be clearly statistically significant.[20]

These findings do not tell the whole story, even on the impacts of the specific variables examined here. The next step is clearly to consider the impacts of interactions between these factors, and perhaps, to incorporate various other factors into our duration model, using a more flexible hazard modeling technique. Nevertheless, these preliminary results do begin to show participation patterns over time for certain important subgroups within the AFDC population. Further, they strikingly illustrate the importance of using sub-annual data to consider the determinants of spell durations, even for a program like AFDC which is widely believed to include a large proportion of recipients with very long durations. Although much work remains to be done, we believe these results begin to indicate the enormous potential of the SIPP for broadening our understanding of patterns of participation in AFDC and related programs.

Appendix Table A-1. Characteristics of AFDC Recipients: Weighted Data from the SIPP 32-Month Panel File.

	Month 1	Month 8	Month 16	Month 24	Month 32
Marital Status of Adult Females in the AFDC Unit:					
Percentage who are:					
Married, Spouse Present	3.9	4.2	5.0	6.3	5.6
Divorced or Separated	49.8	49.1	43.8	46.5	48.7
Not Married	40.2	42.0	44.4	42.2	41.7
Other, including unknown	6.1	4.7	6.7	5.0	3.9
Race					
Percentage of Adult Recipients who are:					
Black	38.1	40.1	43.2	43.6	44.1
White	58.5	56.1	53.3	52.6	52.3
Other, including unknown	3.4	3.8	3.5	3.8	3.7

FOOTNOTES

1. See Garfinkel and McLanahan (1986) or Ellwood and Bane (1984) for a discussion of this literature.

2. See discussion in Blank (1986).

3. For more details on the characteristics of this longitudinal panel file, see Coder et al. (1987).

4. In most areas the same welfare office and often the same welfare worker qualifies applicants for both programs. Under these circumstances, it is extremely likely that those who qualify for AFDC will also be signed up for the Food Stamp Program. An earlier study by Ruggles and Nightingale (1987) found that in fact virtually all AFDC recipients who were eligible for them also received food stamps. Further, virtually all AFDC recipients not in larger households were found to be eligible for the Food Stamp Program.

5. The major impact of this variable resulted from the fact that it eliminated recipients whose incomes were in fact too high for them to qualify for AFDC--such higher-income reporters almost never report receiving food stamps as well (probably because they are not actually welfare recipients and would not qualify for the FSP). In general, perhaps because food stamps are tangible objects, people appear to be less likely to be confused over the question of whether or not they receive them. Nevertheless, even though there is substantial evidence that AFDC and FSP recipiency overlap almost completely for the population eligible for both, and as reported in the next section this edit produces almost exactly the proportion of non-food stamp recipients seen in the AFDC program data, this edit may still be a bit more comprehensive than is fully justified, in that it is at least possible that an otherwise eligible AFDC recipient might simply choose not to participate in the Food Stamp Program. In a future version of these edits, therefore, it might be desirable to substitute an edit that would eliminate only those recipients who were not subfamily members and who were also not <u>eligible</u> for food stamps (generally, because their incomes were too high.) We suspect that the net effect of such an edit would be virtually the same as the present edit, but it would perhaps be preferable in that it would allow for the possibility that a given recipient might choose to participate in one program but not the other.

6. Wave one cross-sectional weights are available, and will be used for this file in a future version of this paper. Unfortunately, these weights have not yet been appended to our analysis file. However, the total variance in wave one weights is fairly small, so that analyzing these data in an unweighted form is probably not too misleading. A comparison of distributions in this unweighted file with the weighted panel file (fully interviewed) distributions is shown in Appendix A.

7. For the purposes of this paper, the fiscal year 1985 data have been used, since this period covers the approximate midpoint of the SIPP panel. This file contains average monthly information for the period October 1984 through September 1985.

8. Based on the documentation for the 1986 QC, it appears likely that all states were assumed to use a similar random sampling procedure.

9. This figure refers to the reason for deprivation of the unit's youngest child. No estimates for this variable are given on a unit basis, since units with more than one child may have more than one reason for deprivation.

10. See for example Bane and Ellwood (1983), Blank (1986), and Williams and Ruggles (1987).

11. See for example Ruggles (1988) or Bianchi, McArthur and Hill (1988) for further discussion of income and poverty status by marital status.

12. Among other problems, income data are not collected for persons aged 15 or under in the SIPP, making it difficult to identify child-only AFDC recipients.

13. AFDC cases may be part of a larger household, if some but not all members of the household meet AFDC eligibility requirements. AFDC rules specify which household members must be included in the assistance unit, and which may be included at the unit's discretion. In most cases, the AFDC unit is likely to constitute a subfamily within the larger group--for example, a mother and child living with the mother's parents.

14. In any given month, the number of employed adult female recipients is only about 50 in the SIPP, implying that in fact this estimate could not be shown to be significantly different from the 5.7 percent seen in the QC.

15. As discussed earlier, virtually all AFDC recipients who are eligible for the Food Stamp Program in fact participate in it. See Ruggles and Nightingale (1987).

16. Although these amounts are supposed to be recorded, failure to do so is not a sanctionable error since they do not affect benefit levels, and as discussed above data collection on items that are not used in the eligibility and benefit determination process tends to be relatively weak. Also, it is not clear from the documentation for the 1985 QC whether or not these items are included in the "unearned income" variable used in the tables produced by the Office of Family Assistance.

17. See Bane and Ellwood (1983).

18. In all cases, only the first observed spell has been used. The SIPP is fairly short relative to the average spell length, which limits the potential for observation of multiple spells. We expect to do some analysis of multiple spells in the future, however, even though the data are relatively limited. In this context, however, the finding by Enrique Lamas and Jack McNeil (also reported in this session) that only about one-fourth of AFDC recipients who exit the program re-enter within the next 12 months implies that in fact the relatively rapid exits seen for most entrants are sustained over the longer run in the majority of cases.

19. Because the purpose of this section is to compare estimates of survival durations within the AFDC population, rather than simply to compare data bases, standard errors have been calculated for the survival rates shown in Table 11. As noted earlier, however, because of the intention of survey sign effects and program variation across geographic regions these standard errors may be underestimates, and should be used with caution. Revised error estimates will be produced under a future study. For the purposes of this study, however, it is clear that even if the standard errors shown are substantial underestimates, the population differences discussed in the text would still be statistically significant.

20. As discussed briefly above, current estimates of standard errors for the SIPP as a whole are probably underestimates for AFDC-related variables, given the high degree of correlation between AFDC eligibility and payment levels and the geographic factors that figure in the SIPP sample design. This makes it difficult to say definitely that any given difference is statistically significant. However, these particular estimates are not significantly different at the 90 percent level even using these probably under-estimated errors.

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