

POTENTIAL EFFECTS OF PROGRAM CHANGES ON
FOOD STAMP PROGRAM ERROR RATES

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PREFACE

This report presents the findings of a study that examined the effects on Food Stamp Program error rates of two possible program policy changes and an alternate specification of error rates for AFDC recipients. The study was conducted by Mathematica Policy Research.

We would like to thank Joseph Murray for outstanding programming support for the analysis. We are also indebted to Abt Associates for supplying the data extract on which our tabulations are based and for providing tabulations of the percentages of various types of error occurring in AFDC cases.



EXECUTIVE SUMMARY

This report uses case-level data from the Integrated Quality Control System to examine the effects on Food Stamp Program error rates of two possible program policy changes:

- o Elimination of the housing deduction
- o Adoption of a standard benefit policy for cases that also receive assistance under the Aid for Families with Dependent Children program (AFDC), such as that tested by Illinois in the Food Stamp Simplified Application Demonstration

In addition, the report examines the potential effects of altering the way Food Stamp Program error is determined for food stamp cases that also receive AFDC. Specifically, it considers:

- o Adoption of an error measure which, for AFDC recipients, takes into account the offsetting effect on Food Stamp Program error of the benefits determination rules for the AFDC program.

The analysis suggests that each of these three program changes would result in substantially lower Food Stamp Program error rates. It is estimated that the elimination of the shelter deduction would have lowered the Fiscal Year 1984 payment error rate from 8.6 percent to 8.1 percent. This, in turn, would have reduced the total amounts of the fiscal liabilities levied on the states by about \$16 million, a reduction of approximately 20 percent of the total.

The adoption of standard benefits policies for AFDC households would have lowered the Fiscal Year 1984 payment error rate from 8.6 percent to 7.6 percent, resulting in a reduction in fiscal liabilities of \$31

million, or 39 percent. The comparable savings from taking into account the AFDC offset in computing error rates are a reduction in error from 8.6 percent to 8.1 percent and a reduction in sanctions of \$16 million, approximately 20 percent of the total.

I. INTRODUCTION

Altering various features of the Food Stamp Program could potentially affect the complexity of the administration of the program, and this, in turn, could have effects on measured program error rates. It is therefore useful to have quantitative estimates of the approximate sizes of the changes in error rates which could result from changes in the program. As part of FNS's current study of the Integrated Quality Control System, FNS has asked Mathematica Policy Research to examine the potential effects on error rates of a number of possible Food Stamp Program changes.

This report examines the potential effects of two substantive policy changes:

- o Elimination of the housing deduction
- o Adoption of a standard benefit policy for households that also receive assistance under the Aid for Families with Dependent Children program (AFDC) such as that tested by Illinois in the Food Stamp Simplified Application Demonstration

In addition, we examine the potential effects of altering the way Food Stamp Program error is determined for food stamp cases that also receive AFDC. Specifically, we consider:

- o Adoption of an error measure which, for AFDC recipients, takes into account the offsetting effect on Food Stamp Program error of the benefits determination rules for the AFDC program.

For each of these three potential program changes, this report analyzes data from a national sample of QC cases to determine the potential

changes in error rates that would occur.¹ Section II describes the data used in the analysis and provides a summary of the QC errors that were observed for the sample under conventional Food Stamp Program rules. The effects of the three possible program changes identified above are then examined in Sections III, IV, and V respectively. Section VI summarizes the results of the study. A series of appendices provide technical details about the analysis.

¹ The effects of two other possible changes in the way in which state fiscal liability based on error rates is computed - taking into account claims collection rates and taking into account underpayment - were discussed in an earlier memorandum to FNS.

II. DESCRIPTION OF THE DATABASE AND SAMPLE

The data used in the analysis for this report were extracted from the Integrated Quality Control System (IQCS) and are based on a national sample of households participating in the Food Stamp Program. The QC system reviews data concerning household composition and income during a particular month for a sample of food stamp households. This information is then compared with data originally collected by the local food stamp offices, and errors are recorded.

The QC reviews are done at the state level. However, federal workers "rereview" samples of each state's reviews to assess their accuracy and the final official state error rates are adjusted to reflect the results of this rereview process. In calculating official state error rates, cases with errors of 5 dollars or less are not counted as cases with errors.

During the review process some cases are found to have more than one error. In all states, when multiple errors are found, the state reviewers code information on the type of error for each error that is discovered. In some states, in multiple error cases, dollar amounts are also assigned to each individual error; however, in other states only the overall case error amount is determined, rather than the amounts for the individual component errors. Even in states where dollar amounts are assigned to individual component errors, the dollar amounts do not necessarily add up to the overall case error, because some errors may be either overlapping or partially offsetting others.

The analysis for this report uses data from July and August 1984. Observations are weighted to represent the national population of Food Stamp program participants. However, statistics based on this weighted sample will differ somewhat from published national statistics on QC error rates, both because federal rereview data were not used here, and because the sample is based on data for two months rather than a full year.

The IQCS extract used in this analysis included 6979 households, of which 1543 contained errors in food stamp coupon issuance amounts identified by the QC system. Of those cases with reported errors, 789 were missing individual data items or had inconsistencies among data items. We attempted to edit these cases in order to preserve them for analysis and were successful in all but 62 cases for which there were insufficient data available to make sensible imputations. These 62 cases were deleted.

The 727 cases with data problems which were not deleted were subject to editing procedures, many of which were guided by QC system coding conventions. These included ignoring errors of 5 dollars or less and assuming that the most important error was coded in the first error block. In addition, when conflicting information was presented by the total error and individual errors, the total error was assumed to be correct, since it is that quantity which is used in calculating official state error rates and presumably is subject to greater scrutiny by the QC system.

For a substantial number of states, in cases with multiple errors no information was available about the dollar error amounts of individual errors. In such instances, the data editing involved imputation procedures under which the overall case error was allocated among the individual

component errors, based on allocation factors derived from the subsample of cases with complete error coding.

The procedures used in the editing employed the simplifying assumption that the individual error dollar amounts would sum to the total case error. While there are circumstances in which the components ought not to sum to this total, this assumption was necessary due to constraints on available information. In particular, though nonlinearities in the food stamp benefit formula can lead to nonadditive errors, there was generally insufficient information on the file to simulate the effects of nonlinear interactions between individual error amounts.

The details of our editing procedures are described in Appendix A. Forty-two observations for Illinois are not included in the tabulations for the analysis because observed errors in that state in 1984 were affected substantially by the existence of the Food Stamp Program Simplified Application Demonstration.

Because certain of the policies to be examined in this paper would be applied only to food stamp cases all of whose members receive AFDC, most of the data tabulations presented in this report distinguish between such cases, usually referred to as "pure AFDC households", and other cases.¹ It should be noted that the "other" category includes both cases with no AFDC income and cases in which some, but not all, of the members receive AFDC assistance.

Table II.1 presents case error prevalence by household type. The QC system found no errors in coupon issuance in 77.5 percent of the

¹ See Appendix C for a detailed description of the allocation of households to the "pure AFDC" and other categories.

TABLE II.1
 DISTRIBUTION OF CASES WITH ERRORS BY HOUSEHOLD TYPE
 (Percentages)

	Pure AFDC Households	Other Households	All Households
No Errors	81.2%	75.8%	77.5%
One Error	16.9	21.3	19.9
More than One Error	1.8	2.8	2.5
Percent of All Cases	31.7	68.3	100.0

households in the overall analysis sample. Of those households with errors, approximately 88 percent had just one error, and 12 percent had two or more errors. Among pure AFDC households, which make up just under a third of the sample, 81 percent had no errors. The distribution of cases with one error or more than one error for the two subsamples was similar to the distribution for the overall sample.

Average dollar error per case by household type and case review finding (that is, net overpayment, payment to ineligible or underpayment for the case) are summarized in Table II.2. For the overall sample, errors for overpayment cases averaged 38 dollars, and those for underpayment cases averaged 32 dollars, each about 27 percent of the average allotment. Errors involving issuances to ineligible households were higher, 101 dollars, because the errors were always for the full coupon issuance. Cases with more than one error had somewhat higher average errors than those with one error.

For overpayment and underpayment cases, there was very little variation in amount of error across household types. However, these errors are approximately 23 percent of the allotment in AFDC households, but are 39 and 30 percent of the allotment in other households for overpayment and underpayment, respectively. For ineligible households in the AFDC subsample the average error was 135 dollars, while for other households it

TABLE II.2

AVERAGE ERROR AND ALLOTMENT BY HOUSEHOLD TYPE AND REVIEW FINDING
(Dollars)

	Pure AFDC Households			Other Households			All Households		
	Ineligibility	Over Payment	Under Payment	Ineligibility	Over Payment	Under Payment	Ineligibility	Over Payment	Under Payment
Average Error									
Cases with one error	\$134.92	\$38.09	\$34.84	\$95.08	\$34.25	\$29.78	\$101.46	\$35.43	\$31.33
Cases with more than one error	-	48.85	18.61 ^a	-	53.19	44.15	-	52.34	38.65
All cases with errors	134.92	39.06	33.26	95.08	37.05	31.91	101.46	37.61	32.30
Average Allotment	135.00 ^b	168.70	152.44	131.05	95.08	106.00	101.48 ^b	141.48	119.65

^aThis average is based only on 11 cases.

^bIn general payment error due to ineligibility for a case should be the same as the case allotment. Editing procedures for households with a review finding of ineligibility deleted all error blocks for which the error finding was not ineligibility and recomputed the total error. This occurred in only a few cases and caused the observed discrepancy. ^c

was 95 dollars. The higher food stamp allotment, and subsequent larger error, in these cases reflect the relatively lower economic status of AFDC participants.¹

The proportions that various types of error contribute to overall error rates vary somewhat among household types and across review findings. This is shown in Table II.3 which displays errors classified by type of error (household composition, earned income, unearned income, shelter deduction or other).²

Payment error (overissuances and issuances to ineligible households) for the sample as a whole was dominated by errors associated with earned income. Forty-two percent of overissuances and 47 percent of ineligibility error fell into this category.

Several other error categories also contributed substantially to the error totals. For overpayments, 28 percent of the error was due to errors associated with unearned income. For ineligibility errors, substantial numbers of errors involved asset information, the predominant error type in the "other" category for ineligibility errors. For underpayment errors, household composition, earned income and unearned

¹ The average underpayment error for pure AFDC households with more than one error was found to be 19 dollars. Based on intuition and empirical evidence for the other subsample, it could be expected that this number should be at least as large as average error for households with only one error (35 dollars). However, there were only 11 pure AFDC cases with more than one error, so this result is probably due to sampling error.

² Type of error was based on the element and nature codes of the individual errors. See Appendix C for the precise mapping of these codes into the categories cited in this report. A more detailed version of Table II.3 is given in Table D.2 in which element codes are not aggregated into these categories.

TABLE II.3

SOURCE OF ERROR BY HOUSEHOLD TYPE
AND REVIEW FINDING
(Percentages)

	Pure AFDC Households			Other Households			All Households		
	Ineligibility	Over Payment		Ineligibility	Over Payment		Ineligibility	Over Payment	
		Payment	Under Payment		Payment	Under Payment		Payment	Under Payment
Household Composition	10.1%	13.8%	46.9%	17.7%	10.6%	19.5%	16.1%	11.5%	27.7%
Earned Income	53.8	49.5	7.0	45.1	39.0	29.6	46.9	42.0	22.9
Unearned Income	-	16.6	11.2	3.8	32.1	32.7	3.0	27.7	26.3
Shelter Deduction	-	16.5	30.9	-	11.1	10.0	-	12.6	16.2
Other ^a	36.1	3.6	4.0	33.3	7.1	8.2	33.9	6.1	6.9

^a"Other" includes errors concerning assets, deductions other than for shelter and utilities and other miscellaneous errors.

income errors were represented approximately equally as the major sources of error.

The subsample of pure AFDC households generally reflected the patterns of the sample as a whole with respect to payment error. Earned income was the primary source of this type of error, and problems with information concerning assets contributed substantially to issuances to ineligible households. However, unearned income errors did not play as big a role in overpayments to pure AFDC households as they did for other households, reflecting the fact that for most pure AFDC households the only source of unearned income is the AFDC payment, which is accurately known by the case worker at the time when the food stamp eligibility and benefit determinations are made.

The lack of a dominant source of underpayment error noted for the overall sample appears to be the result of different types of errors being the major contributors for the two subsamples. Among the pure AFDC subsample, household composition and shelter deductions were the major factors in underissuance error, while in the other subsample they were earned and unearned income.

Since parts of the analysis focus on policies that would affect only AFDC households, it is important to examine the proportion of all error that occurs in such cases. As shown in Table II.4, pure AFDC households account for approximately 25 percent of payment error and approximately 30 percent of underpayments.

TABLE II.4
 PERCENTAGE OF ERROR DOLLARS
 BY HOUSEHOLD TYPE

	Pure AFDC Households	Other Households	All Households
All Payment Error	25.1%	74.9%	100.0%
Overpayment	28.3	71.7	100.0
Ineligibility	21.3	78.7	100.0
Underpayment	29.7	70.3	100.0

III. ELIMINATION OF THE SHELTER AND UTILITY DEDUCTIONS

The Food Stamp Program shelter and utility deductions add considerably to the complexity of the process of determining food stamp eligibility and benefit levels, and, because of this, they contribute significantly to the administrative cost of operating the program. In particular, use of the shelter and utility deductions adds to administrative burden, both because it requires that case workers obtain detailed information on housing and utility costs from clients, and also because it increases the complexity of the arithmetic calculations needed to determine net countable income for the program.

The purpose of the shelter deduction is to target benefits to households who are most in need of assistance. However, the degree to which it is an effective mechanism for doing this is unclear, since, to some degree, differences in housing expenses simply reflect different consumption preference patterns of households rather than differences in underlying need.

In light of these factors, it has been suggested that the separately calculated housing deduction be eliminated and replaced with an increase in the standard deduction.¹ This would clearly simplify the program and would essentially "define away" housing error. This section provides quantitative estimates of these potential effects on error rates.

¹ The offsetting increase in the standard deduction could be set at a uniform rate for the nation as a whole, or it could be calculated on a state-by-state basis to take into account differences between states in average shelter costs.

1. Simulation Procedures

The elimination of the shelter and utility deductions was simulated by setting all shelter and utility errors on the analysis file to zero. Case and dollar error rates were then recalculated without the shelter errors.

2. Effects on Error Rates

Estimates of the percentage reduction in QC error rates under the elimination of the shelter and utility deductions are presented in Table III.1. The 1984 national error rates and their adjusted values based on the simulation have been included for the purposes of illustration.

As shown in the last column of the table, for the overall sample the estimated reduction in payment error resulting from the elimination of the shelter deduction is 6.8 percent. A reduction of this magnitude lowers the national payment error rate from its 1984 value of 8.6 percent to 8.1 percent. The reduction in the payment error rate was larger for the AFDC subsample, where errors in the reporting of the shelter and utility deductions were most prevalent, and smaller for the remainder of the sample.

The reduction in underpayment error was 16.5 percent for the overall sample. The order of the reductions in underpayment error among the subsamples followed the pattern observed for payment error. A larger reduction was seen for the AFDC subsample--31.0 percent--and a smaller one for the other subsample--10.2 percent.

The reduction in case error rate for the sample as a whole was 17.7 percent. For the AFDC subsample, the reduction in the case error rate was

TABLE III.1

1984 ERROR RATES AND ERROR RATE REDUCTIONS UNDER ELIMINATION
OF SHELTER AND UTILITY DEDUCTIONS

	Pure AFDC Households	Other Households	All Households
<u>Payment Error^a</u>			
1984 Rate	5.3%	11.0%	8.6% ^b
Estimated Percent Reduction	9.7	5.7	6.8
Adjusted 1984 Rate	4.8	10.4 ^c	8.1
<u>Underpayment Error</u>			
1984 Rate	1.7	2.7	2.3 ^b
Estimated Percent Reduction	31.0	10.2	16.5
Adjusted 1984 Rate	1.2	2.5	2.0
<u>Case Error</u>			
1984 Rate	19.5	25.1	23.4 ^b
Estimated Percent Reduction	28.9	13.8	17.7
Adjusted 1984 Rate	13.9	21.7	19.2

^aIncludes overissuances and issuances to ineligible.

^b1984 error rates for pure AFDC and other households were computed from the national error rates for all households. These allocations were based on the proportion of error attributable to each subsample in the July/August 1984 QC dataset used in this analysis.

28.9 percent, while among the other households the reduction was 13.8 percent.

3. Effects on Fiscal Liability

As noted above, the elimination of the shelter deduction is estimated to reduce national payment error rates by 6.8 percent. It is of interest to assess the impact that such reductions would have on the fiscal liabilities that are computed for the states with high error rates. In order to examine this issue, we have recomputed the Fiscal Year 1984 liabilities under the assumption that each state's payment error was reduced by 6.8 percent.

Table III.2 displays the results of these calculations. Illinois is excluded from the analysis because the Simplified Application Demonstration was taking place in that state during the analysis period. As shown in the table, in 1984 fiscal liabilities were computed for 35 of the states and territories included in the table. We estimate that the liabilities would have been totally eliminated for 5 of these 35 states and territories and that liabilities would have been reduced for another 16 of them. Overall, the total amount of the liabilities for states other than Illinois is estimated to drop from \$78.5 million to \$62.0 million, a reduction of approximately 20 percent.

In examining the state-by-state information displayed in Table III.2, it should be noted that these calculations are based on an assumption that the elimination of the shelter deduction would reduce error for all states by the same percentage. In fact, it is likely that states with relatively high shelter costs experience relatively more shelter-related error and therefore would have relatively larger error

TABLE III.2

EFFECTS ON FISCAL LIABILITY OF
ELIMINATING THE SHELTER DEDUCTION

State	Official 1984 Payment Error Rate	Adjusted 1984 Payment Error Rate	Official 1984 Liability (b)	Adjusted 1984 Liability (c)	Change Between Official and Adjusted Liability
Alabama	13.4	12.4	\$9,227,122	\$7,549,464	\$1,677,659
Alaska	9.3	8.7	\$0	\$0	\$0
Arizona	9.4	8.7	\$1,199,017	\$599,509	\$599,509
Arkansas	9.7	9.0	\$1,144,268	\$1,144,268	\$0
California	7.7	7.1	\$4,263,749	\$4,263,749	\$0
Colorado	10.7	9.9	\$1,381,910	\$829,146	\$552,764
Connecticut	7.1	6.6	\$0	\$0	\$0
Delaware	6.4	6.0	\$0	\$0	\$0
Washington DC	8.8	8.2	\$235,823	\$235,823	\$0
Florida	9.0	8.4	\$2,116,453	\$1,058,226	\$1,058,226
Georgia	9.6	8.9	\$3,697,445	\$2,464,963	\$1,232,482
Hawaii	3.7	3.4	\$0	\$0	\$0
Idaho	6.9	6.4	\$0	\$0	\$0
Indiana (a)	8.6	8.1	\$1,361,069	\$1,361,069	\$0
Iowa	8.5	7.9	\$690,194	\$345,097	\$345,097
Kansas	7.4	6.9	\$101,150	\$0	\$101,150
Kentucky	9.0	8.4	\$1,395,355	\$1,395,355	\$0
Louisiana	10.2	9.5	\$5,283,439	\$3,170,063	\$2,113,375
Maine	6.7	6.3	\$0	\$0	\$0
Maryland	6.9	6.4	\$0	\$0	\$0
Massachusetts	9.9	9.2	\$2,321,093	\$1,547,396	\$773,698
Michigan	6.5	6.0	\$0	\$0	\$0
Minnesota	9.8	9.1	\$1,461,779	\$1,461,779	\$0
Mississippi	9.2	8.6	\$1,731,884	\$1,154,589	\$577,295
Missouri	5.8	5.4	\$0	\$0	\$0
Montana	8.8	8.2	\$90,933	\$0	\$90,933
Nebraska	8.8	8.2	\$301,193	\$301,193	\$0
Nevada	2.5	2.4	\$0	\$0	\$0
New Hampshire	8.2	7.6	\$73,631	\$0	\$73,631
New Jersey	7.5	7.0	\$1,088,471	\$0	\$1,088,471
New Mexico	11.8	11.0	\$2,197,196	\$1,569,426	\$627,770
New York	10.1	9.5	\$10,063,964	\$10,063,964	\$0
North Carolina	7.2	6.7	\$523,964	\$0	\$523,964
North Dakota	6.3	5.8	\$0	\$0	\$0
Ohio	6.7	6.2	\$0	\$0	\$0
Oklahoma	7.6	7.1	\$586,756	\$586,756	\$0
Oregon	9.2	8.6	\$1,340,292	\$893,528	\$446,764
Pennsylvania	10.4	9.7	\$7,819,005	\$4,691,403	\$3,127,602
Rhode Island	7.1	6.6	\$0	\$0	\$0
South Carolina	10.9	10.2	\$3,159,387	\$3,159,387	\$0
South Dakota	3.6	3.3	\$0	\$0	\$0
Tennessee	6.1	5.7	\$0	\$0	\$0
Texas	10.0	9.3	\$8,212,334	\$8,212,334	\$0
Utah	11.4	10.7	\$1,334,155	\$952,968	\$381,187
Vermont	9.7	9.0	\$200,169	\$200,169	\$0
Virginia	7.6	7.1	\$652,347	\$652,347	\$0
Washington	9.2	8.6	\$1,509,980	\$1,006,653	\$503,327
West Virginia	7.0	6.5	\$0	\$0	\$0
Wisconsin	9.6	8.9	\$1,391,622	\$927,748	\$463,874
Wyoming	9.1	8.5	\$94,377	\$94,377	\$0
Guam	3.4	3.2	\$0	\$0	\$0
Virgin Islands	12.1	11.3	\$259,762	\$155,857	\$103,905
TOTAL			\$78,511,287	\$62,048,605	\$16,462,681

(a) Illinois is excluded from the tabulations because not all of the relevant data were available.

(b) Total fiscal liability including Illinois was \$81,355,779.

(c) "Adjusted 1984 Liability" was computed using the official FNS formula for calculating state liability. The formula may be summarized as follows: if the official payment error rate exceeds the state's goal, then a liability is applied according to the state's rate of liability, which is equal to five percent for every percentage point or fraction up to three percentage points by which the error rate exceeds the goal, plus ten percent for every percentage point or fraction above three. The state's liability is the FNS share of the state's administrative funding times the liability rate. The liability may not exceed the state's excess error times the state's FSP issuances.

Note: Based on state error rate and fiscal liability data available as of December 1986.

reductions. This would be offset by lower-than-average error reductions in states with low shelter costs. Thus the state-by-state information in the table represents only an approximation of the potential effects of the policy change being analyzed. It seems likely, however, that, overall, the information in the table represents a reasonable estimate of the potential national impact on fiscal liability from eliminating the shelter deduction. The estimates of reductions for individual states are probably much less accurate.

IV. ADOPTION OF THE STANDARD BENEFITS POLICY FOR AFDC HOUSEHOLDS

A second Food Stamp Program change which could lead to reductions in QC error rates is the adoption of a standard benefits policy for AFDC recipients, such as that recently tested in Illinois in the Food Stamp Simplified Application Demonstration. Under a standard benefits policy, households composed entirely of persons who receive AFDC assistance automatically are assumed to be eligible for food stamps. Furthermore, the amount of food stamp benefits to which such households are entitled is determined from a simple table "look-up" process, based only on household size, the presence of earnings, and the presence of an elderly or disabled household member.¹

Any standard benefits plan that was implemented would probably be limited to food stamp households composed entirely of members who also receive AFDC assistance. In most states, virtually all households that consist entirely of AFDC recipients are eligible for food stamps. In addition, because of the structure of the AFDC program within any given state, most AFDC-recipient households of the same size have approximately the same income, since AFDC benefits are generally reduced to offset the presence of other sources of income. The basic logic of the standard benefits concept as it applies to AFDC households is that, because all AFDC households within certain easily defined categories have approximately the same income, the administration of the Food Stamp Program for these

¹ The look-up tables on which standard benefits would be based would be set on a state-by-state basis to reflect differences between states in AFDC benefit levels.

households can be simplified substantially by giving all households within each category the same allotment level, without going through the detailed eligibility and benefit calculation procedures that are normally used in the Food Stamp Program.

The results of the Illinois demonstration showed that a standard benefits policy can lead to substantial reductions in the administrative costs of providing food stamp benefits to AFDC recipients. In addition, as noted in MPR's evaluation of the demonstration, there are several features of standard benefits that result in substantial reductions in error rates. In particular, since shelter costs are not involved in the standard benefits calculation, errors due to this factor are eliminated. Over- and underpayment errors associated with unearned income are also eliminated, since the standard benefits approach does not make use of this information. Furthermore, while the presence of earnings is a factor in determining standard benefits, the exact level of earnings is not, only whether earnings were above or below 75 dollars. Therefore, measured errors in this area are also reduced.

The analysis below examines the magnitude of the reductions in error rates that could be expected from the adoption of a standard benefits policy. It should be emphasized that such policies are only applicable to cases composed entirely of AFDC recipients, and, as discussed above, reductions in error rates are therefore limited to such households.

1. Simulation Procedures

In order to simulate the effects on QC error rates of the standard benefits calculation, a new error file was created by modifying individual error blocks on the base file and recomputing the amounts of total case

error and case review findings¹ as necessary. As mentioned above, the standard benefits plan applies only to AFDC recipients and our analysis applied this simulation only to pure AFDC households.

For the purpose of specifying the simulation, individual errors were classified by review finding (ineligibility versus over- or underpayment) and by type of error. Most ineligibility errors were assumed not to change under standard benefits. However, any such errors that were due to the incorrect reporting of deductions were eliminated. Over- or underpayments that were due to information concerning household composition were also assumed to be unchanged by standard benefits, since the standard benefits plan relies on household size in a manner similar to the current benefit calculation. Those payment errors that were due to information concerning unearned income or deductions were eliminated, since the only form of income that a standard benefits plan would examine is earnings. Over- or underpayments that were due to information concerning earned income were reduced by 89 percent. This assumed percent reduction was based on the results of the Simplified Application Demonstration Evaluation.² Details of this procedure appear in Appendix B.

¹ Case review finding was recomputed as follows. If all the error blocks were deleted, the finding was set to 1, no error. If any error block had a finding of ineligibility, the case finding was set to 4, ineligibility. Otherwise, the case finding was set to 2, overpayment, if the sum of the individual errors showed a net overpayment and was set to 3, underpayment, if the sum showed a net underpayment.

² Errors involving earned income were still possible under the Illinois Simplified Application Demonstration, because the amount of standard benefits received depended on whether or not a household had more than 75 dollars of earned income.

2. Effects on Error Rates

Table IV.1 presents estimates of the effects of a standard benefits plan on payment, underpayment, and case error rates for the total sample and AFDC subsample. 1984 national error rates and their adjustments under the adoption of the standard benefit plan are also presented. Error rates under the current benefit calculation are presented for other households for the purpose of comparison. The estimates for the total sample reflect the use of standard benefits only in the AFDC subsample.

Under the standard benefits plan, the payment error rate for the AFDC subsample was reduced by 48.2 percent. This had the effect of reducing the payment error rate in the total sample by 12.2 percent. When these reductions were applied to the 1984 error rates for pure AFDC households, the payment error rate dropped from 5.3 to about 2.8 percent. For the overall sample, payment error dropped from 8.6 percent to 7.6 percent.

The estimated effects on underpayment error of adopting a standard benefits policy are comparable in relative magnitude to the effects on payment error. For the overall sample, underpayment error was reduced from 2.3 percent to 2.0 percent. Similarly, case error dropped from 23.4 percent to 20.0 percent.

Table IV.2 breaks down payment error reductions by type of error. Standard benefits had no impact on reducing payments to ineligible households. Its major effect on overissuances was in eliminating all unearned income and shelter deduction errors and reducing earned income error by 89 percent among pure AFDC households. Errors due to other

TABLE IV.1

1984 ERROR RATES AND RATE REDUCTIONS UNDER ADOPTION OF
THE STANDARD BENEFITS POLICY

	Pure AFDC Households	Other Households	All Households
<u>Payment Error^a</u>			
1984 Rate	5.3%	11.0%	8.6% ^b
Estimated Percent Reduction	48.2	--	12.2
Adjusted 1984 Rate	2.8	11.0	7.6
<u>Underpayment Error</u>			
1984 Rate	1.7	2.7	2.3 ^b
Estimated Percent Reduction	50.4	--	15.3
Adjusted 1984 Rate	0.8	2.7	2.0
<u>Case Error</u>			
1984 Rate	19.5	25.1	23.4 ^b
Estimated Percent Reduction	55.0	--	14.3
Adjusted 1984 Rate	8.8	25.1	20.0

^a Includes overissuances and issuances to ineligible.

^b 1984 error rates for pure AFDC and other households were computed from the national error rates for all households. These allocations were based on the proportion of error attributable to each subsample in the July/August 1984 QC dataset used in this analysis.

TABLE IV.2

SOURCE OF PAYMENT ERROR REDUCTION DUE TO ADOPTION OF STANDARD BENEFITS BY REVIEW FINDING FOR PURE AFDC HOUSEHOLDS

	Ineligibility			Overpayment			Total Payment Error		
	Under Current Policy	Under Standard Benefits	Percent Reduction	Under Current Policy	Under Standard Benefits	Percent Reduction	Under Current Policy	Under Standard Benefits	Percent Reduction
Household Composition	\$595,374	\$595,374	0.0%	\$1,120,594	\$1,120,594	0.0%	\$1,715,968	\$1,715,968	0.0%
Earned Income	3,169,109	3,169,109	0.0	4,584,902	503,526	89.0	7,754,011	3,672,635	52.6
Unearned Income	0	0	-	1,531,571	0	100.0	1,531,571	0	100.0
Shelter Deduction	0	0	-	1,448,752	0	100.0	1,448,752	0	100.0
Other	2,127,535	2,127,535	0.0	309,811	133,943	56.8	2,437,346	2,261,478	7.2
Total	5,892,018	5,892,018	0.0	8,995,630	1,758,063	80.5	14,887,648	7,650,081	48.6 ^a

^a The percent reduction for total payment error for pure AFDC households differs slightly from the figure presented in Table IV.1 (column 1, row 2). This is because some cases that are currently overpayments become underpayments under the simulation and vice versa. These cases are included in the Table IV.1 error reduction estimates (which are therefore more conceptually correct), but not in the more detailed tabulation presented here.

deductions and assets were also eliminated, thereby reducing "other" errors by 57 percent.

3. Effects on Fiscal Liability

The estimates presented above suggest that approximately 49 percent of payment error for AFDC cases would be eliminated by adopting a standard benefits plan. Since AFDC cases account for approximately one fourth of all payment error (see Table II.4), this implies that the overall national payment error rate would decline by approximately 12 percent, as shown in Table IV.1. As with the impacts of eliminating the shelter deduction, it is of interest to examine the potential impacts of a standard benefits plan on fiscal liability.

In conducting this analysis, we have taken into account variations among states in the proportion of food stamp payment error which occurs in AFDC cases. In some states, particularly many of those in the South, with relatively low levels of AFDC payments and low income limits for AFDC eligibility, only a relatively small proportion of the food stamp caseload receives AFDC and, correspondingly, AFDC households account for only a small proportion of food stamp error. On the other hand, in states with more generous AFDC programs, substantial proportions of the food stamp caseload and of food stamp error are accounted for by AFDC households. In order to take this factor into account, we have estimated for each state the reduction in the state's payment error rate resulting from a standard benefits plan by multiplying the national estimate of the reduction in payment error for AFDC cases (i.e. 49 percent) by the proportion of the state's payment error which occurs in AFDC cases. For instance, if for a given state, AFDC cases accounted for 33 percent of payment error in the

state, the reduction in that state's error rate was estimated as .33 times 49 percent, or approximately 16 percent.¹ The adjusted state error rates were then used to recompute state liability.

Table IV.3 displays the estimated changes in the Fiscal Year 1984 fiscal liabilities which would result from the introduction of a standard benefits policy. The estimates shown in the table suggest that the amount of fiscal liabilities would be reduced for 27 of the states and territories included in the table. The overall level of liability would be reduced by \$30.6 million, from \$78.5 million to \$47.9 million, a reduction of approximately 39 percent.

¹ State-by-state estimates of the percent of case error occurring in AFDC cases were developed on the basis of tabulations provided by Abt Associates of payment error by household type by state for all 12 months of Fiscal Year 1984. These data are presented in Appendix D.

TABLE IV.3

EFFECTS ON FISCAL LIABILITY OF
THE STANDARD BENEFITS SIMULATION

State	Official 1984 Payment Error Rate	Adjusted 1984 Payment Error Rate	Official 1984 Liability (b)	Adjusted 1984 Liability (c)	Change Between Official and Adjusted Liability
Alabama	13.4	12.9	\$9,227,122	\$7,549,464	\$1,677,659
Alaska	9.3	8.2	\$0	\$0	\$0
Arizona	9.4	8.7	\$1,199,017	\$599,509	\$599,509
Arkansas	9.7	9.3	\$1,144,268	\$1,144,268	\$0
California	7.7	6.0	\$4,263,749	\$0	\$4,263,749
Colorado	10.7	8.7	\$1,381,910	\$552,764	\$829,146
Connecticut	7.1	5.8	\$0	\$0	\$0
Delaware	6.4	6.0	\$0	\$0	\$0
Washington DC	8.8	6.5	\$235,823	\$0	\$235,823
Florida	9.0	8.4	\$2,116,453	\$1,058,226	\$1,058,226
Georgia	9.6	8.7	\$3,697,445	\$2,464,963	\$1,232,482
Hawaii	3.7	3.0	\$0	\$0	\$0
Idaho	6.9	6.3	\$0	\$0	\$0
Indiana (a)	8.6	8.2	\$1,361,069	\$1,361,069	\$0
Iowa	8.5	7.3	\$690,194	\$345,097	\$345,097
Kansas	7.4	6.3	\$101,150	\$0	\$101,150
Kentucky	9.0	8.5	\$1,395,355	\$1,395,355	\$0
Louisiana	10.2	9.4	\$5,283,439	\$3,170,063	\$2,113,375
Maine	6.7	6.2	\$0	\$0	\$0
Maryland	6.9	5.5	\$0	\$0	\$0
Massachusetts	9.9	7.3	\$2,321,093	\$0	\$2,321,093
Michigan	6.5	4.9	\$0	\$0	\$0
Minnesota	9.8	8.3	\$1,461,779	\$974,520	\$487,260
Mississippi	9.2	8.9	\$1,731,884	\$1,154,589	\$577,295
Missouri	5.8	5.3	\$0	\$0	\$0
Montana	8.8	7.7	\$90,933	\$0	\$90,933
Nebraska	8.8	7.8	\$301,193	\$150,597	\$150,597
Nevada	2.5	2.5	\$0	\$0	\$0
New Hampshire	8.2	7.0	\$73,631	\$0	\$73,631
New Jersey	7.5	6.2	\$1,088,471	\$0	\$1,088,471
New Mexico	11.8	11.2	\$2,197,196	\$1,569,426	\$627,770
New York	10.1	8.6	\$10,063,964	\$5,031,982	\$5,031,982
North Carolina	7.2	6.9	\$523,964	\$0	\$523,964
North Dakota	6.3	5.4	\$0	\$0	\$0
Ohio	6.7	5.5	\$0	\$0	\$0
Oklahoma	7.6	7.3	\$586,756	\$586,756	\$0
Oregon	9.2	8.6	\$1,340,292	\$893,528	\$446,764
Pennsylvania	10.4	9.4	\$7,819,005	\$4,691,403	\$3,127,602
Rhode Island	7.1	6.3	\$0	\$0	\$0
South Carolina	10.9	9.8	\$3,159,387	\$1,895,632	\$1,263,755
South Dakota	3.6	3.3	\$0	\$0	\$0
Tennessee	6.1	5.9	\$0	\$0	\$0
Texas	10.0	9.0	\$8,212,334	\$8,212,334	\$0
Utah	11.4	10.1	\$1,334,155	\$952,968	\$381,187
Vermont	9.7	8.8	\$200,169	\$133,446	\$66,723
Virginia	7.6	7.2	\$652,347	\$652,347	\$0
Washington	9.2	7.8	\$1,509,980	\$503,327	\$1,006,653
West Virginia	7.0	6.5	\$0	\$0	\$0
Wisconsin	9.6	7.5	\$1,391,622	\$463,874	\$927,748
Wyoming	9.1	8.5	\$94,377	\$94,377	\$0
Guam	3.4	3.3	\$0	\$0	\$0
Virgin Islands	12.1	12.0	\$259,762	\$259,762	\$0
TOTAL			\$78,511,287	\$47,861,644	\$30,649,643

(a) Illinois is excluded from the tabulations because not all of the relevant data were available.

(b) Total fiscal liability including Illinois was \$81,355,779.

(c) "Adjusted 1984 Liability" was computed using the official FNS formula for calculating state liability. The formula may be summarized as follows: if the official payment error rate exceeds the state's goal, then a liability is applied according to the state's rate of liability, which is equal to five percent for every percentage point or fraction up to three percentage points by which the error rate exceeds the goal, plus ten percent for every percentage point or fraction above three. The state's liability is the FNS share of the state's administrative funding times the liability rate. The liability may not exceed the state's excess error times the state's FSP issuances.

Note: Based on state error rate and fiscal liability data available as of December 1986.

V. INCORPORATION OF AFDC OFFSET FACTOR INTO FOOD
STAMP PROGRAM ERROR CALCULATIONS

The third potential change examined in this report is a change not in the Food Stamp Program itself but rather in how QC error is calculated for food stamp cases that also receive AFDC. In particular, the change considered below would involve altering the error determination rules to take into account the offsetting effects on Food Stamp Program error of the benefits determination rules for the AFDC program.

Under current QC rules, AFDC and Food Stamp Program errors are determined independently of each other. Therefore the assumed "correct" food stamp amount used in calculating food stamp error is based on the households' AFDC receipts during the review month. The rationale for this is that it bases the food stamp error calculation on the cash income actually available to the household. However, this tends to overestimate the net cost to the government of the errors, in that it ignores the fact that changes in the size of a client's AFDC payment to correct for an AFDC error will, in general, result in a change in Food Stamp Program benefits in the opposite direction.

An example may help illustrate this. If, under conventional Food Stamp Program rules, an AFDC/food stamp case is found to have unreported income, the size of the food stamp error is calculated under the assumption that true gross food stamp income for the case should have been the amount actually used in the erroneous calculation plus the entire amount of the unreported income. In fact, if the unreported income had been known to the case worker who was handling the case, gross income used in the food stamp benefit calculation would not have gone up by the full amount of the

unreported income, because the AFDC payment would have been reduced, largely offsetting the contribution of the unreported income to gross income in the food stamp benefit calculation. The current QC rules do not take this offset into account.

The analysis below estimates the potential impact on measured Food Stamp Program error rates of changing the QC rules to take this AFDC offset into account. In this analysis, we shall assume that the rule change is limited only to food stamp households composed entirely of AFDC recipients. In principle, this change in QC procedures might also be applied to "mixed" households where some but not all of the household members receive AFDC. However, with the information on our data file, it is not possible, in general, to determine for these mixed cases whether the recorded errors involve the AFDC or the non-AFDC members of the household. Therefore simulating the effects of the rule change on these mixed households would be difficult. This limitation may result in some underestimate of the potential effects of taking into account the AFDC offset in calculating Food Stamp Program error.¹

It should also be noted that our analysis focuses only on error offsets related to the AFDC program. In principle, similar adjustments could be made with regard to other assistance programs such as Social

¹ Tabulations conducted of the QC data file on which the current study is based suggest that approximately 40 percent of the QC error in cases where there are any AFDC recipients occurs in mixed cases which are composed only partly of AFDC recipients. This would appear to place an upper bound on the degree to which our results understate the total possible effect due to our not considering the mixed households. In fact, however, it is reasonable to assume that much of the error which occurs in mixed households pertains to the non-AFDC members of the households, and thus the understatement implicit in our results is probably much lower than 40 percent.

Security, SSI, and General Assistance. However, because of resource limitations, the current analysis focuses only on interactions with AFDC errors.

The analysis below considers only errors affecting both AFDC and food stamp benefits. Errors that could affect AFDC but not food stamps, and thus could potentially introduce a food stamp error when none was measured before, are not included in the data base used in the analysis and therefore could not be analyzed.

1. Simulation Procedures

As with the simulation of the standard benefits calculation, in order to simulate the offsetting effects of the impact of taking into account changes in AFDC payments when computing Food Stamp Program errors, a new error file was constructed that modified the error blocks as appropriate and recomputed total case error and review findings. Again, this simulation was applied only to the subsample of pure AFDC households.

Under the simulation of the AFDC offset, ineligibility errors were assumed to be unchanged, since a household would remain ineligible for the Food Stamp Program regardless of any impact the error might have on AFDC payment. Over- and underpayment errors due to information concerning AFDC income were also assumed to be unchanged. This was because the correction of such error would have no "offsetting" effect on AFDC payment. Over- and underpayment errors due to information concerning other unearned income were eliminated, since the corrections to the AFDC payment and the unreported unearned income would cancel each other out in the food stamp gross income computation.

Over- and underpayment errors due to the misreporting of earned income were recomputed as follows. The amount of unreported earnings was estimated from the dollar amount of food stamp error. The impact of those earnings on the AFDC payment was estimated, and the food stamp error amount was then reduced by 30 percent of the change in AFDC payment. It was assumed that all earned income was subject to both the AFDC 75 dollar work expense deduction and the "30 1/3" income disregard.¹

Over- and underpayment errors due to information concerning household composition were recomputed by estimating the number of persons wrongly included in (or excluded from) the food stamp calculation. This computation was based on the assumption that the misreporting of each household member would engender an issuance error of approximately 57 dollars. A state-specific benefit table was used to estimate the change to the AFDC payment that would be brought about by correct reporting, and the food stamp error was reduced by 30 percent of the change in AFDC payment. Other over- and underpayments remained the same. Details of this procedure appear in Appendix B.²

¹ Assuming that all cases would be eligible to receive the "30 and 1/3" income disregard tends to bias our estimates of Food Stamp Program error reduction downward, since it minimizes estimated effects on AFDC payments and thus minimizes the offset effect.

² The procedures for simulating effects of the policy change on household composition errors implicitly assume that when a household composition error is made in a food stamp case composed entirely of AFDC recipients, there is a corresponding error in the AFDC cases. This may not always be the case, and this factor may thus bias our estimates of the effect of the AFDC offset upwards somewhat. However, as shown in Table V.2, reductions in household composition error account for less than 15 percent of all estimated reductions under the AFDC offset simulation. Thus the bias, if present, is relatively small.

2. Effects on Error Rates

Table V.1 presents estimates of the reductions in error rates due to taking account of the AFDC offset effect. By accounting for the effects of the AFDC offset, the payment error for the AFDC subsample was reduced by 24.7 percent. This had the effect of reducing payment error in the total sample by 6.2 percent.

When these estimated reductions were applied to the 1984 error rates for pure AFDC households, the payment error rate was reduced from 5.3 to 4.0 percent, and in the overall sample payment error rate dropped from 8.6 percent to 8.1 percent. Corresponding reductions would occur in underissuance error and case error rates.

Table V.2 breaks down payment error reductions by type of error. The AFDC offset computation had no impact on reducing payments to ineligible households. Its major effect on overissuances among pure AFDC households was in reducing errors associated with earned income and those associated with unearned income by more than 50 percent. Errors associated with household composition were reduced by 41 percent.

3. Effects on Fiscal Liability

Estimation procedures analogous to those described above with regard to the effects of a standard benefits policy were used to estimate the effects on state fiscal liability of taking into account the AFDC offset effect in computing QC error rates. As shown in Table V.3, fiscal liabilities are estimated to be reduced for 17 states and territories; overall liability declines from \$78.5 million to \$62.7 million, a reduction of approximately 20 percent.

TABLE V.1

1984 ERROR RATES AND ERROR RATE REDUCTION UNDER
THE COMPUTATION OF THE AFDC OFFSET

	Pure AFDC Households	Other Households	All Households
<u>Payment Error^a</u>			
1984 Rate	5.3%	11.0%	8.6% ^b
Estimated Percent Reduction	24.7	--	6.2
Adjusted 1984 Rate	4.0	11.0	8.1
<u>Underpayment</u>			
1984 Rate	1.7	2.7	2.3 ^b
Estimated Percent Reduction	28.0	--	8.5
Adjusted 1984 Rate	1.2	2.7	2.1
<u>Case Error</u>			
1984 Rate	19.5	25.1	23.4 ^b
Estimated Percent Reduction	6.0	--	1.6
Adjusted 1984 Rate	18.4	25.1	23.0

^a Includes overissuances and issuances to ineligible.

^b 1984 error rates for pure AFDC and other households were computed from the national error rates for all households. These allocations were based on the proportion of error attributable to each subsample in the July/August 1984 QC dataset used in this analysis.

TABLE V.2

SOURCE OF PAYMENT ERROR REDUCTION DUE TO COMPUTATION
OF AFDC OFFSET BY REVIEW FINDING FOR PURE AFDC HOUSEHOLDS

	Ineligibility			Overpayment			Total Payment Error		
	Under Current Policy	Under Standard Benefits	Percent Reduction	Under Current Policy	Under Standard Benefits	Percent Reduction	Under Current Policy	Under Standard Benefits	Percent Reduction
Household Composition	\$595,374	\$595,374	0.0%	\$1,120,594	\$667,096	40.5%	\$1,715,968	\$1,262,470	26.4%
Earned Income	3,169,109	3,169,109	0.0	4,584,902	2,203,773	51.9	7,754,011	5,372,882	30.7
Unearned Income	0	0	-	1,531,571	679,068	55.7	1,531,571	679,068	55.7
Shelter Deduction	0	0	-	1,448,752	1,448,752	0.0	1,448,752	1,448,752	0.0
Other	2,127,535	2,127,535	0.0	309,811	309,811	0.0	2,437,346	2,437,346	0.0
Total	5,892,018	5,892,018	0.0	8,995,630	5,308,500	41.0	14,887,648	11,200,518	24.8 ^a

^a The percent reduction for the total payment error for pure AFDC households differs slightly from the figure presented in Table V.1 (column 1, row 2). This is because some cases that are currently overpayments became underpayments under the simulation and vice versa. These cases are included in the Table V.1 error reduction estimates (which are therefore more conceptually correct) but not in the more detailed tabulation presented here.

TABLE V.3

EFFECTS ON FISCAL LIABILITY OF
THE AFDC OFFSET SIMULATION

State	Official 1984 Payment Error Rate	Adjusted 1984 Payment Error Rate	Official 1984 Liability (b)	Adjusted 1984 Liability (c)	Change Between Official and Adjusted Liability
Alabama	13.4	13.1	\$9,227,122	\$9,227,122	\$0
Alaska	9.3	8.8	\$0	\$0	\$0
Arizona	9.4	9.1	\$1,199,017	\$599,509	\$599,509
Arkansas	9.7	9.5	\$1,144,268	\$1,144,268	\$0
California	7.7	6.8	\$4,263,749	\$0	\$4,263,749
Colorado	10.7	9.7	\$1,381,910	\$829,146	\$552,764
Connecticut	7.1	6.4	\$0	\$0	\$0
Delaware	6.4	6.2	\$0	\$0	\$0
Washington DC	8.8	7.7	\$235,823	\$0	\$235,823
Florida	9.0	8.7	\$2,116,453	\$2,116,453	\$0
Georgia	9.6	9.2	\$3,697,445	\$3,697,445	\$0
Hawaii	3.7	3.3	\$0	\$0	\$0
Idaho	6.9	6.6	\$0	\$0	\$0
Indiana (a)	8.6	8.4	\$1,361,069	\$1,361,069	\$0
Iowa	8.5	7.9	\$690,194	\$345,097	\$345,097
Kansas	7.4	6.8	\$101,150	\$0	\$101,150
Kentucky	9.0	8.7	\$1,395,355	\$1,395,355	\$0
Louisiana	10.2	9.8	\$5,283,439	\$3,170,063	\$2,113,375
Maine	6.7	6.5	\$0	\$0	\$0
Maryland	6.9	6.2	\$0	\$0	\$0
Massachusetts	9.9	8.6	\$2,321,093	\$1,547,396	\$773,698
Michigan	6.5	5.7	\$0	\$0	\$0
Minnesota	9.8	9.0	\$1,461,779	\$1,461,779	\$0
Mississippi	9.2	9.1	\$1,731,884	\$1,731,884	\$0
Missouri	5.8	5.6	\$0	\$0	\$0
Montana	8.8	8.3	\$90,933	\$0	\$90,933
Nebraska	8.8	8.3	\$301,193	\$301,193	\$0
Nevada	2.5	2.5	\$0	\$0	\$0
New Hampshire	8.2	7.6	\$73,631	\$0	\$73,631
New Jersey	7.5	6.8	\$1,088,471	\$0	\$1,088,471
New Mexico	11.8	11.5	\$2,197,196	\$1,569,426	\$627,770
New York	10.1	9.4	\$10,063,964	\$10,063,964	\$0
North Carolina	7.2	7.1	\$523,964	\$523,964	\$0
North Dakota	6.3	5.8	\$0	\$0	\$0
Ohio	6.7	6.0	\$0	\$0	\$0
Oklahoma	7.6	7.4	\$586,756	\$586,756	\$0
Oregon	9.2	8.9	\$1,340,292	\$893,528	\$446,764
Pennsylvania	10.4	9.9	\$7,819,005	\$4,691,403	\$3,127,602
Rhode Island	7.1	6.7	\$0	\$0	\$0
South Carolina	10.9	10.4	\$3,159,387	\$3,159,387	\$0
South Dakota	3.6	3.5	\$0	\$0	\$0
Tennessee	6.1	6.0	\$0	\$0	\$0
Texas	10.0	9.5	\$8,212,334	\$8,212,334	\$0
Utah	11.4	10.8	\$1,334,155	\$952,968	\$381,187
Vermont	9.7	9.2	\$200,169	\$200,169	\$0
Virginia	7.6	7.4	\$652,347	\$652,347	\$0
Washington	9.2	8.5	\$1,509,980	\$1,006,653	\$503,327
West Virginia	7.0	6.7	\$0	\$0	\$0
Wisconsin	9.6	8.6	\$1,391,622	\$927,748	\$463,874
Wyoming	9.1	8.8	\$94,377	\$94,377	\$0
Guam	3.4	3.4	\$0	\$0	\$0
Virgin Islands	12.1	12.1	\$259,762	\$259,762	\$0
TOTAL			\$78,511,287	\$62,722,563	\$15,788,723

(a) Illinois is excluded from the tabulations because not all of the relevant data were available.

(b) Total fiscal liability including Illinois was \$81,355,799.

(c) "Adjusted 1984 Liability" was computed using the official FNS formula for calculating state liability. The formula may be summarized as follows: if the official payment error rate exceeds the state's goal, then a liability is applied according to the state's rate of liability, which is equal to five percent for every percentage point or fraction up to three percentage points by which the error rate exceeds the goal, plus ten percent for every percentage point or fraction above three. The state's liability is the FNS share of the state's administrative funding times the liability rate. The liability may not exceed the state's excess error times the state's FSP issuances.

Note: Based on state error rate and fiscal liability data available as of December 1986.

VI. CONCLUSIONS

The above analysis suggests that all three program changes considered in this report have the potential for causing significant reductions in payment error rates and in the fiscal liabilities computed for the states. Of the individual changes considered, the largest effect would come from adopting a standard benefits policy, which would lower the measured payment error rate by a percentage point and would cause a reduction of nearly 40 percent in the total amount of liability. Each of the other two changes would lower the measured error rate by approximately five tenths of a percentage point and would reduce liability by approximately 20 percent.

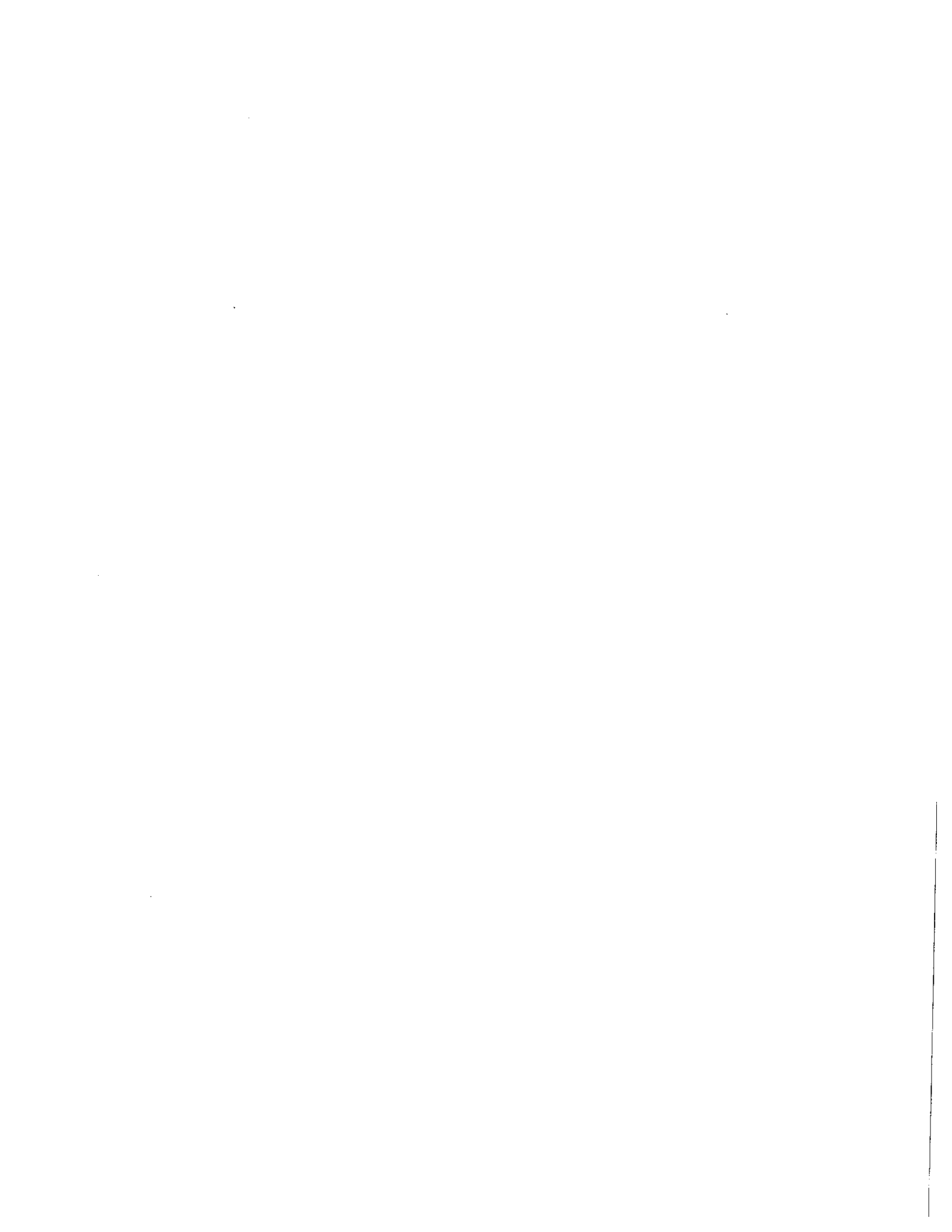
In assessing these results, it should be noted that the three policy changes are not independent of each other, and the result of implementing all three together would not be equal to the sum of the individual effects. In particular, the third possible change that was considered, taking into account the AFDC offset in computing error rates, is essentially subsumed in the error rate reduction estimates for the standard benefits policy. The standard benefits policy also includes the effects of eliminating the shelter deduction for AFDC cases, though it does not include the effects of eliminating the shelter deduction for non-AFDC cases.

Table VI.1 summarizes the joint effects of each of the possible combinations of the policies considered in the above analysis. The greatest possible effects would be achieved by implementing both standard benefits policies and the elimination of the shelter deduction.

TABLE VI.1
EFFECTS OF COMBINATIONS OF POLICIES

	Elimination of Shelter Deduction for All Households	Adoption of Standard Benefits for AFDC Households	Including AFDC Offset in Error Calculation for AFDC Households	Total Effect
Combination 1	X		X	Sum of two components effects
Combination 2	X	X		Sum of Standard Benefit effect plus 2/3 of shelter deduction effect
Combination 3		X	X	Same as Standard Benefit effect by itself
Combination 4	X	X	X	Same as Combination 2

APPENDIX A
EDITING PROCEDURES



APPENDIX A
EDITING PROCEDURES

This appendix describes editing work done on the national Food Stamp Program Quality Control (QC) data set used for the present study. The problems we encountered with the data fell into 2 categories: those that were insoluble and led to cases being deleted, and those that involved discrepancies between state-provided summary error data and individual error blocks that were correctable. The purpose of this appendix is to describe these problems and their resolutions fully.

The following variables will be referred to below:

AFDCTYPE	presence of AFDC recipients in the food stamp household (1=all AFDC, 2=mixed, 3=no AFDC) ¹
NUMERROR	number of errors and, therefore, the number of error blocks filled in
STATEFND	case review finding (1=no error, 2=overpayment, 3=underpayment, 4=ineligible)
STATEERR	case error amount (\$)
PROG_ID	error block program identification (2=Food Stamp; values other than 2=AFDC, Medicaid or other error)
ERRFIND	error block review finding (same codes as STATEFND)
DOLLAMT	error block amount (\$)
DOLLRSUM	sum of DOLLAMT over all error blocks from 1 to NUMERROR

Of the 6979 cases on the QC file, those that contained no food stamp payment errors (NUMERROR=0 and STATEFND equal to 1) were dropped, leaving 1543 cases. Of those 1543 cases with at least one error, 789 had problems that caused us to modify or delete them. These problem cases are the focus of this appendix. As discussed below, the majority of these 789 cases

¹ See Appendix C for the specification of the construction of the AFDCTYPE variable.

involved only minor editing of the data; the editing required for approximately 250 of the cases was more extensive.

Many of the editing decisions described below were guided by QC system coding conventions. These included ignoring errors of 5 dollars or less and assuming that the most important error was coded in the first error block. In addition, when conflicting information was offered by STATEERR and DOLLRSUM, the value in STATEERR was chosen because STATEERR is used directly in calculating state error rates and thus is presumably subjected to greater scrutiny by the QC system. In the face of certain problems described below we also employed the simplifying assumption that the individual error block dollars should sum to STATEERR. Although we are aware that there may be circumstances in which the components ought not to sum to STATEERR, this assumption was necessary due to constraints on available information. Even though nonlinearities in the food stamp benefit formula can lead to non-additive errors, there is generally not enough information on the file to simulate the effects of the non-linear interactions between error amounts.

CASES DELETED

The following types of cases were deleted:

- o 20 cases in which the case weight was missing. (Case weight is a number assigned to a sample household so that it is represented accurately in estimates of the national food stamp population.)
- o 3 cases in which the case finding indicated an error (STATEFND greater than 1) but no error blocks were entered (NUMERROR=0). (Although STATEFND and STATEERR could have been moved into an error block, the type of error--element and nature codes-- were not known, thus, these cases were deleted.)

- o 24 cases in which the AFDCTYPE could not be determined due to errors in the household composition and food stamp affiliation information.
- o 15 cases in which the available data were either inconsistent or so incomplete that reasonable imputation procedures could not be applied.
- o 42 cases from Illinois that remained on the file but were not included in any of the tabulations. These were not included due to their participation in the Simplified Application Demonstration in Illinois.

CASES CORRECTED

The majority of the cases that were corrected were classified in terms of their values of NUMERROR (equal to 1 or greater than 1), STATEERR (equal to 0 or not equal to 0), and DOLLRSUM (equal to 0 or, if not equal to 0, equal to STATEERR or not equal to STATEERR). This classification was used in situations (1) to (6) below. Situation (7) describes the resolution of cases for which AFDCTYPE was missing.

Note that when STATEERR or DOLLRSUM were blank, they were treated as if they had the value 0. DOLLRSUM, a variable constructed for the imputation procedure, could have been blank if DOLLAMT was not filled in for any block or if one or more DOLLAMT was not accompanied by ERRFIND, which specifies the sign of the dollar amount. Note also that whenever STATEERR was equal to 0, STATEFND was equal to 1 and vice versa. Therefore, looking at STATEERR was sufficient to tell whether the QC System had found the case in error.

Following are specific situations that were considered in the editing work:

- (1) There were 124 cases in which STATEERR was 0, but NUMERROR was greater than 0. (In 25 of the 124 cases NUMERROR was greater than 1). In 123 of

the 124 cases the dollar amounts in the blocks were each either blank or less than or equal to 5 dollars. Error blocks in these 123 cases were deleted and NUMERROR was set to 0. (In effect, the cases were dropped from the error file.) We did this because under the QC system rules, cases that have errors of 5 dollars or less are not counted as having errors. The remaining case was modified in the same way. Although DOLLAMT1 was larger than 5 dollars it was a shelter deduction error that seemed not to affect the overall payment.

(2) There were 315 cases in which STATEERR was not equal to 0, NUMERROR was equal to 1 and DOLLAMT(1), the dollar amount in the first error block, was blank or zero. In these cases DOLLAMT(1) was set equal to STATEERR and ERRFIND was set equal to STATEFND.

(3) There were 66 cases in which STATEERR was not equal to 0, NUMERROR was equal to 1 and DOLLAMT(1) had a nonzero value that was different from STATEERR. In these cases DOLLAMT(1) was set equal to STATEERR. We chose to accept the STATEERR value rather than the DOLLAMT value because the STATEERR variable is believed to be more reliable as mentioned above.

(4) There were 163 cases in which STATEERR was not equal to 0, NUMERROR was greater than 1 and DOLLRSUM was 0 or blank. These were examined case by case. Their individual resolutions are listed in Table A.1. However, a few general rules were applied:

(i) If STATEFND=4, that is, the case was ineligible, the case error data (STATEFND and STATEERR) were moved into the first error block along with the element and nature codes describing the reason for ineligibility, NUMERROR was set to 1, and the remaining error blocks were

deleted. This was done because the QC coding rules instruct reviewers to code the most important error first and ineligibility error is more important than any other.

(ii) If one error was for household composition and its nature code had an offsetting sign to that of STATEFND, DOLLAMT was set to 57 dollars in the household composition block. The amount needed to make DOLLRSUM equal STATEERR was then calculated and that amount was evenly divided among the other error blocks. (The 57 dollars is based on the per person allotment in the Thrifty Food Plan.)

(iii) If the element and nature codes and other data offered no information on how to allocate STATEERR, one of two ratios was used impute the dollars that belong in error block 1, which generally holds the bulk of the error, and the difference between that amount and STATEERR was divided evenly among the other error blocks.

To deal with cases in which all errors were of the same sign, we computed the ratio, P1. P1 was estimated as the average of DOLLAMT1/DOLLRSUM, computed on the set of all cases for which STATEERR was equal to DOLLRSUM (that is, all cases in which the sum of the dollars in the error blocks did, in fact, equal the case error amount). Then, in the problem cases, DOLLAMT1 was set equal to $P1 * STATEERR$ and the remaining DOLLAMT variables were set equal to $((1-P1) * STATEERR) / (NUMERROR-1)$. The calculated value of P1 used in the editing was 0.922.

In cases in which the first error was of one sign and the remaining errors were all of the opposite sign, the ratio P2, equal to $1+(1-P1)$, was used to assign a proportion of STATEERR to DOLLAMT1. That is, DOLLAMT1 was set equal to $P2 * STATEERR$. The rationale for this formula for P2 is based

on the assumptions employed above: that individual errors should sum to STATEERR and that a proportion of $1-P_1$ of the case error dollars belong in the second and subsequent error blocks. Therefore, in order for $P_2 - (1-P_1) = 1$, P_2 must equal $1+(1-P_1)$.

(5) There were 34 cases in which STATEERR was not equal to 0, NUMERROR was greater than 1, DOLLRSUM was not equal to 0, DOLLRSUM was not equal to STATEERR, but DOLLRSUM was within 10 dollars of STATEERR. These cases were modified so that the error block dollars would sum exactly. Most of the cases were modified by scaling all DOLLAMT entries by STATEERR/DOLLRSUM. However, in the case in which STATEERR was equal to or approximately equal to DOLLAMT1 and the subsequent DOLLAMT were all less than or equal to 5 dollars, the subsequent blocks were deleted and NUMERROR was set to 1 or the difference between STATEERR and DOLLAMT1 was placed in DOLLAMT2, the remaining blocks deleted and NUMERROR set to 2.

(6) There were 38 cases in which STATEERR was not equal to 0, NUMERROR was greater than 1, DOLLRSUM was greater than 0, and the difference between DOLLRSUM and STATEERR was greater than 10 dollars. As in situation (4), these cases were considered individually but were subject to general rules such as those described above.

(7) There were 41 cases in which AFDCTYPE was missing. This variable was reconstructed in the following types of cases. For a household in which no children were receiving AFDC, it was assumed that no adults were receiving AFDC, and AFDCTYPE was set to 3. If one adult in the case was getting AFDC and everyone was part of the same household, a second adult was assumed not to be getting AFDC (unless the adult was a spouse of the household head),

and thus AFDCTYPE was set to 2. If the household contained only adults, it was assumed that no one was getting AFDC and AFDCTYPE was set to 3. This left 24 cases that fell into none of the above situations and were deleted from the error file.

Among the cases listed in (1) through (6), there were 130 cases in which the individual ERRFINDs were totally inconsistent with STATEFND or in which the ERRFINDs were missing. These cases have been examined individually. Whenever possible, ERRFIND was determined on the basis of the element and nature codes. When this was not possible error blocks were deleted.

In addition, there were 6 cases in which specific error blocks had PROG_ID not equal to 2. For these cases, those blocks were dropped and NUMERROR was adjusted appropriately.

DETAILS OF MANUAL EDITING

The following notes document the specific editing algorithms used to deal with "problem" cases which were reviewed manually (i.e. cases in categories 4,5,6, and 7 as identified in the preceding section).

Table A.1 shows the numerical editing codes assigned to various cases, together with the editing algorithms used. In implementing the codes in Table A.1, the following conventions were used:

- (1) Recoding for ineligibility took precedence over any other recoding.
- (2) Frequently, the first error accounts for STATEERR and STATEFND by itself, but is followed by a small shelter or utility deduction error. In these cases, code 7 (Deleting all but the first error block) took

precedence over code 6 (Rescaling the DOLLAMT variables by STATEERR/DOLLRSUM).

(3) Errors that had neither ERRFIND nor DOLLAMT variables, and for which it was impossible to determine the direction of the error from the element and nature codes, were deleted from the file.

(4) When summing the DOLLAMT variables, the signs (as determined by the ERRFIND variables) were taken into account. ERRFIND = 3 indicated that the DOLLAMT should be treated as negative, and ERRFIND = 2 or 4 indicated that the DOLLAMT should be treated as positive. The sum of the DOLLAMT variables, DOLLARSUM (which in the edited file equals STATEERR), indicated the amount of over- or underpayment.

TABLE A.1

EDITING CODES

Number of Problem Code	Problem and Resolution	Times Code Was Used
1.	The state finding (STATEFND) indicates ineligibility, and at least one of the individual errors is coded as ineligible. Attribute the entire error amount (STATEERR) to the first ineligibility error (even if it is not in the first block) and delete the other error blocks, adjusting the number of errors (NUMERROR) as appropriate.	20
2.	STATEFND indicates ineligibility, and none of the individual errors are coded as ineligible. Attribute STATEERR to the first appropriate individual error, delete the other error blocks and adjust NUMERROR. (NOTE: It would not be appropriate to attribute an ineligibility error to an underpayment error block (ERRFIND = 3).)	14
4.	All but one of the individual dollar amounts (DOLLAMT) are filled in. Fill in the remaining one to make the DOLLAMT variables sum to STATEERR.	1
5.	DOLLAMT variables are present, but individual error findings (ERRFIND) are not and cannot be determined from the element and nature codes. If there is a permutation of the error findings that would make the DOLLAMT variables sum to STATEERR, then use it.	2
6.	The sum of the DOLLAMT variables (DOLLRSUM) is close but not equal to STATEERR (i.e., $2/3 * STATEERR \leq DOLLRSUM \leq 3/2 * STATEERR$). Rescale the DOLLAMT variables by STATEERR/DOLLRSUM so that they do sum to STATEERR.	19
7.	The entries for the first error block are consistent with, and account for, STATEERR and STATEFND by themselves, but other error blocks are filled in. Delete the other error blocks, and adjust NUMERROR.	109

TABLE A.1 (continued)

Number of Problem Code	Problem and Resolution	Times Code Was Used
8.	An ERRFIND entry is inconsistent with the nature code, but otherwise the DOLLAMT variables would sum properly to STATEERR. Change ERRFIND so that the DOLLAMT variables do sum to STATEERR.	1
10.	All errors are in the same category and have the same sign as STATEERR (as determined by their ERRFIND entries or nature codes), but the DOLLAMT variables are missing. Put P1 percent of STATEERR into the first error block, and spread the rest of the amount $((1 - P1) * STATEERR)$ evenly among the remaining blocks. (NOTE: Error categories include household composition, assets, earned income, unearned income, and shelter and utilities deductions.) ^a	16
11.	All errors have the same sign as STATEERR, but the DOLLAMT variables are missing. Put P1 percent of STATEERR into the first error block, and spread the rest of the amount evenly among the remaining blocks. (NOTE: Codes 10 and 11 are separated because code 10 is less likely to affect results. If the errors are all in the same category, then a proposed program change will usually affect either none or all of them, and in either case, it will not matter how the amounts are distributed.) ^a	42
12.	The errors have offsetting signs, only one error has the same sign as STATEERR, and the DOLLAMT variables are missing. Put $(2 - P1)$ percent of STATEERR in the error block with the same sign, and distribute evenly among the remaining blocks the amount that makes the DOLLAMT variables sum to $STATEERR ((1 - P1) * STATEERR)$. ^a	36
13.	The first error has the same sign as STATEERR, there are two other errors with offsetting signs, and the DOLLAMT variables are missing. Put STATEERR into the first dollar amount, and put offsetting amounts equal to $(1 - P1) * STATEERR$ into the second and third error blocks. ^a	5
14.	One error block has an element code of 150 and a sign offsetting that of STATEERR, and the DOLLAMT variables are missing. Let the DOLLAMT for the	6

TABLE A.1 (continued)

Number of Problem Code	Problem and Resolution	Times Code Was Used
	"150" error block be \$57 and distribute $(1 - P_1) * (STATEERR + 57)$ evenly among the remaining error blocks. ^a	
19.	An error block does not contain enough information to make any reliable assumptions concerning the DOLLAMT or ERRFIND variables. Delete the error block, adjust NUMERROR, and rescale the DOLLAMT variables as appropriate using the codes above.	20
20.	The available data appear to be internally inconsistent. Delete the entire case. (NOTE: This code applies particularly to the few cases where all the error blocks had signs opposite to that of STATEFND.)	b
21.	The ERRFIND in the first block has a different sign from STATEFND, and it is not obvious how to apply one of the above codes to the case. As with code 20, delete the entire case	b
22.	Too much arbitrary assignment of signs and values would be required to produce a full case. Delete the entire case.	b
28.	A nature code is inconsistent with the ERRFIND entry, but otherwise the case appears correct and the DOLLAMT variables sum properly to STATEERR. Change the nature code so that it agrees with ERRFIND.	45
31.	The ADCTYPE type is less than 0 (indicating a data error), and the original data show that none of the children in the household are receiving AFDC payments. Assume that none of the adults in the household are receiving AFDC payments either, and set AFDCTYPE = 3, a non-AFDC household. ^c	4

TABLE A.1 (continued)

Number of Problem Code	Problem and Resolution	Times Code Was Used
32.	The AFDCTYPE is less than 0, everybody in the case is part of the same household, one adult is receiving AFDC payments, and the food stamp affiliation code of a second adult is missing or invalid. Assume that the second adult is not receiving AFDC payments (unless the second adult is the spouse of the first), and set AFDCTYPE = 2, mixed AFDC/non-AFDC household. ^c	5
33.	The AFDCTYPE is less than 0, and the review household contains only adults. Set AFDCTYPE = 3. ^c	6

^a For these five codes $P_1 = 0.922$ was determined from tabulations of well-coded cases where the first DOLLAMT is less than or equal to STATEERR.

^b 15 cases had one of the codes 20, 21, or 22 and were deleted from the file.

^c For these three codes, it may be necessary to apply further corrective measures after the AFDCTYPE has been fixed.

APPENDIX B

DETAILS OF THE STANDARD BENEFITS AND AFDC OFFSET
SIMULATION PROCEDURES FOR PURE AFDC HOUSEHOLDS

APPENDIX B

DETAILS OF THE STANDARD BENEFITS AND AFDC OFFSET SIMULATION PROCEDURES FOR PURE AFDC HOUSEHOLDS

THE STANDARD BENEFITS SIMULATION

The basic logic of the standard benefits concept as it applies to AFDC households is that, because all AFDC households within certain easily defined categories have approximately the same income, the administration of the Food Stamp Program for these households can be simplified substantially by giving all households within each category the same allotment level, without going through the detailed eligibility and benefit calculation procedures that are normally used in the Food Stamp Program.

The error types referred to below are aggregations of element and nature codes, the exact specifications of which are provided in Appendix C.

1. Ineligibility Errors

Most ineligibility errors were assumed not to change under standard benefits. However, any such errors that were due to the incorrect reporting of deductions (error types 4, 5, and 6) were eliminated.

2. Over- and Underissuances

Unearned Income and Deduction Component

Those payment errors that were due to information concerning unearned income or deductions (error types 3, 4, 5, and 6) were eliminated, since the only form of income that a standard benefit plan would examine is earnings.

Earned Income Component

Over- or underpayments that were due to information concerning earned income (error type 2) were reduced by 89 percent. This assumed percent reduction was based on the results of the Simplified Application Demonstration Evaluation.

Household Composition Component

Over- or underpayments that were due to information concerning household composition (error type 1) and miscellaneous causes (error type 7) were also assumed to be unchanged by standard benefits, since the standard benefit plan relies on household size in a manner similar to the current benefit calculation. Miscellaneous errors were unrelated to changes engendered by standard benefits.

THE AFDC OFFSET SIMULATION

The AFDC offset simulation assumes that certain errors that caused over- or underissuances in the food stamp allotment also caused independently estimated over- or underissuances in AFDC benefit. In reality, these issuance errors are not independent and the food stamp over- or underissuances are offset to some degree by the effect of the error on the AFDC benefit. The simulation described below seeks to compute the change in the AFDC benefit and to incorporate that change in a revised estimate of food stamp over- or underissuance.

1. Ineligibility Errors

Under the simulation of the AFDC offset, ineligibility errors were assumed to be unchanged, since a household would remain ineligible for the

Food Stamp Program regardless of any impact the error might have on AFDC payment.

2. Over- and Underissuances

Unearned Income Component

Over- and underpayment errors due to information concerning AFDC income (error type 3, element code 344) were assumed to be unchanged. This was because the correction of such error would have no "offsetting" effect on AFDC payment. Over- and underpayment errors due to information concerning other unearned income (error type 3, other element codes) were eliminated, since the corrections to the AFDC payment and the unreported unearned income would cancel each other out in the food stamp income computation.

Earned Income Component

Individual errors concerning earned income (error type 2) were adjusted as if the earned income involved in the error had first been included in the AFDC benefit calculation. The first step of the adjustment procedure was to estimate the amount of earned income not reported, ME, based on the size of the food stamp issuance error, DOLLAMT, which was positive for an overissuance and negative for an underissuance.

$$ME = \frac{DOLLAMT}{.3 * (1 - .18)}$$

This equation is based on the fact that in the food stamp net earnings computation, 18 percent of earnings is deducted for work-related expenses

and 30 percent of the remainder is deducted from the maximum food stamp allotment to determine the actual issuance. That is,

$$\text{DOLLAMT} = .3 * (1 - .18) * \text{ME}.$$

The change in the AFDC benefit, DAFDC, was then computed based on, ME, the earnings that were either underreported or overreported, as:

$$\text{DAFDC} = .66 * (| \text{ME} | - 75 - 30)$$

This computation assumes that the earnings were subject both to the 75 dollar AFDC work expense deduction and the "30 1/3" disregard.¹ If DAFDC was computed to be less than zero, it was set to zero. Then the correct food stamp error was computed by subtracting .3* DAFDC from DOLLAMT, if the error was an overissuance or by adding .3* DAFDC to DOLLAMT, if the error was an underissuance. Thirty percent of the change in AFDC benefit was deducted (or added) because that is the rate at which the food stamp benefit calculation taxes unearned income.

Household Composition Component

Individual errors concerning household composition (error type 1) were adjusted as if the household member(s) involved in (or excluded from) the error had been included in (or excluded from) the AFDC benefit

¹ By including the 75 dollar deduction we implicitly assume that there had not already been earnings subjected to the 75 dollar deduction. Assuming that all cases would be eligible to receive the "30 and 1/3" income disregard tended to bias our estimates of Food Stamp program error reduction downward, since it minimizes estimated effects on AFDC payments and thus minimizes the offset effect.

calculation. First, the number of persons involved, DNP, was estimated from the food stamp issuance error, DOLLAMT.

$$\text{DNP} = \text{rounded} (\text{DOLLAMT}/57)$$

This is based on the fact that the Thrifty Food Plan increases the food stamp allotment by 57 dollars for each additional household member. If DNP was computed to be less than 1, it was set to 1. Then, in order to compute the effect of the presence (or absence) of the household member on the AFDC benefit, DAFDC, a state-specific AFDC benefit table (Table B.1) was used to determine the per-person change in benefit for the particular state. The per-person change was estimated to be the difference in benefit between a four-person and three-person household, P4-P3.¹

$$\text{DAFDC} = (\text{P4} - \text{P3}) * \text{DNP}$$

Then, as above, if the food stamp error were an overissuance, DOLLAMT was adjusted by subtracting .3* DAFDC; if it were an underissuance, .3*DAFDC was added to DOLLAMT.

Deductions and Other Over- and Underissuances

Other over- and underpayment errors (error types 4, 5, 6, and 7) were assumed to be unchanged in this simulation.

¹ Information on the different AFDC amounts for different household sizes was taken from U.S. House of Representatives, Committee on Ways and Means, "Background Material and Data on Programs within the Jurisdiction of the Committee on Ways and Means", February 21, 1984. The choice of using the difference between 3- and 4- person households was an arbitrary, simplifying assumption.

TABLE B.1

MAXIMUM AFDC BENEFITS, BY FAMILY SIZE, JANUARY 1984¹

State	2-Person Family	3-Person Family	4-Person Family	5-Person Family	6-Person Family
Alabama	\$ 88	\$118	\$147	\$177	\$206
Alaska*	617	696	775	854	933
Arizona	180	233	282	322	360
Arkansas	135	164	191	217	242
California	424	526	625	713	802
Colorado	265	336	408	484	558
Connecticut*	427	529	617	695	777
Delaware	212	287	336	416	475
District of Columbia	236	299	366	422	497
Florida	178	231	273	315	356
Georgia*	169	202	238	272	295
Hawaii	390	468	546	626	709
Idaho	246	305	345	385	420
Illinois	250	302	368	434	495
Indiana	198	258	318	374	414
Iowa	305	360	419	464	516
Kansas*	306	364	411	453	495
Kentucky*	162	188	235	275	310
Louisiana	138	190	234	277	316
Maine	253	341	430	518	606
Maryland	230	295	355	411	454
Massachusetts	314	379	445	511	577
Michigan:					
(Washtenaw County)	376	445	516	593	677
(Wayne County)	348	418	488	566	649
Minnesota*	412	500	583	654	726
Mississippi	60	96	120	144	168
Missouri	209	261	305	346	384
Montana*	279	332	425	501	564
Nebraska	280	350	420	490	560
Nevada	183	228	272	317	362
New Hampshire*	291	341	389	437	497
New Jersey*	273	360	414	468	522
New Mexico	210	258	313	359	391
New York:					
(Suffolk County)*	486	579	676	637	776
(New York City)*	399	474	566	646	731
North Carolina*	176	202	221	242	261
North Dakota*	289	357	437	496	547
Ohio	227	276	343	400	445
Oklahoma*	218	282	349	409	468
Oregon	312	368	445	523	596
Pennsylvania	273	350	415	474	514
Phode Island*	375	462	528	594	669
South Carolina*	108	142	174	206	238
South Dakota*	280	321	361	401	441
Tennessee	101	127	154	182	209
Texas	128	148	178	198	228
Utah	286	362	416	490	540
Vermont	507	530	592	671	716
Virginia	258	310	360	428	468
Washington	374	462	544	627	710
West Virginia	164	206	249	275	275
Wisconsin	436	513	612	703	760
Wyoming	290	325	355	405	460
Guam*	205	265	310	341	371
Puerto Rico	76	100	124	148	172
Virgin Islands	154	209	263	317	371
Median State*	258	321	366	428	495

*These States pay 100 percent of the need standard.

¹ Maximum benefit paid for a family of given size with zero countable income. Family members include 1 adult caretaker.

SOURCE: Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means, U.S. Government Printing Office, February 1984.

APPENDIX C

CATEGORIZATION OF HOUSEHOLDS BY HOUSEHOLD TYPE
AND ERRORS BY ERROR TYPE

APPENDIX C

CATEGORIZATION OF HOUSEHOLDS BY HOUSEHOLD TYPE AND ERRORS BY ERROR TYPE

CATEGORIZATION OF HOUSEHOLDS BY HOUSEHOLD TYPE

A variable called AFDCTYPE was constructed that categorized QC cases according to whether (1) all household members were receiving AFDC (2) some, but not all, household members were receiving AFDC or (3) none of the household members was receiving AFDC. The latter two categories were combined for the analysis presented here.

AFDCTYPE was based on the IQCS form 2-digit entry "Food Stamp Case Affiliation", which was filled out for each member of the household. First, each household member was determined to be "included" or "excluded". Members for whom the first digit of the case affiliation code was 2 (members of food stamp case not under review) or 3 (member does not receive food stamps) were considered "excluded" from the household. Therefore, only those whose first digit was 1 (member of food stamp case under review) were "included". All households had at least one "included" member.

If all the included members had a second digit of 1 (member receives AFDC income), then the AFDCTYPE was 1. If none of the included members had a second digit of 1, then the AFDCTYPE was 3. If some of the included members had a second digit of 1 and some did not, AFDCTYPE was 2.

CATEGORIZATION OF ERRORS BY ERROR TYPE

The following table describes the mapping of element and nature codes into the broad error types used in this analysis. The "other" category was broken down as described below for the purposes of performing the simulations, but appears as a single category in the tables that present analysis results. Element and nature codes are defined in U.S. Department of Agriculture, Food and Nutrition Service, "Integrated Manual for AFDC, Adult, Food Stamp, and Quality Control Reviews", September, 1985.

Element	Nature	Error Type
130, 150 110	all 04, 05	1. Household composition
311, 312, 314	all	2. Earned income
331-346	all	3. Unearned income
363, 364	all	4. Shelter and Utility Deduction
520	all	5. Other (affecting standard benefits and AFDC offset)
361, 365, 321, 323, 362	all	6. Other (affecting standard benefits only)
211-225, 411, 371, 372, 560 values less than 200 not included in Household Composition	all	7. Other (affecting neither)

APPENDIX D
SUPPLEMENTARY TABLES

APPENDIX D
SUPPLEMENTARY TABLES

Estimates of the proportions of various types of error which occur in pure AFDC cases were developed on the basis of tabulations performed for the current study by Abt Associates using a 12-month Integrated Quality Control System data file for 1984. These estimated are presented in Table D.1.

TABLE D.1

PERCENT PAYMENT ERROR BY
HOUSEHOLD TYPE AND BY STATE

State	Error in Pure AFDC Households		Error in All Other Households		Percent Payment Error in Pure AFDC Households
	Overpayment	Ineligible	Overpayment	Ineligible	
Alabama	\$114,804	\$25,590	\$1,155,935	\$757,538	5.3%
Alaska	\$17,908	\$14,233	\$47,620	\$57,881	22.4%
Arizona	\$86,704	\$54,597	\$540,539	\$331,239	13.9%
Arkansas	\$31,943	\$51,767	\$449,655	\$555,475	7.7%
California	\$1,172,814	\$535,452	\$764,949	\$1,231,217	45.4%
Colorado	\$191,782	\$85,593	\$214,678	\$241,367	37.9%
Connecticut	\$88,520	\$54,355	\$144,055	\$81,284	39.8%
Delaware	\$10,245	\$7,209	\$69,021	\$40,803	13.7%
Washington DC	\$114,557	\$53,322	\$82,208	\$72,150	53.1%
Florida	\$205,475	\$95,354	\$1,223,319	\$688,768	12.6%
Georgia	\$250,541	\$170,245	\$1,142,005	\$835,510	17.5%
Hawaii	\$42,859	\$81,519	\$55,729	\$105,460	35.7%
Idaho	\$13,814	\$17,868	\$101,509	\$55,101	15.0%
Indiana (a)	\$113,877	\$58,196	\$583,596	\$593,833	9.8%
Iowa	\$137,041	\$57,423	\$271,587	\$227,022	23.1%
Kansas	\$57,157	\$42,388	\$103,555	\$150,366	20.1%
Kentucky	\$142,585	\$125,543	\$1,158,095	\$938,322	11.3%
Louisiana	\$205,390	\$195,145	\$1,129,127	\$1,131,329	15.1%
Maine	\$25,459	\$24,251	\$121,839	\$143,615	15.8%
Maryland	\$190,713	\$201,099	\$327,911	\$232,950	41.1%
Massachusetts	\$359,254	\$292,703	\$329,605	\$252,864	53.2%
Michigan	\$861,539	\$535,535	\$777,145	\$712,501	50.1%
Minnesota	\$108,851	\$93,513	\$255,655	\$222,059	29.5%
Mississippi	\$59,519	\$54,205	\$339,207	\$659,590	7.2%
Missouri	\$141,028	\$55,391	\$233,457	\$237,755	13.3%
Montana	\$30,735	\$17,211	\$87,020	\$65,375	23.0%
Nebraska	\$52,145	\$19,446	\$111,520	\$115,274	24.0%
Nevada	\$0	\$0	\$31,437	\$4,681	0.0%
New Hampshire	\$21,113	\$12,895	\$43,367	\$40,545	29.7%
New Jersey	\$337,925	\$255,574	\$543,372	\$484,601	35.8%
New Mexico	\$32,923	\$39,922	\$295,330	\$327,399	10.5%
New York	\$1,001,267	\$1,073,055	\$2,608,958	\$2,243,292	30.0%
North Carolina	\$55,307	\$35,754	\$516,292	\$359,355	9.7%
North Dakota	\$11,503	\$10,108	\$21,264	\$24,795	27.8%
Ohio	\$330,284	\$545,432	\$1,204,048	\$1,351,092	35.0%
Oklahoma	\$47,340	\$5,527	\$370,391	\$238,203	8.5%
Oregon	\$55,483	\$22,127	\$430,363	\$350,055	13.0%
Pennsylvania	\$651,157	\$251,047	\$1,452,527	\$2,235,177	20.2%
Rhode Island	\$42,642	\$9,204	\$32,735	\$79,642	32.8%
South Carolina	\$212,155	\$109,921	\$757,722	\$549,437	19.5%
South Dakota	\$5,577	\$3,431	\$37,145	\$25,737	13.7%
Tennessee	\$105,659	\$0	\$781,915	\$504,624	7.7%
Texas	\$439,798	\$261,105	\$1,419,713	\$1,533,209	18.5%
Utah	\$31,048	\$44,250	\$145,160	\$90,018	24.0%
Vermont	\$13,155	\$15,227	\$73,571	\$57,479	19.2%
Virginia	\$59,002	\$57,322	\$545,725	\$353,255	11.5%
Washington	\$357,824	\$135,073	\$343,581	\$245,173	20.9%
West Virginia	\$22,622	\$35,553	\$153,519	\$225,793	14.3%
Wisconsin	\$225,215	\$205,441	\$302,457	\$259,790	43.6%
Wyoming	\$3,125	\$10,149	\$43,620	\$44,348	15.4%
Guam	\$1,751	\$0	\$21,470	\$41,073	2.7%
Virgin Islands	\$1,375	\$2,840	\$32,800	\$133,551	1.3%
TOTAL	\$9,466,475	\$6,305,459	\$25,264,159	\$15,180,022	24.1%

(a) Illinois is excluded from the tabulations because not all of the relevant data were available.

DETAILED SOURCE OF PAYMENT ERROR BY HOUSEHOLD
TYPE AND REVIEW FINDING

Table II.3 presented payment error by household type and review finding in which the sources of error were the standard aggregations of element and nature codes used in the analysis and described in Appendix C. Table D.2 presents payment error data by source, where source is the unaggregated element codes and, therefore, at a greater level of detail than Table II.3. In addition, dollar amounts are presented as well as the percent each dollar amount represents of the column total.

TABLE D.2
 DETAILED SOURCE OF PAYMENT ERROR BY HOUSEHOLD TYPE AND REVIEW FINDING
 (Dollars. Percent of Column Total)

Element Code	Pure AFDC Households			Other Households			All Households		
	Ineligibility	Over Payment	Under Payment	Ineligibility	Over Payment	Under Payment	Ineligibility	Over Payment	Under Payment
098	0	\$2,034 (0.0%)	0	0	0	0	0	2,034 (0.0%)	0
110 Age and School Attendance	0	0	0	321,024 (1.5)	221,766 (0.9)	0	321,024 (1.2)	221,766 (0.7)	0
130 Citizenship and Aliens	0	0	107,562 (2.7)	0	114,632 (0.5)	0	0	114,632 (0.4%)	107,562 (0.8)
140 Residency	307,542 (5.2)	0	0	230,616 (1.1)	0	25,800 (0.3)	538,158 (1.9)	0	25,800 (0.2)
150 Living Arrangement and Household Composition	595,374 (10.1)	1,273,252 (13.8)	1,750,979 (44.1)	3,532,280 (16.2)	2,154,022 (9.2)	1,825,465 (19.5)	4,127,654 (14.9)	3,427,274 (10.5)	3,576,444 (26.8)
160 Work/WIN Registration	0	0	0	123,861 (0.6)	0	0	123,861 (0.4)	0	0
170 Social Security Number	0	125,489 (1.4)	0	2,610 (0.0)	0	0	2,610 (0.0)	125,489 (0.4)	0
211 Bank Accounts or Cash on Hand	619,269 (10.5)	0	0	2,106,929 (9.7)	0	0	2,726,198 (9.9)	0	0
213 Other Liquid Assets and Personal Property	0	0	0	86,853 (0.4)	0	0	86,853 (0.3)	0	0
221 Real Property	420,950 (7.1)	0	0	2,469,479 (11.5)	0	0	2,890,429 (10.5)	0	0
222 Vehicles	545,643 (9.3)	0	0	1,282,452 (5.9)	0	5,122 (0.1)	1,828,095 (6.6)	0	5,122 (0.0)
224 Other Non-Liquid Resources	17,976 (0.3)	0	6,420 (0.2)	0	0	0	17,976 (0.1)	0	6,420 (0.0)
225 Combined Resources	0	0	0	146,739 (0.7%)	0	0	146,739 (0.5%)	0	0

Table D.2 (cont.ined)

Element Code	Pure AFDC Households			Other Households			All Households		
	Ineligibility	Over Payment	Under Payment	Ineligibility	Over Payment	Under Payment	Ineligibility	Over Payment	Under Payment
311									
Wages and Salaries	\$2,674,586 (45.4%)	\$4,502,291 (48.7%)	\$241,347 (6.1%)	\$9,140,747 (42.0%)	\$8,670,692 (37.0%)	\$2,511,784 (26.8%)	\$11,815,333 (42.7%)	\$13,172,983 (40.3%)	\$2,753,131 (20.7%)
312									
Self-employment	494,523 (8.4)	71,483 (0.8)	17,138 (0.4)	671,614 (3.1)	466,974 (2.0)	260,083 (2.8)	1,166,137 (4.2)	538,457 (1.6)	277,221 (2.1)
314									
Other Earned Income	0	11,128 (0.1)	19,507 (0.5)	0	0	0	0	11,128 (0.0)	19,507 (0.1)
321									
Earned Income Deduction	0	1,284 (0.0)	2,655 (0.1)	0	190,767 (0.8)	2,026 (0.0)	0	192,051 (0.6)	4,681 (0.0)
323									
Child or Dependent Care	0	11,664 (0.1)	3,792 (0.1)	0	150,258 (0.6)	16,929 (0.2)	0	161,922 (0.5)	20,721 (0.2)
331									
RSDI Benefits	0	44,386 (0.5)	16,688 (0.4)	427,126 (2.0)	1,285,797 (5.5)	357,695 (3.8)	427,126 (1.5)	1,350,183 (4.1)	374,383 (2.8)
332									
Veterans' Benefits	0	36,278 (0.4)	0	6,680 (0.0)	182,776 (0.8)	158,568 (1.7)	6,680 (0.0)	219,054 (0.7)	158,568 (1.2)
333									
SSI	0	2,616 (0.0)	5,994 (0.2)	14,006 (0.1)	1,901,725 (8.1)	93,217 (1.0)	14,006 (0.1)	1,904,341 (5.8)	99,211 (0.7)
334									
Unemployment Compensation	0	38,726 (0.4)	5,152 (0.1)	97,501 (0.4)	1,139,124 (4.9)	386,050 (4.1)	97,501 (0.4)	1,177,850 (3.6)	391,202 (2.9)
335									
Worker's Compensation	0	24,656 (0.3)	0	0	64,240 (0.3)	298,453 (3.2)	0	88,896 (0.3)	298,453 (2.2)
336									
Other Government Benefits	0	6,078 (0.1)	0	64,240 (0.3)	265,023 (1.1)	76,871 (0.8)	64,240 (0.2)	271,101 (0.8)	76,871 (0.6)
342									
Contributions/Income In-kind	0	249,962 (2.7)	0	122,176 (0.6)	1,092,938 (4.7)	217,344 (2.3)	122,176 (0.4)	1,342,900 (4.1)	217,344 (1.6)

Table D.2 (Continued)

Element Code	Pure AFDC Households		Other Households		All Households	
	Ineligibility	Over Payment	Ineligibility	Over Payment	Ineligibility	Over Payment
344						
PA or GA	0	\$682,358 (7.4%)	0	\$608,633 (2.6%)	0	\$1,290,991 (4.0%)
	--		--		--	
345						
Education Grants	0	309,141 (3.3)	25,764 (0.1)	79,020 (0.3)	25,764 (0.1)	388,161 (1.2)
	--		--		--	
346						
Other Unearned income	0	141,516 (1.5)	74,557 (0.3)	889,289 (3.8)	74,557 (0.3)	1,030,805 (3.2)
	--		--		--	
362						
Unearned income deduction	0	52,558 (0.6)	0	0	0	52,558 (0.2)
	--		--		--	
363						
Shelter Deduction	0	926,961 (10.0)	8,820 (0.0)	1,058,311 (4.5)	8,820 (0.0)	1,985,272 (6.1)
	--		--		--	
364						
Standard Utility	0	596,749 (6.5)	0	1,546,633 (6.6)	0	2,143,382 (6.6)
	--		--		--	
365						
Medical Deductions	0	0	37,297 (0.2)	814,953 (3.5)	37,297 (0.1)	814,953 (2.5)
	--		--		--	
371						
Combined Gross Income	216,155 (3.7)	0	300,026 (1.4)	0	516,181 (1.9)	5,504 (0.0)
	--		--		--	
372						
Combined Net Income	0	0	431,013 (2.0)	0	431,813 (1.6)	0
	--		--		--	
370						
Arithmetic Computation	0	136,258 (1.5)	33,585 (0.2)	323,988 (1.4)	33,585 (0.1)	460,246 (1.4)
	--		--		--	
360						
Monthly Reporting	0	0	0	187,465 (0.8)	0	187,465 (0.6)
	--		--		--	
TOTAL	\$5,892,018 (100%)	\$9,246,868 (100%)	\$21,757,995 (100%)	\$23,409,026 (100%)	\$27,650,013 (100%)	\$32,655,894 (100%)
						\$13,327,697 (100%)