U8216 Microeconomics and Policy Analysis
Fall 2000
Group Project 1

Under the food stamp program in the United States now, eligible households receive coupons every month. Legally, the coupons can be used only to purchase food at approved stores. The number of coupons a household receives is determined by a very complex formula. "Cashing-out" means sending checks instead of coupons; some cashing-out proposals also talk about changing around the value of what some households receive.

Since many New York workfare participants also receive food stamps, the Union of NYC Workfare Participants (UNYCWP) is interested in these proposals, and has hired you to advise them about whether they should support cashing-out in some form. They want you to make a presentation of about 20 minutes to them, and also to answer their questions. They love diagrams.

To give you some idea of the magnitudes involved: A single adult, living alone, would get at most $111 a month in food stamps, if he or she had a very low income and reasonably high rent. A family of three receiving TANF benefits and paying typical rents would get about $217 a month in food stamps in New York City. On the other hand, expenditure surveys have found that households in the bottom 20% of the income distribution spend on average about $120 per month per person on food (this includes food stamp-backed purchases), out of average total expenditures of around $500 per month per person.

Among the questions they think you might want to address are:

- Under pure cashing-out, what recipients would be better off? What recipients would be worse off? What recipients would be just as well off? (They really want to see some indifference curves and budget sets on this.) Would the recipients who are better off in terms of preference-satisfaction be better off in terms of health? Which is more important?

- In many cities there is now an illegal resale market in food stamps. In this market, coupons are bought and sold at about 70¢ on a dollar of face value. How does this illegal market change the analysis of the first set of questions? If the market were legalized, what do you think the price of coupons would be? Would it be better just to legalize this market, rather than cashing-out the food stamps?

- Why did the federal government start giving food stamps rather than money in the first place? Do the people who support the food stamp program care more about recipients' utility or their health and what they consume? The value of food stamps has roughly kept pace with inflation in the last 20 years, but the value of cash welfare grants has not. Would cashed-out food stamps be treated more like food stamps in the future, or like cash welfare grants?

- Many poor people eat at soup kitchens, and some soup kitchens ask people who receive food stamps to donate them. How does the possibility of eating at soup kitchens affect your diagrams for cashing-out? How would cashing-out affect the operation of soup kitchens? How would it affect the people who eat at soup kitchens but don't get food stamps?

- (A hard question) For many recipients, the value of the food stamps they receive every month is increased by 30¢ for every dollar they pay in rent above a certain level. What do these households' budget sets look like? (Now there are three goods: food, housing and everything else. Try drawing budget sets for housing vs everything else first.) Should this rent subsidy be cashed out as well? If so, how?

- Are there good alternatives to pure cashing-out?

- What should UNYCWP do?

You should also prepare for distribution a summary (one page or less) of your recommendations.

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Fall 2000
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U8216 Microeconomics and Policy Analysis
Fall 2000
Group Project 1 Appendix

The Effects of Cash-Out on Food Use of Food Stamp Participants:
Summary Results from Four Demonstrations, September 1993.

Background

A fundamental issue in the design of the Food Stamp Program is the form the benefits take. From the inception of pilot programs in the early 1960s to the contemporary program, the vehicle of choice has been the food stamp coupon, a voucher that can be redeemed for food at authorized retailers. For nearly that same period analyses have considered the relative merits of cash--or, in practice, checks--as an alternative. Advocates of the current coupon system argue that coupons are a direct and inexpensive way to ensure that food stamp benefits are used to purchase food, that the unauthorized use of food stamps is relatively limited despite some evidence of fraud and benefit diversion, and that coupons provide some measure of protection to food budgets from other demands on limited household resources. Advocates of cash benefits argue that the current system limits the purchasing choices of participants; places a stigma on participation; does not prevent the diversion of benefits (as evidenced by the existence of illegal trafficking); and entails excessive costs for coupon production, issuance, transaction, and redemption.

The debate over the desirability of one benefit form over the other has been hampered by sparse evidence comparing coupons and cash food benefits. To fill this gap, the Food and Nutrition Service and several States sponsored four major cash-out demonstrations in recent years: the San Diego Cash-Out Demonstration, the Washington State Family Independence Program (FIP), the Alabama Avenues to Self-Sufficiency through Employment and Training (ASSETS) Program, and the Alabama "Pure" Cash-Out Demonstration. Both the San Diego and Alabama "Pure" demonstrations randomly assigned some participants to receive coupons and others to receive checks. By creating two directly comparable groups, any observed differences between the two groups can be attributed to the effect of cash-out. The Washington FIP and Alabama ASSETS projects include cash-out as one component of a broader welfare reform test and rely on a somewhat weaker evaluation design. Both features make it more difficult to estimate the effect of cash-out reliably and separate it from the effect of other program changes in these sites.

The Food Stamp Act of 1977 as amended authorizes the Food Stamp Program to help low-income households obtain a more nutritious diet through normal channels of trade by increasing food purchasing power for all eligible households who apply for participation. Given this fundamental policy goal, a full assessment of the relative merits of cash and coupons should address three central issues. First, what effect will the substitution of checks for coupons have on participating households; in particular, will cash-out weaken the link between the food stamp benefit and food consumption, reducing the likelihood that participating households obtain a more nutritious diet? Second, what effect will cash-out have on authorized retailers, the "normal channels of trade" envisioned in the Food Stamp Act? And finally, what effect will cash-out have on program participation, benefits, and administrative costs?

Information now available from these demonstrations describes the short-term effect of cash-out on household expenditures, food use, nutrient availability, and preferences. There is only limited information on administrative costs and retailer preferences and, as yet, no information on program participation.

A more complete assessment of the effects of cash-out must await these forthcoming analyses. We can, however, draw some tentative conclusions about the effect of cash-out on food stamp
households.

Findings

First, cash-out appears to reduce household food expenditures, but the size of the reduction remains uncertain. Three of the evaluations find statistically significant reductions in food expenditures (or the money value of purchased food used at home).

The reduction in San Diego is relatively modest (roughly 5 percent), the reduction in Alabama ASSETS is substantially larger (about 20 percent), and the reduction in Washington falls in-between (about 15 percent). In the Alabama "Pure" test, however, there are virtually no differences between households with checks and coupons.

Second, there is some evidence that cash-out reduces the availability of some nutrients. It is not clear, however, that households receiving checks are at significantly greater nutritional risk. The Alabama "pure" test reports virtually no difference in the availability of key macronutrients, vitamins, and minerals between check and coupon households. The San Diego and Washington evaluations find some statistically significant reductions in the availability of food energy, protein, and selected micronutrients. These reductions, however, are uniformly modest (generally between 5 and 10 percent). Moreover, average nutrient availability for both groups exceed the RDAs for each nutrient by fairly wide margins in all three sites. The evaluations in San Diego and the Alabama "Pure" demonstrations examine particular concerns about the effect of cash-out on food stamp recipients who are presumably at greater nutritional risk. In both sites, cash-out has no discernable effect on food use and the availability of selected key nutrients among households in the lower end of the distribution of food use. The ASSETS evaluation did not assess changes in nutrient availability because it did not collect food use data.

Third, there is little evidence of any increase in the incidence of acute food shortages, or deterioration in the adequacy of the home food supply due to cash-out. There is little evidence of any increase in the number of households reporting they do not have enough to eat, days with no food or resources to buy food, or skipped meals in any of the four research sites. There is little evidence of increased reliance on other food assistance programs with the exception of surplus commodity programs: three of the four sites report statistically significant increases in the number of households seeking USDA surplus commodities under cash-out.

Fourth, there is some evidence that cash-out leads to higher expenditures on some items other than food. The evaluation of San Diego, ASSETS, and Washington all report statistically

significant increases in the share of household budgets devoted to shelter, the evaluations of ASSETS and Washington report increases in the share devoted to transportation, and the San Diego evaluation reports increases in the share devoted to medical and educational expenses. The Alabama "Pure" test again reports virtually no difference between checks and coupons. No site finds meaningful increases in expenditures for food away from home.

Finally, households that receive checks prefer them to coupons. The most commonly cited advantage of checks among all recipients regardless of benefit form is the ability to purchase items other than food. Conversely, both coupon and check recipients typically cite the expectation that coupons ensured benefits were spent on food as the major advantage of coupons.

Several important questions about the consequences of cash-out remain. Forthcoming analyses will attempt to determine the extent to which cash-out makes the program more attractive to some eligible nonparticipants, causes some to apply for benefits, and thus leads to increased participation. Additional analyses will assess the effects of cash-out on administrative costs and the retailer community. This new information will enable a more complete assessment of the relative merits of cash and coupons.

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Ohls, James C., Thomas Fraker, Alberto Martini, and Michael Ponza. "The Effects of Cash-Out on Food Use by Food Stamp Program Participants in San Diego." Report submitted to the Food and Nutrition Service, USDA. Princeton, NJ: Mathematica Policy Research, 1992.

U8216 Microeconomics and Policy Analysis
Fall 2000
Group Project 1 Appendix

Summary of "The Effects of Food Stamp Cash-Out On Administrative Costs, Participation, and Food Retailers in San Diego," September 1993.

Background

A fundamental issue in the design of the Food Stamp Program (FSP) is the form benefits should take. Advocates of the current coupon system argue that coupons are a direct and inexpensive way to ensure that food stamp benefits are used to purchase food. Coupon advocates contend that, despite some evidence of fraud and benefit diversion under the current system, food stamps are used largely to purchase food. In addition, they contend that coupons give household food budgets some measure of protection against other demands on limited household resources. Advocates of cashing out the FSP argue that the current system limits the food-purchasing choices of recipients and places a stigma on participation. Moreover, they cite the cumbersome nature and cost of coupon issuance, transaction, and redemption.

The San Diego cash-out demonstration began in 1989. FNS also sponsored three other major cash-out studies in Alabama and Washington State. In January 1993, FNS released the first report on the effects of cash-out on households food use and nutrient availability in San Diego. The initial report found that there was a statistically significant reduction in the value of food used at home by FSP participants. This companion report focuses on the administrative and participation outcomes of the demonstration and its effects on food retailers.

Results of the effects of cash-out on administrative costs, fraud and participation were based on interviews with staff and/or information obtained from state, county, and Federal reports. Retailer findings were based largely on data from a telephone survey of a representative sample of managers of retail food stores authorized to participate in the FSP.

Findings

Cash-out substantially reduced issuance costs. At the county level, the average cost per food stamp issuance was reduced from $2.21 to $0.19. This savings yielded a total estimated savings of $1.3 million annually. Fifty percent of the savings accrued to the federal government, 35 percent to the state and 15 percent to the county.

Cash-out substantially reduced the vulnerability of the issuance system to theft and fraud. In the months before the start of the partial cash-out demonstration, issuance system losses were approximately $22,000 monthly; after full cash-out losses fell to approximately $1000 monthly. The liability for losses (i.e. replacement of coupons lost in the mail) was shifted from the public sector to the person or institution cashing the check.

There was no significant evidence that cash-out increased Food Stamp Program participation. Although San Diego's caseload grew by 38.7 percent in the two years after cash-

out was introduced, similar increases were observed in several other Southern California counties which did not cash-out the FSP. It appears that these increases were due to other factors, such as the deteriorating economy during this period.

Cash-out probably reduced retailer sales, but the magnitude of the decline is uncertain. More than half the stores in the retailer survey believed that cash-out had reduced their sales. The size of the apparent effects in some of the data suggests that they may have also been influenced by other factors such as the deteriorating economy rather than just cash-out.

In general, food retailers prefer FSP coupons to checks. Retailers expressing a preference for FSP coupons cited the negative impact of cash-out on store sales of food items and also stated the concern that people might "misuse" cash benefits by spending less on food, and thus go hungry.

Caveat

Despite these relatively unsurprising findings on the reduction in administrative costs, there is enough evidence based on the Department's rigorous program of demonstration and evaluation to be cautious about the detrimental effects of cash-out. There is reasonably clear evidence that cash-out will reduce expenditures on food: across three different sites, food spending fell roughly 5 to 20 percent when food stamp benefits were converted from coupons to check. In only one site was there no evidence of lower food spending. Moreover, these reductions were observed in the context of short-term demonstrations. It is entirely possible that recipients might spend even less on food over a longer period.

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Fall 2000
Group Project 1 Appendix

Summary of The Evaluation of the Alabama Food Stamp Cash-Out Demonstration, September 1992.

Background

A fundamental issue in the design of the Food Stamp Program (FSP) is the form benefits should take. Advocates of the current coupon system argue that coupons are a direct and inexpensive way to ensure that food stamp benefits are used to purchase food; that, despite some evidence of fraud and benefit diversion under the current system, the unauthorized use of food stamps is relatively limited; and that coupons provide some measure of protection to food budgets from other demands on limited household resources. Advocates of replacing coupons with cash argue that the current system limits the food purchasing choices of participants, places a stigma on participation; and entails excessive costs for coupon issuance, transaction, and redemption.

The debate about the desirability of one form over the other is limited by the sparse empirical evidence comparing coupon and cash food benefits. The Alabama Food Stamp Cash-Out Demonstration offers a rigorous evaluation of the effects of cash-out on household expenditures, food use, and nutrient availability. This report also describes the planning and implementation of the demonstration and assesses the impacts of cash-out on the costs of administering the FSP.

The recipient impacts report [Volume I] is based largely on data obtained from an in-person survey of approximately 600 rural and 600 urban check recipients and 600 rural and 600 urban coupon recipients conducted between August and November of 1990. The in-person survey obtained detailed information on household composition, income, and the foods used by each household during the seven days preceding the interview. Because the cash-out participants were selected randomly, any systematic differences between the groups can be attributed to cash-out.

Data for the administrative outcomes report [Volume II] was obtained from a mail survey of certification and eligibility workers about issuance problems and on-site interviews with state and county FSP staff.

Findings

Cash-out did not lead to a reduction in the money value of food used at home. This finding holds regardless of whether the outcome measure includes only purchased food or all food used at home or when scaled to adjust for differences in household composition and the number of meals eaten at home. A comparison of check and coupon households in the lower end of the distribution of the money value of food used at home revealed that cash-out had virtually no effect on the use of food by those households.

Cash-out did not result in a reduction in nutrient availability for food energy, protein or any of seven key vitamins and minerals. Both check and coupon households exceeded the Recommended Dietary Allowances (RDA) standardized for household size, composition and number of meals from the household's food supply for all nutrients studied. Almost all (95 percent) households from both the check and coupon samples achieved the RDA for protein, whereas 80 percent achieved their RDA for energy.

Cash-out did not increase the incidence of acute shortages of food. There were no significant differences between coupon and check households in reports of not having "enough" food on some days or skipping some meals. There was little evidence that check recipients relied more heavily than coupon households on most government food assistance programs, food banks or soup kitchens. The one exception was the USDA commodity distribution program where check households reported a significantly higher rate of participation than coupon households (20 percent versus 17 percent).

The purchase of food used away from home (such as restaurant meals) did not increase under cash-out. In fact, check households spent slightly less ($3.29 versus $3.50) and reported eating fewer meals away from home (11.58 percent versus 12.74 percent).

There was no evidence that cash-out led to shifts in other types of household expenditures. With the exception of utilities there were no significant differences between check and coupon households in their expenditures for nonfood goods and services.

Virtually all benefit recipients preferred checks to coupons.

The most commonly cited advantage of checks was the ability to purchase items other than food. Conversely, coupon recipients typically cited the fact that coupons ensured that food stamp benefits were spent on food as the major advantage of coupons.

The cost of issuing benefits was 50 percent lower under cash-out. State and county costs declined, while federal costs were eliminated. Three-quarters of the savings accrued to the federal government and one-quarter to the state government. The cost of mail loss borne by the state and federal government under coupon issuance was shifted to banks and stores. Under cash-out costs associated with losses during production, shipment, and storage of coupons and over-issuance were eliminated.

Caveats

The Alabama Food Stamp Cash-Out Demonstration is one of four tests undertaken since 1989. (The other three are the Washington State Family Independence Program, the San Diego Cash-Out Demonstration, and the Alabama Avenues to Self-Sufficiency through Employment and Training Demonstration). Alabama differs from much of the rest of the United States along a number of important dimensions, which limits the generalizability of these results. Alabama relies heavily on food stamps because AFDC provides low benefit levels and General Assistance is not available. Additionally Alabama is a poorer, more rural state having a larger proportion of food stamp households that are elderly than the United States as a whole. Consequently, the

findings of the Alabama demonstration should be considered jointly with the other ongoing evaluations.

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Leaving FSP

Who is Leaving the Food Stamp Program? An Analysis of Caseload Changes from 1994 to 1997

United States Department of Agriculture
Food and Nutrition Service
Office of Analysis, Nutrition, and Evaluation
March 1999

Background

The number of people receiving food stamps fell by over 5.9 million between summer 1994 and summer 1997, with most of the decline occurring in the year between September 1996 and September 1997. This decline occurred during a period of strong economic growth – unemployment fell, inflation stayed low, and the percentage of Americans living in poverty fell slightly. In the same period, Congress enacted and States implemented sweeping reforms to the Food Stamp Program (FSP) and to the nation's welfare programs.

Some point to the participation decline as proof that the strong economy is lifting all boats, providing job opportunities and higher wages for all, including low-income families. Welfare reform is credited with moving millions of families from dependence on the state to work.

However, others raise more troubling questions. Suppose families are not leaving the safety net for paid employment and self-sufficiency but rather remain poor but without assured access to sufficient food to meet their basic needs? Suppose people leaving welfare remain eligible for food stamps but don't realize that these benefits are still available to them? These critics cite the increased demand for assistance at food pantries and soup kitchens as evidence that declining caseloads are not necessarily a sign of success.

These questions cannot be answered conclusively yet. However, an analysis of food stamp administrative data provides some initial insights into the changes that have occurred in the Food Stamp Program. This analysis examines FSP administrative data from 1994, when FSP caseloads peaked, and 1997, the most recent

year when full data are available. 1997 was a transition year as States replaced the Aid to Families with Dependent Children (AFDC) program with Temporary Assistance for Needy Families (TANF) and when changes to the FSP took effect. Thus this report provides information about caseload changes during the early stages of implementation. This analysis focuses on those groups most affected by welfare reform – single parents, legal immigrants, and unemployed childless adults.

General Trends

As Table 1 shows, three major groups accounted for almost all the drop in the food stamp caseload between 1994 and 1997. The number of legal immigrants fell by 54 percent, accounting for 14 percent of the total decline. The number of childless unemployed adults fell by 44 percent, accounting for 8 percent of the total decline. Finally, the number of families receiving welfare benefits fell by 28 percent. Because this group accounts for such a large share of the FSP caseload, they represented 61 percent of the decline. Only 17 percent of the decline came from other groups, including elderly, the disabled, and households with earnings and no welfare income.

Thus, the steepest declines in participation occurred among legal immigrants and unemployed childless adults, the two groups affected by tough new restrictions under welfare reform. However, most of the reduction occurred among the large group of cash welfare households.

Trends Among Single Parent Families

Among other changes, welfare reform was designed to move families from welfare to work. The Aid to Families with Dependent Program (AFDC), which was an entitlement for needy single parents with children, was replaced by block grants to States to operate the Temporary Assistance to Needy Families (TANF), which was designed to provide short term assistance to help poor families become economically self-sufficient.

As Table 2 shows, the number of single-parent families, the group most affected by welfare reform, fell by 17 percent. Within this group, the number receiving AFDC or TANF benefits fell by 27 percent but the number of those *not* receiving welfare *rose* by 9 percent. This suggests that welfare reform has been partially responsible for the drop in welfare caseloads. Had it been solely the strong economy, the number of food stamp households with welfare and without welfare would have both fallen by similar amounts. It also suggests that at least some families that no longer receive welfare continue to receive food stamps.

Among single-parent families, the number of those with earnings rose by 10 percent. And while the number of single-parents receiving AFDC or TANF benefits fell overall, the number of those

who combined welfare with work also rose by 9 percent. This points to an increased reliance on work among single parents.

However, it is important to note that the number of single-parent households with no income from either welfare or work also rose by 9 percent. Also, the number of single-parent food stamp households receiving welfare dropped by nearly 900,000, while number not receiving welfare rose by only 120,000. Because we only have data on food stamp participants, we don't know whether the households leaving both welfare and food stamps found jobs and are economically independent, or are unemployed and in need.

Trends Among Legal Immigrants

Welfare reform legislation made most legal immigrants ineligible for food stamps. Those who were participating at the time the law went into effect could participate until September 1997. New applicants became ineligible starting October 1996.

In 1994, nearly 1.5 million legal immigrants received food stamps. This number dropped sharply after welfare reform was enacted. The number of legal immigrants receiving food stamps declined steadily throughout late 1996 and most of 1997 (Figure 1). The decline was gradual throughout the year, rather than falling sharply between August and September 1997. This indicates that as current immigrants left the program, they were not replaced by new immigrant participants.

Restrictions on participation by legal immigrants appear to have deterred participation by their children, many of whom retained their eligibility for food stamps. Participation among U.S. born children living with their legal immigrant parents fell faster than participation among children living with native-born parents (Table 3). The number of children living with legal immigrants fell by 37 percent, versus 15 percent for children living with native-born parents.

The number of naturalized citizens receiving food stamps rose by 173,000 between 1994 and 1997, an increase of 66 percent (Table 4). This reflects the surge in naturalizations starting in 1993.

Trends Among Childless Unemployed Adults

Welfare reform restricted most childless unemployed adults to no more than three months of food stamps in a 36-month period, unless they were employed or participating in qualified work programs. Many parts of the country were exempt from the work requirement and time limit, due to waivers granted to areas with high unemployment rates or insufficient jobs.

As expected, the number of unemployed childless adults fell by 476,000, a drop of one third, between August 1996 and

September 1997 (Figure 2). This decline was sharpest in the period between January and March, 1997, as States implemented the time limits.

Trends Among the Elderly

The number of households with aged members dropped by 86,000 from 1994 to 1997, a decline of less than five percent. Over time, the number of elderly receiving benefits is very steady, while the share of the caseload that they represent fluctuates. During periods of caseload expansion, elderly households represent a declining share of the food stamp population. During periods of caseload decline, they represent a larger share.

Changes in Ethnic/Racial Composition

Some have raised a concern that those finding work and leaving welfare are predominantly non-Hispanic whites, leaving the welfare caseload even more disproportionately minority. The data do not support this claim. The racial composition of the food stamp caseload as a whole is virtually unchanged between 1994 and 1997 (Figure 3), despite steep drops in participation overall.

The same is true for AFDC/TANF recipients. Whites left the food Stamp Program and welfare at the same rate as minorities. The number of whites receiving welfare and food stamps between 1994 and 1997 fell by 32 percent, compared to a 31 percent drop for African Americans and a 27 percent drop for Hispanics. As a result, the caseload composition is very similar for both years.

The one group where the racial/ethnic composition did change significantly is the unemployed childless adult group subject to time limits. While the proportion of blacks in this group remained unchanged between 1994 and 1997, the proportion of whites fell, while the proportion of Hispanics doubled. However, this is a relatively small group that may be heavily affected by State policy.

About the Data

The data come from Food Stamp Quality Control records. The cases are derived from State samples of caseloads pulled each month for a review on payment accuracy. Records from all States for all months during a fiscal year are combined into one file. Each year, there are about 50,000 households represented in the data. The files are then edited for consistency and weights are assigned.

We analyzed data from two years -- 1994, the year participation peaked; and 1997, the most recent year that we have complete data.

Limitations of the Analysis

The analysis compares snapshots of the food stamp population at different points in time. It does not follow individuals or families over a course of time, showing their movements on and off jobs, welfare, or food stamps. Nor does this analysis provide any information about low-income households not receiving food stamps, including former participants.

This report was prepared by Jenny Genser, Office of Analysis, Nutrition, and Evaluation, based on data prepared by Scott Cody and Laura Castner of Mathematica Policy Research, Inc. The information presented in this report is based on data collected by Food Stamp Program Quality Control data for fiscal years 1994 and 1997.

TABLE 1

Participation Changes from 1994 to 1997 (in thousands)

	Participants: Summer 1994	Participants: Summer 1997	Participation Change	Percent Change	Share of Decline
Legal Permanent Residents	1,537	706	-831	54 %	14 %
Childless Unemployed Adults	1,148	648	-500	-44 %	8 %
AFDC/TANF Participants	13,052	9,442	-3,610	-28 %	61 %
All Other Participants	11,697	10,707	-990	-8 %	17 %
TOTAL	27,434	21,503	-5,931	-22 %	100 %

TABLE 2:

Single Parent Households by Presence of Earnings and Welfare Receipt: 1994 and

1997

	Households: 1994	Households: 1997	Participation Change	Percent Change
All Single Parents	4,595	3,816	-779	-17 %
With AFDC/TANF	3,319	2,422	-897	-27 %
Without earnings	3,022	2,097	-925	-31 %
With earnings	297	325	28	9 %
Without AFDC/TANF	1,276	1,394	118	9 %
Without earnings	568	614	46	8 %
With earnings	708	780	72	10 %
With earnings	1,005	1,105	100	10 %

FIGURE 1:

Legal Immigrant Participants: August 1996 through September 1997

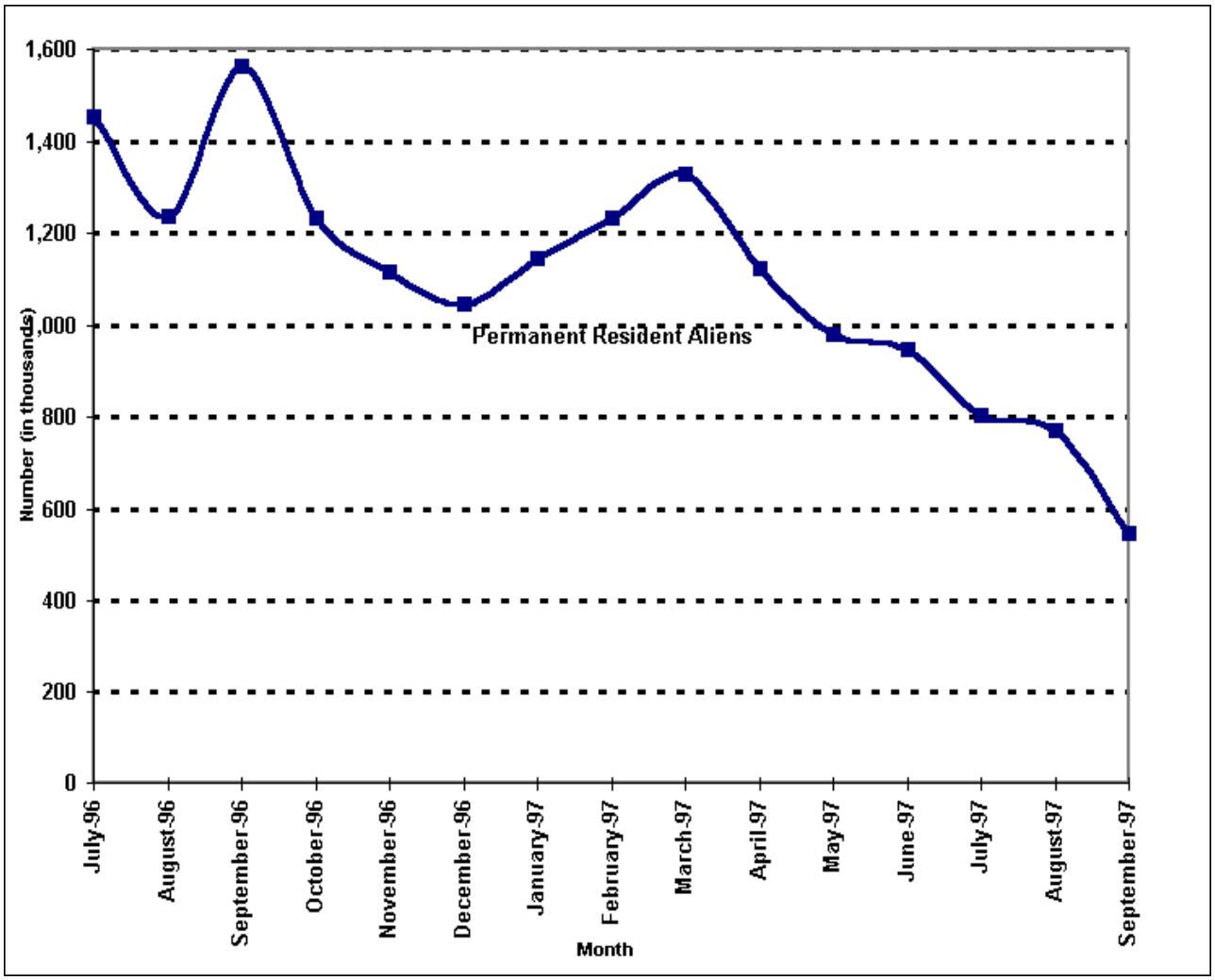


TABLE 3:

Number of Children Participating by Citizenship Status of Parents: October 1996 and September 1997 (in thousands)

	Participants: October 1996	Participants: September 1997	Participation Change	Percent Change
Children Living with Legal Immigrants	1,251	742	434	37 %
Children Not Living with Legal Immigrants	11,034	9,804	1,682	15 %

TABLE 4:

Number of Legal Immigrants by Status: 1994 and 1997
(in thousands)

	Participants: 1994	Participants: 1997	Participation Change	Percent Change
Permanent Resident Aliens	1,453	547	-906	- 62 %
Refugees	359	235	-104	- 31 %
Naturalized Citizens	264	437	+173	66 %
All Legal Immigrants	2,056	1,219	-837	- 41 %

Figure 2:

Childless Unemployed Adults:
August 1996 through September 1997

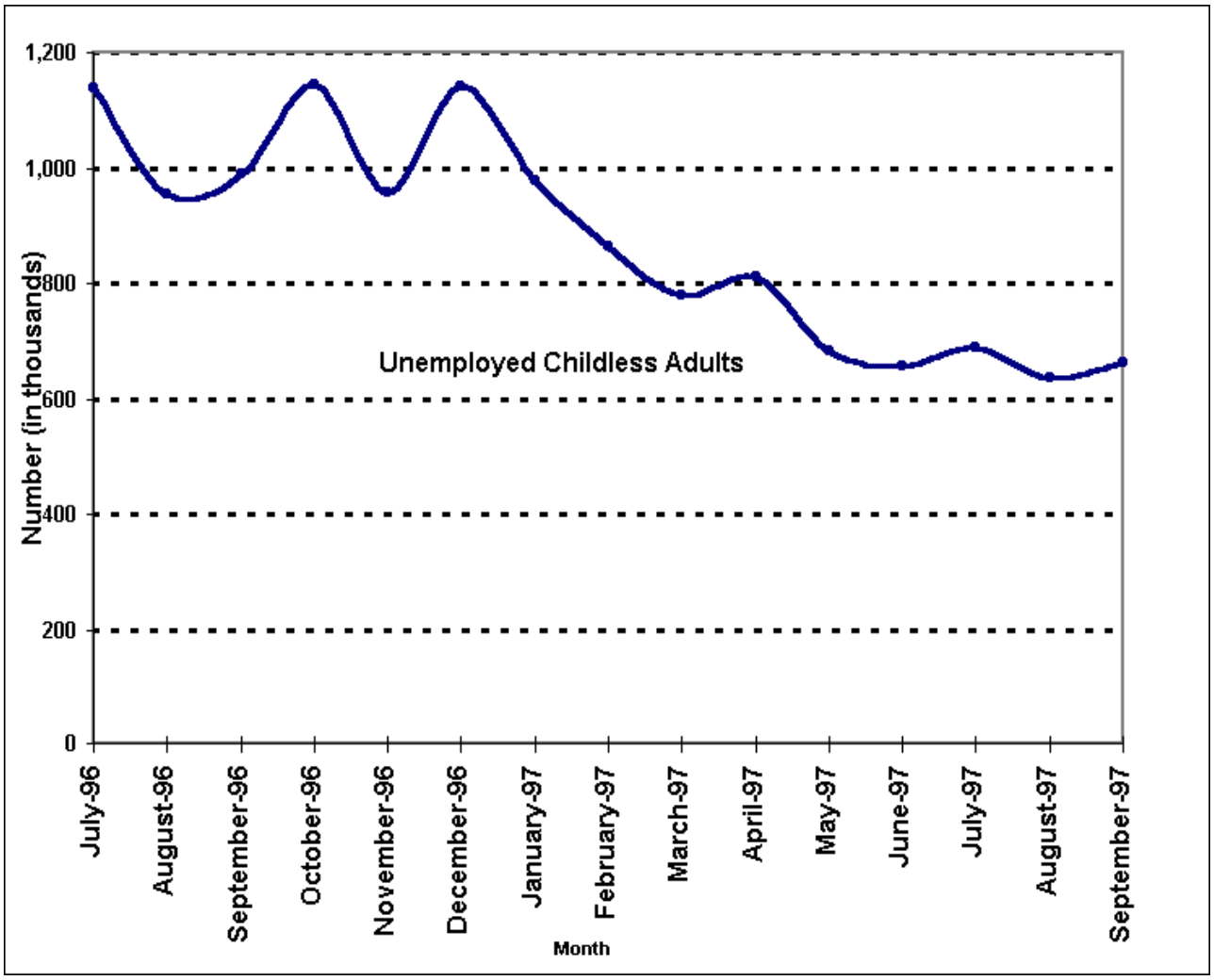
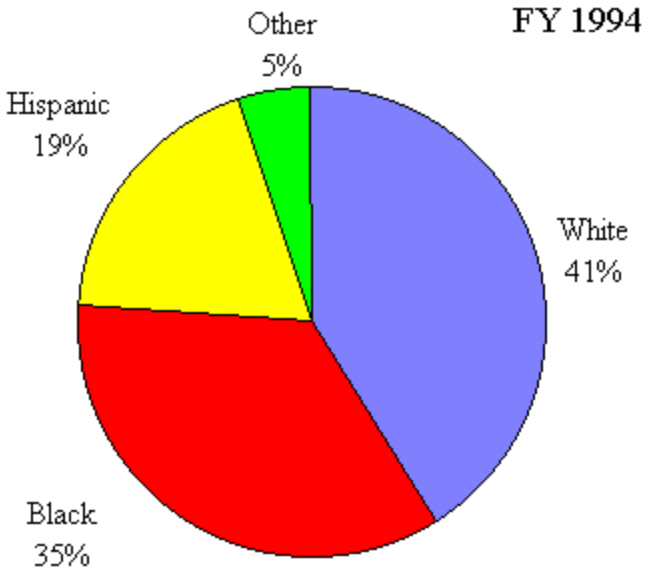
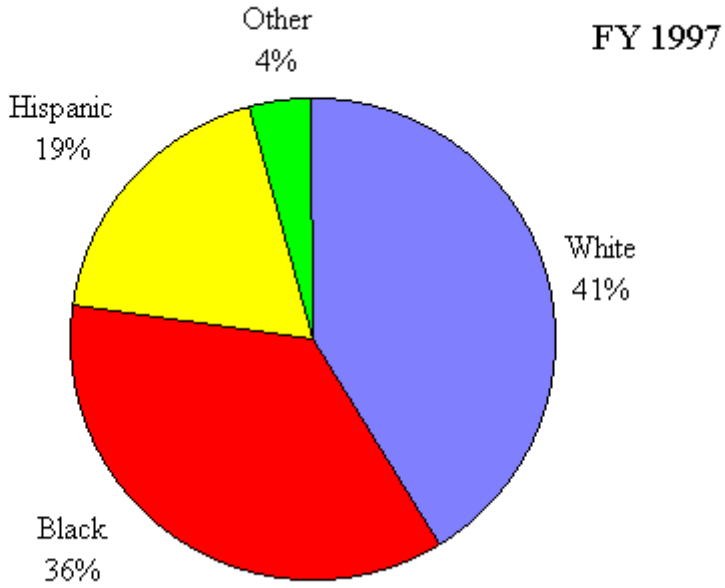


Figure 3

Racial Composition of Food Stamp Participants Receiving Welfare: 1994 and 1997





Last Updated: 02/04/00

THE EXTENT OF TRAFFICKING IN THE FOOD STAMP PROGRAM:

AN UPDATE

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Food and Nutrition Service
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EXECUTIVE SUMMARY

Food stamps are intended for food. When individuals sell their benefits for cash it violates the spirit and intent of the Food Stamp Program as well as the law. This practice, known as trafficking, diverts food stamps away from their purpose. It reduces intended nutritional benefits and undermines public perceptions of the integrity and utility of the program. A crucial question, therefore, is the extent to which trafficking exists.

Several years ago, a method to calculate data-based estimates of the prevalence of trafficking was developed by USDA. *The Extent of Trafficking in the Food Stamp Program*[*] used this method to analyze over 11,000 completed undercover investigations of trafficking and generate an estimate for calendar year 1993. This report duplicates the precise methodology of the earlier analysis with more than 10,000 new investigations to generate an estimate for the 1996 - 1998 calendar year period. We find that:

The amount of trafficking has decreased. Stores trafficked about $660 million per year for cash from the government in the 1996 - 1998 period, a 19 percent decline from the $815 million trafficked in 1993.

The rate of trafficking has also decreased. The trafficking *rate* – which compares dollars trafficked to benefits issued – declined 8 percent: from almost four cents of every dollar of food stamp benefits issued to three-and-one-half cents of every dollar issued.

FNS concentrates its enforcement efforts on stores most likely to traffic. In addition, the expansion of Electronic Benefit Transfer (EBT) – which had grown to half of all issuance during this period – makes certain forms of trafficking harder to conduct and large-scale trafficking easier to detect. For these reasons, **we find the largest reduction in the trafficking rate among the store categories most likely to traffic – privately-owned stores, especially small ones that do not stock a full line of food.**

When we repeat our analysis of where store violations occur the overall pattern remains unchanged:

- **Dramatic differences exist among store types:** the percent of redemptions that are trafficked ranged from nearly zero to over fifteen percent across store categories.

[*] Theodore F. Macaluso, *The Extent of Trafficking in the Food Stamp Program* (Alexandria, VA: Food and Nutrition Service, USDA; 1995).

- **The stores which redeem the overwhelming majority of food stamp benefits continue to have very low trafficking rates.**

Acknowledgments

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The Extent of Trafficking in the Food Stamp Program

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INTRODUCTION

Food stamps are intended for food. When individuals sell their benefits for cash it violates the spirit and intent of the Food Stamp Program as well as the law. This practice, known as trafficking, diverts food stamps away from their purpose. It reduces intended nutritional benefits and undermines public perceptions of the integrity and utility of the program. A crucial question, therefore, is the extent to which trafficking exists.

Several years ago, a method to calculate data-based estimates of the prevalence of trafficking was developed by USDA. *The Extent of Trafficking in the Food Stamp Program*[i] used this method to analyze over 11,000 completed undercover investigations of trafficking and generate an estimate for calendar year 1993.[ii] The report found that:

- About $815 million was trafficked for cash from the government by food stores during 1993. This amounted to just under four cents of every dollar of food stamp benefits issued.

- Significant differences across types of food retailers existed: supermarkets had very low trafficking rates, non-supermarkets had substantially higher trafficking rates.

- The food stores which redeemed the overwhelming majority of food stamp benefits had very low trafficking rates.

This report updates the earlier analysis with more than 10,000 new investigations to generate an estimate for the 1996 - 1998 calendar year period. We continue to estimate three basic measures of trafficking:

1. the *amount of trafficking* (i.e., the total sum of dollars trafficked, which depends partly upon the total sum of benefits issued and partly upon the next measure, the rate of trafficking);

2. the *rate of trafficking* (the proportion of total benefits issued which were trafficked), and

3. the *store violation rate* (the proportion of all authorized stores that engage in trafficking).

While all three measures are important for different purposes, the second measure – the rate of trafficking – is the one that provides an approximation of FNS' relative success in controlling trafficking. The trafficking rate is independent of the size of the program (i.e., the total sum of benefits issued) or the relative market share of different types of retailers (which is not reflected in the store violation rate).

We undertook an update because there have been several significant developments which may affect each of these measures of trafficking. These developments include the following:

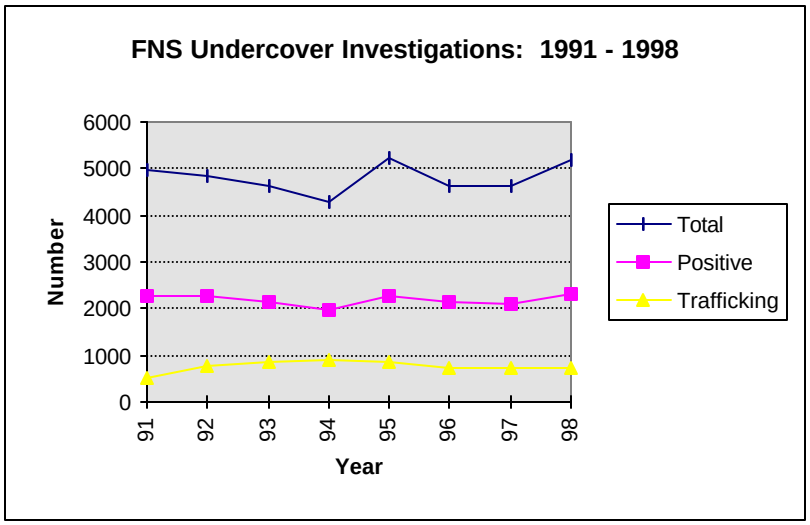
- *a 24 percent decline in food stamp caseload*: from 10.8 million households per month in 1993 to 8.2 million in 1998. The caseload decline resulted in an 11.3 percent decline in total benefits issued. This is likely to reduce the total dollar amount of trafficking (since total benefits issued decreased), but is unlikely – by itself – to change the trafficking rate (i.e., the proportion of benefits issued that are trafficked).[iii]

- *a 16 percent decline in the number of food retailers authorized to accept food stamps*: from about 210,000 in 1993 to 177,000 in 1998. The decline in participating retailers may change the store violation rate depending upon whether stores willing to traffic left the program at a faster (or slower) rate than non-trafficking stores. However the influence of this factor on changes in the rate of trafficking will depend upon two things: (i) whether trafficking-prone stores that remain on the program changed their trafficking activity; and (ii) whether food stamp participants choose to shop at trafficking-prone stores or not.

- *a 50 percent change-over from paper food coupons to electronic benefit transfer* (EBT). The Personal Responsibility and Work Opportunities Reconciliation Act of 1996 mandates that all states convert from paper food stamp coupons to electronic benefit issuance by 2002. By September 1998 slightly more than half of all food stamp benefits were issued and redeemed electronically. Under EBT certain forms of trafficking are harder to conduct and large-scale trafficking is easier to detect. Therefore, we would expect its expansion to reduce the rate of trafficking (i.e., the proportion of benefits issued that are trafficked).[iv]

The combined effect of these developments is hard to predict. Fortunately, one additional factor that could affect results – the quality of FNS undercover investigations – appears to have remained stable: there has been no meaningful change in the quantity or quality of FNS investigations. The total number of investigations, the number in which *any* food stamp violation is disclosed ("positives") and the raw number in which trafficking is found have each remained relatively constant from 1993 through 1998 (Chart 1).

Chart 1



APPROACH

This update uses the same methodology as the earlier report to ensure consistent comparisons. The method focuses on authorized food retailers because all trafficking must eventually flow through a food retailer authorized to participate in the Food Stamp Program. The reason is obvious, but worth pointing out explicitly: *authorized food retailers are the only ones who can redeem food benefits for cash from the government*.[v]

Because authorized food retailers are the only ones who can redeem food benefits for cash from the government, knowing the prevalence of trafficking among retailers tells us the maximum amount of dollars diverted from food benefits by trafficking for cash.[vi]

The Food and Nutrition Service (FNS) maintains a staff of investigators who work undercover to determine whether authorized food stores sell ineligible items or engage in trafficking. Stores caught violating are fined or removed from the program and in some instances prosecuted.

For the update, we followed the same approach used in the earlier report:[vii]

- First, we sorted a database of 10,354 completed investigations across five specific dimensions that categorize store types and store locations. [viii]

- Second, for each specific category of store and location we compiled national data from calendar years 1996 through 1998 on the total number of stores and the total food stamp redemptions in that category.

- Third, we analyzed the investigation outcomes and calculated the weighted trafficking and store violation rates within each category. [ix] We weighted the investigation data to accurately represent the national figures.[x] We calculated two of our three measures: the trafficking rate, a redemption-based rate to reflect dollar diversions, and the store violation rate, a store-based rate to identify the kinds of stores that contain the most violators.

- Finally, we multiplied the redemption-based trafficking rate against the total food stamp redemptions in each category and summed across all categories to obtain the first of our three measures: the amount of trafficking, which provides an estimate of dollars diverted from food benefits by trafficking in the Food Stamp Program.[xi]

FINDINGS

About $660 million per year was diverted from food benefits by trafficking between 1996 and 1998. This amounts to three-and-one-half cents of every benefit dollar issued (Table 1). Our methodology yields a cautious estimate that is likely to best represent the maximum dollars diverted from food benefits per year by direct trafficking in 1996-1998.

Table 1 - Trafficking Continues to be Low Among Supermarkets and Large Grocery Stores But Substantially Higher Among Small Stores and Stores That Do Not Stock a Full Line of Food.

Type of Store	1993			1996 - 1998		
	Store Violation Rate	**Trafficking Rate**	**Estimated Trafficking Amount ($000)**	**Store Violation Rate**	**Trafficking Rate**	**Estimated Trafficking Amount ($000)**
Supermarkets	4.2	1.7	$282,058	5.3	1.9	$279,163
Large Groceries	6.7	3.7	46,632	9.8	3.2	35,255
Subtotal	**5.0**	**1.9**	**$328,690**	**6.7**	**2.0**	**$314,418**
Small Groceries	12.8	15.7	177,809	14.4	15.8	154,109
Convenience	8.1	9.6	78,090	11.7	10.8	66,809
Specialty	17.6	14.2	117,004	10.7	8.1	55,782
Gas/Grocery	8.7	10.4	27,528	12.8	9.7	21,784
Other Types	10.2	12.4	82,605	16.2	9.4	43,892
Subtotal	**10.7**	**13.0**	**$483,036**	**13.0**	**11.5**	**$342,376**
All Stores	**9.4**	**3.8**	**$811,726**	**11.7**	**3.5**	**$656,794**

Notes: The 1996-1998 data have been annualized – see endnote 7.

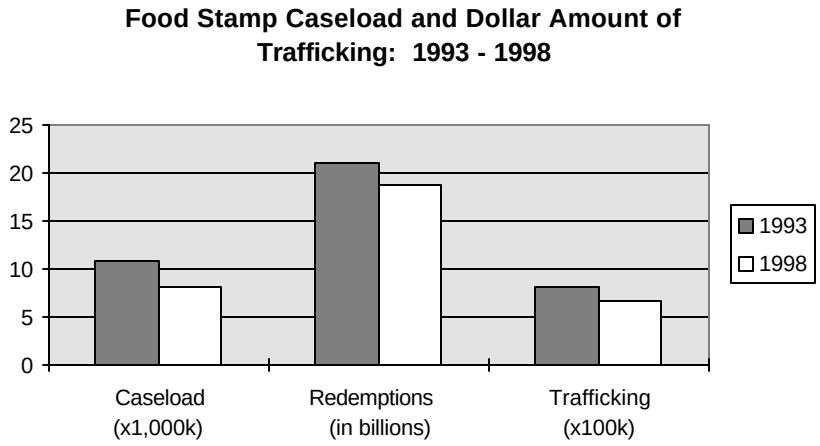
Trafficking violation rates are calculated separately for stores and redemptions. The store violation rate is the percent of investigated stores caught trafficking weighted by the national distribution of *stores*. The trafficking rate is the percent of trafficked redemptions in investigated stores, weighted by the national distribution of *redemptions*. The apparent anomaly between the two rates – i.e., the store-based rate was higher in 6 of 7 store types while the redemption-based rate is lower both overall and in 4 of 7 store types – reflects the fact that the two rates measure different aspects of trafficking.

TRAFFICKING AND CHANGE IN BENEFITS ISSUED

Compared to 1993, the 1998 figure represents a 19 percent decline in the dollar amount of benefits trafficked. As expected, we find a similarity among the changes in caseload, total redemptions, and the amount of trafficking (Chart 2):

However, the decline in caseload and total redemptions is far from a complete explanation of changes over this period of time: we also find an 8 percent decline in the *rate* of trafficking, which is independent of benefits issued. The trafficking rate decreased from 3.8 percent of benefits issued in 1993 to 3.5 percent of benefits issued in 1998 (Table 1).

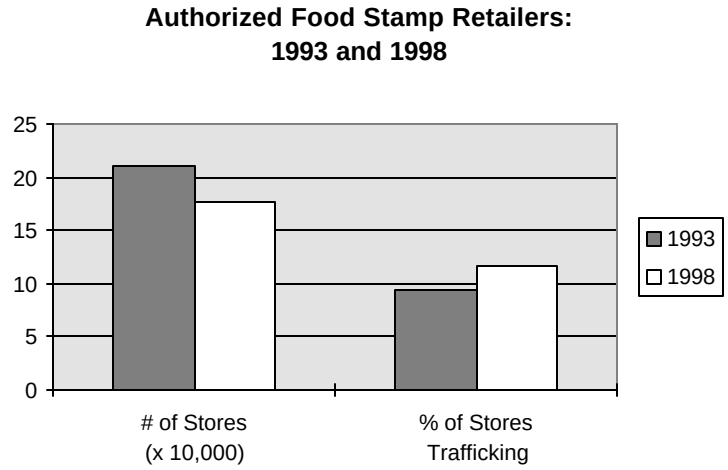
Chart 2



TRAFFICKING AND CHANGE IN THE AUTHORIZED RETAILER POPULATION

The 16 percent decline in number of authorized retailers also does not appear to explain the improvement in the trafficking rate: we actually find an *increase* in the store violation rate between 1993 and 1998 (Table 1 and Chart 3).

Chart 3



TRAFFICKING AND TYPE OF FOOD RETAILER

Part of the explanation for the improvement in the trafficking rate is to be found in two critical facts:

(1) trafficking continues to vary by type of store;

(2) stores that redeem the most, traffic the least.

Tables 1 and 2 show that:

- Supermarkets and large grocery stores redeemed 84 percent of all benefit dollars but few of those dollars are trafficked.

- In comparison to supermarkets and large grocery stores, trafficking rates among small stores and stores that do **not** stock a full line of food are 4 to 8 times higher.

Table 2 - Distribution and Market Shares of Authorized Food Stamp Retailers.

	1993 Percent of All		1996 - 1998 Percent of All	
Type of Store	**Stores**	**Redemptions**	**Stores**	**Redemptions**
Supermarkets	15.3	76.5	14.9	78.3
Large Groceries	6.9	6.0	7.0	5.8
Subtotal	**22.2**	**82.5**	**21.9**	**84.1**
Small Groceries	18.8	5.4	20.0	5.2
Convenience	27.7	3.8	26.8	3.3
Specialty	8.7	3.9	9.0	3.7
Gas/Grocery	10.3	1.2	11.9	1.2
Other Types	12.3	3.2	10.4	2.5
Subtotal	**77.8**	**17.5**	**78.1**	**15.9**
All Stores	**100.0[a]**	**100.0[b]**	**100.0[c]**	**100.0[d]**

Notes:

[a] Based on a total of 200,568 authorized food retailers redeeming at any point during 1993.

[b] Based on a total of $21.1 billion.

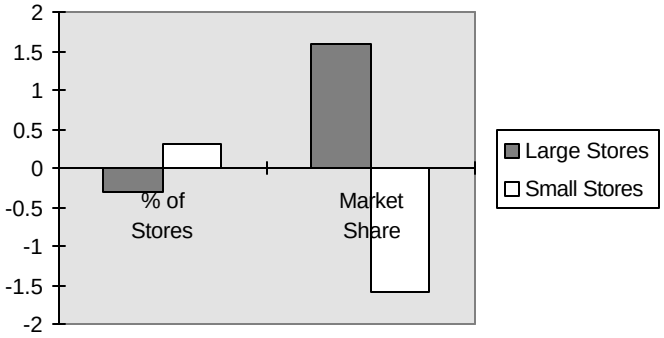
[c] Based on 237,824 unique food retailers redeeming at any point during the 1996-1998 period.[xii]

[d] Based on total of $56.16 billion over the three years.[xiii]

Between 1993 and 1998 there was a modest increase in the relative market share of supermarkets and large grocery stores – the stores least likely to traffic (Chart 4).

Chart 4

Change in Retailer Population and Market Share: 1993 - 1998



Notes: Unlike earlier charts, in which each column was a different year (1993 or 1998), in this chart each column is *the difference* between the two periods. The "large store" category includes both supermarkets and large grocery stores; "small stores" are everything else. Market share is defined as the percentage of redemptions accounted for by the given category of store.

Food retailers owned by public corporations (i.e., owned by a company whose stock trades publicly) continue to have lower trafficking rates than privately-owned stores (Table 3). The public corporation category includes many of the major national supermarket chains, many convenience store chains, and many grocery marts associated with national gasoline retailers.[xiv]

- In 375 investigations of public corporations, FNS undercover investigators found trafficking involved about four percent of publicly-owned stores.

- Among privately-owned food retailers, FNS undercover investigators found trafficking in almost thirteen percent of stores.

Table 3 - Publicly-Owned Food Retailers Display Low Trafficking Rates; Privately-Owned Retailers, Especially Non-Supermarkets, Are Substantially More Likely to Engage in Trafficking.

Type of Store	Trafficking When Store is Publicly-Owned				Trafficking When Store is Privately-Owned			
	Store Violation Rate		Trafficking Rate		Store Violation Rate		Trafficking Rate	
	1993	1998	1993	1998	1993	1998	1993	1998
Supermarkets	0.0	4.7 [a]	0.0	3.0 [a]	5.4	5.7	2.6	1.3
Large Groceries	0.0	0.0	0.0	0.0	6.8	9.9	3.8	3.3
Other Types (small groceries, convenience stores, gas/grocery, specialty foods, etc.	1.7	4.3	1.8	4.6	12.0	14.0	15.1	12.3
All Stores	1.2	4.4	0.2	3.0	10.7	12.7	5.3	3.7

Notes: [a] See endnote[xv]

Trafficking violation rates are calculated separately for stores and redemptions. The store violation rate is the percent of investigated stores caught trafficking weighted by the national distribution of *stores*. The trafficking rate is the percent of trafficked redemptions in investigated stores, weighted by the national distribution of *redemptions*.

The store categories most likely to traffic continue to be small privately-owned stores and privately-owned stores that do not stock a full-line of food (Table 4):

- Among these stores more than 1 of every 8 benefit dollars redeemed was trafficked.

- While these categories account for about 71 percent of all stores they account for only 14 percent of all redemptions.

Table 4 - Small Privately-Owned Stores Have the Highest Trafficking Rates But Redeem Only 14 Percent of All Benefits Issued

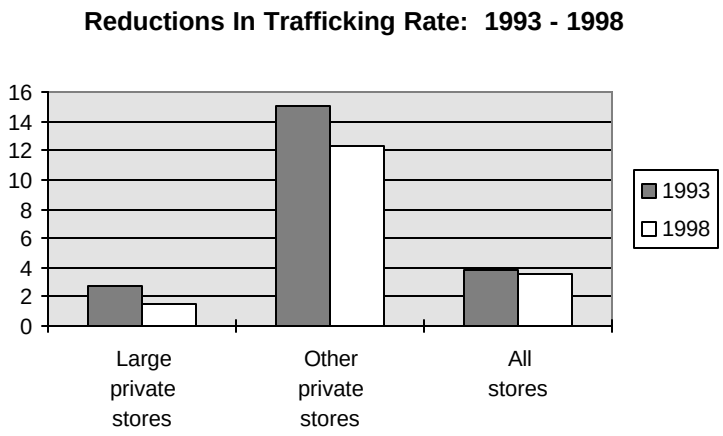
Category of Store	Trafficking Rates (Redemptions)		Percent of All Stores		Percent of All Redemptions	
	1993	1998	1993	1998	1993	1998
Publicly-Owned Stores	0.2	[a]	12.8	12.8	28.0	30.0
Large Private Stores	2.7	1.5	17.2	16.5	56.2	55.8
Private - other stores	15.1	12.3	70.0	70.7	15.8	14.2
All stores	3.8	3.5	100.0	100.0	100.0	100.0

[a] See endnote 15.

TRAFFICKING, FNS ENFORCEMENT AND EBT

FNS concentrates its enforcement efforts on stores most likely to traffic. In addition, the expansion of Electronic Benefit Transfer (EBT) makes certain forms of trafficking harder to conduct and large-scale trafficking easier to detect. For these reasons, it should not be surprising that **we find the largest reduction in the trafficking rate among the store categories most likely to traffic – privately-owned stores, especially small ones that do not stock a full line of food** (Chart 5).

Chart 5



TRAFFICKING AND STORE LOCATION

The 1993 report examined the prevalence of trafficking by neighborhood and found that trafficking is more frequent among stores located in the poorest of poor neighborhoods. The 1993 report also found only a mild relationship between trafficking rates and a store's location in an urban neighborhood. These two findings continued to be true in the 1996 - 1998 period.

Stores in the poorest of poor neighborhoods continue to be more likely to engage in trafficking than stores located elsewhere, although the difference between rich and poor neighborhoods has decreased somewhat (Table 5). Few recipients are likely to sell food stamp benefits for less than they can buy in food, unless the need for cash is overwhelming. It is no surprise, therefore, to find that **the rate of trafficking (i.e., proportion of benefits trafficked) continues to vary widely by the economic status of neighborhoods**.

Table 5 - Trafficking is More Frequent in the Poorest of Poor Neighborhoods.

Percent of Households in Poverty in Zip Code Where Store is Located:	Trafficking Rates:				Percent of All			
	Store Violation Rate		Trafficking Rate		Stores		Redemp-tions	
	1993	1998	1993	1998	1993	1998	1993	1998
0 to 10%	4.6	9.5	1.7	2.0	30.3	26.5	27.2	23.2
11 to 20%	8.7	10.7	4.1	3.1	38.9	40.5	38.9	40.1
21 to 30%	13.0	13.2	3.8	3.3	20.1	20.5	20.1	21.6
over 30%	19.2	16.8	7.6	7.1	13.8	12.4	13.8	15.1
All Stores	**9.4**	**11.7**	**3.8**	**3.5**	**100.0**	**100.0**	**100.0**	**100.0**

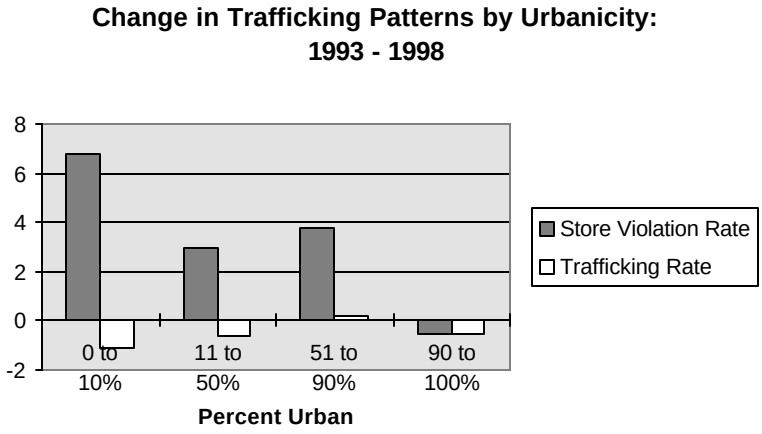
Although some urban areas are widely perceived as having more crime than rural areas, we found only a mild relationship between the *trafficking rate* and urbanicity. The Bureau of the Census classifies zip codes by the urban/rural percentage of residents in the zip code. The trafficking rates by urban/rural percentage in the zip code in which a store is located show a modest increase in highly urban areas (Table 6).

Table 6 - The Trafficking Rate Is Slightly Higher In Highly Urban Areas.

Stores Located in Zip Codes Where Percent Urban is:	Trafficking Rates:			
	Store Violation Rate		Trafficking Rate	
	1993	1998	1993	1998
0 to 10%	6.1	12.9	3.5	2.4
11 to 50%	8.6	11.6	3.1	2.5
51 to 90%	7.1	10.9	2.8	3.0
90 to 100%	12.1	11.6	4.4	3.9

While trafficking rates remain low and do not vary sharply by urbanicity, between 1993 and 1998 we find a large increase in the store violation rate in rural and lower-urban areas (Chart 6). Table 5 indicates a similar increase in the store violation rate outside of the poorest areas. The reason for these changes in store behavior is unknown.[xvi]

Chart 6



Stores in low trafficking areas continue to redeem the majority of food stamp benefits.

- Twelve percent of the nation's authorized food retailers are located in high poverty/high trafficking areas, 88 percent are located in lower poverty/low trafficking areas.

- Eighty-five percent of redemptions flow through stores located in neighborhoods where less than 30 percent of the population is below poverty.

CONCLUSION AND
IMPLICATIONS FOR PROGRAM INTEGRITY

The rate of trafficking has decreased over this period. Although the data available are not sufficient to determine causality, the direction and nature of the decrease are consistent with two facts:

- **The stores which redeem the majority of food stamp benefits continue to be stores with the lowest trafficking rates. Overall, 84 percent of food stamp benefits are redeemed in store categories with the *lowest* rates of trafficking.**

- **Electronic Benefit Transfer accounted for over half of all issuance during the measured period.**

EBT has expanded even more since these data were collected and it now represents over seventy percent of all food stamp issuance.

Finally, during this period the store violation rate increased in rural and lower-poverty areas. While this change should be monitored, its significance is muted by the fact that the proportion of benefits trafficked in such areas (the rate of trafficking) is low.

TECHNICAL DISCUSSION

When we look at additional considerations that bear on trafficking, we find two factors which would tend to increase our estimate and two others that would tend to decrease it. It is important to discuss each of these additional considerations explicitly.

SOURCES OF UNDERESTIMATION

1. Our procedure underestimates two aspects of the trafficking problem. The first aspect leading to *under*estimation is **e*vasion trafficking*:**

   - Among small retailers that are family-owned or where ownership is closely-held, some violators do not redeem coupons for cash from the government (direct trafficking) but buy food stock for resale from large stores with trafficked coupons (a form of tax evasion we label "evasion trafficking"). Evasion trafficking is a gray area, since the practice does not necessarily involve discounting: a small firm makes an illicit profit at the least risk of detection if it accepts food stamps at full value for food from legitimate recipients, but uses them (illegally) to buy food at supermarkets for resale.

   - In our estimate we are most concerned about evasion trafficking when it is linked to discounting (i.e., the firm buys food stamp benefits at a discount). We have no data to estimate the extent of evasion trafficking by unauthorized food stores or restaurants. However, **evasion trafficking by authorized retailers *is* partially captured by our estimating procedure, when the trafficking involves discounting**. The data we use to estimate direct trafficking adequately capture the rate at which ***all*** authorized stores engage in discounting. What the data fail to do is account for redemptions that are *unreported* by authorized discounting firms that buy food for resale with the coupons. If unreported redemptions could be measured, then the evasion trafficking factor would increase the national estimate of dollars diverted from food benefits by trafficking but would not change the store-based violation rates useful for targeting future action.

   - Engaging in evasion trafficking was relatively easy with food coupons but is substantially more difficult under EBT.[xvii] **Because the only ones to find evasion trafficking cost-effective are small privately-owned stores *who have not yet switched to EBT*, the potential impact of this factor is limited to a shrinking subset of the privately-owned small-store component of our estimate.**

2. The second potential cause of *under*estimation is ***network trafficking*:**

   - Some violating stores will traffic with strangers while others restrict their illegal activities to people they know (which we label "network trafficking"). Investigators can and do catch this type of trafficking, but it requires a harder investigation.

   - As a result, **some network trafficking is included in our estimate** (because our investigations include some cases where the network was penetrated and trafficking was caught). But other instances of network trafficking are not included in our estimate (because investigators were unable to penetrate the network and make the case). This source of underestimation applies to all components of our model. **If investigators could catch all instances of network trafficking, the national estimate of trafficking diversions would increase**.[xviii]

SOURCES OF OVERESTIMATION

1. However, our procedure also overestimates other aspects of the trafficking problem. A first source of *over*estimation is the procedure used to determine ***legitimate food sales*.**

   - With extremely rare exceptions, stores that engage in trafficking also sell food and we must allocate some proportion of their total redemptions to legitimate food sales and the balance to trafficking.[xix] **We purposefully used very low figures to estimate the percentage of legitimate food sales by violating stores – this procedure serves our goal of assuring an estimate of the *maximum* benefits diverted by trafficking**. The estimate of trafficking diversion would be lower to the extent that our method to estimate legitimate food sales was more precise.

   - **This consideration is especially relevant to the large-store components of our model (where most redemptions occur)**. We reviewed investigator reports in connection with cases of supermarket trafficking.[xx] **In supermarkets the percentage of total redemptions our methodology attributes to trafficking (40%) is about *four times higher* than experienced FNS field investigators attribute to trafficking (10% or less) when recommending sanctions or participating in other legal proceedings**.

   - **To be consistent with the 1993 figures**, we keep our method the same in this update report – but **it is likely that the percentage of a store's redemptions we attribute to trafficking substantially overestimate trafficking, especially in supermarkets**. Additional work is being conducted to determine whether better estimates can be created.

2. Another major source of *over*estimation is that investigations are ***a non-random sample of stores***.

   - **Our estimating procedure relies on investigations targeted to find fraud**: our estimate would decrease substantially if investigators had randomly selected average stores, rather than selected suspicious stores on purpose.

   - **Of our four technical considerations, this is arguably the one with the largest impact on our estimate and applies to all components of our model**.

ENDNOTES

[i] Theodore F. Macaluso, *The Extent of Trafficking in the Food Stamp Program* (Alexandria, VA: Food and Nutrition Service, USDA; 1995).

[ii] Both the earlier report and this one intentionally use calendar, rather than fiscal, years for the analysis. There are two reasons for this. First, it is necessary to combine investigations from several years to achieve a sufficient number of cases for analysis, so the choice of a fiscal or calendar metric is arbitrary. Second, the use of calendar year reinforces the fact that we are providing *estimates*, rather than administrative data (which typically is presented on a fiscal year basis).

[iii] There has been speculation that able-bodied adults without dependents (ABAWDS) are more likely to traffic than other program participants. If this were true, then welfare reform time limits on the duration of participation by ABAWDS might be expected to reduce the rate of trafficking. However, the evidence available to USDA indicates that no one category of participant is either more or less prone to traffic than any other category.

[iv] EBT also provides new ways to catch any trafficking that does occur. A new system, labeled ALERT, analyzes EBT transaction data to catch some trafficking stores without the need for in-person investigations. These cases are still relatively new and are not incorporated here. FNS is working on developing a new trafficking measure to better reflect the impact of Electronic Benefit Transfer. ALERT data will be included in the new measure.

[v] While food retailers constitute the overwhelming majority of authorized redeemers of food stamp benefits, the Food Stamp Program has also authorized a few food wholesalers to accept food stamp benefits. For simplicity, we refer to all authorized entities as retailers.

[vi] Trafficked coupons are not always redeemed for cash from the government. Owners of small authorized or unauthorized stores, restaurants, and the like can pretend to be recipients and illegally use food stamps to buy food at supermarkets for resale in their stores. We label this "evasion trafficking" (since it is a form of tax evasion) and discuss its impact on our estimate at the end of this paper.

[vii] There is one trivial difference: the earlier report involved data on investigations started by January 1, 1991 and completed by March 1994 which were combined with redemption data from 1993 and presented as a single result for calendar 1993; this update involves data on investigations completed between January

1996 through December 1998 combined with redemptions from 1996 - 1998, which we annualize and present as a single result for the 1996-1998 period. Because trafficking was less of a focus of investigators in the 1980s than it is now, the earlier report involved a cut-off on the *start* of investigations to ensure that the investigators' focus was on trafficking (rather than sale of ineligible items). Such a restriction is no longer needed.

[viii] We obtained all investigations included in the FNS Store Investigation and Monitoring System (SIMS) database for calendar years 1996 through 1998. A small fraction of these investigations were of stores that could not be matched to zip codes in the redemption file and therefore were not used in the analysis. Inspection of these dropped investigations indicated (1) that the proportion of trafficking to non-trafficking outcomes in these investigations was similar to the data used for the analysis and (2) the cases were distributed across the data in such a way that it is implausible that they would change any substantive findings. The total number of SIMS investigations and the number used in the analysis were as follows:

	SIMS	Analysis File
1996:	3,709	3,690
1997:	3,624	3,601
1998:	3,095	3,063
Total:	10,428	10,354

The five dimensions we employ consist of three that categorize stores (type of store, ownership, and amount of food stamp business) and two that categorize the zip code in which each store was located (degree of urbanization, percent of households in poverty). Specific definitions employed are as follows:

Type of Store.
Store types on the FNS application form were collapsed to the following seven categories (to ensure an adequate number of cases of each type):

Supermarket	any store identifying itself to FNS as a supermarket or grocery with gross sales over $2,000,000.
Large grocery	any store identifying itself to FNS as a supermarket or grocery with gross sales between $500,000 and $2,000,000.
Small grocery	any store identifying itself to FNS as a supermarket or grocery with gross sales under $500,000.
Convenience	any store identifying itself to FNS by this title, regardless of gross sales.
Specialty	any store identifying itself to FNS by this title, regardless of gross sales. They are almost always single product line stores such as meat markets, fish markets, dairy stores, etc.

Gas/Grocery	any store identifying itself to FNS by this title, regardless of gross sales.
Other Types	any store identifying itself to FNS by a title different than any of the preceding, regardless of gross sales. Examples include produce stands, general stores, combination grocery/bars, health/natural food stores, milk and/or bread routes.

Ownership.
Ownership types on the FNS application form were collapsed to the following two categories (to ensure an adequate number of cases of each type).

Public	any store identifying itself to FNS as a public corporation (i.e., a retailer whose stock trades publicly).
Private	any store identifying itself to FNS as other than publicly-owned. This includes private (i.e., closely-held) corporations as well as partnerships, sole proprietorships, co-ops, etc.

("Franchise" is a separate category on the FNS application, not an ownership type: both public and private ownership categories include stores that report themselves as franchises.)

Amount of Food Stamp Business.
Stores were categorized into deciles on the basis of food stamp redemptions. The purpose was statistical, rather than analytical, to ensure that large disparities in redemptions by stores do not distort results.

Urbanization.
Based on census data for the zip code in which the store is located. Four categories were employed: 0 to 10 percent urban population, 11 to 50 percent, 51 to 90 percent, and over 90 percent.

Poverty.
Based on census data for the zip code in which the store is located. Four categories were employed: 0 to 10 percent of residential population below poverty, 11 to 20 percent, 21 to 30 percent, and over 30 percent.

[ix] For calculating trafficking rates, the number of investigations in each store category are large enough to give high confidence in the estimates (ranging from a low of 369 to a high of 3,665 by store type).

[x] Statistically, the FNS investigation data base encompasses a sufficient number of cases to be used as a post-stratified sample of the national "population" of retailers. By categorizing the investigated stores on

the five dimensions described in note 8 and weighting the stores, by category, to reflect the national population of retailers, by category, we are able to draw valid conclusions about the national situation.

[xi] The specific calculation was a two-stage one. The first stage combines the data on the trafficking rates by type of store and store location with national redemption data to yield an estimate of the *gross* redemptions by authorized food stores found trafficking. The second stage accounts for the fact that some of the gross redemptions are legitimate food sales. To ensure consistency with the earlier estimate, we continue to use the assumption that legitimate food sales account for 60 percent of the gross redemptions among supermarkets and large grocery stores caught trafficking and treat 40 percent of their gross redemptions as trafficked. Among all other types of food stores, we assume that only 10 percent of the gross redemptions are legitimate food sales among stores that do not stock a full line of food (i.e., small grocery, convenience, specialty food, gas/grocery, and "other" stores) and treat 90 percent of their gross redemptions as trafficked.

[xii] We processed all stores received from FNS redemption files but used only the ones with a match to zip code data in the analysis. Stores that had no redemptions were dropped from the analysis (unless they had been investigated, in which case they were retained). For each specific year the total number of authorized retailers received and total number in our analysis file are as follows:

	Received	Analysis File
1996:	205,318;	202,850
1997:	196,408;	193,510
1998:	184,055.	180,857

[xiii] For each specific year the sum of redemptions (total dollars) was:

	Received	Analysis File
1996:	$21,713,774,005	$21,580,132,008
1997:	$18,463,396,131	$18,322,710,580
1998:	$16,433,240,311	$16,260,221,191

[xiv] We categorize stores according to how they categorized themselves in FNS authorization data. Examples of public corporations are major supermarket chains, like Albertson's and Safeway and gas-and-go mini-marts operated by companies like Texaco or Mobil. Many major supermarket chains, such as the Publix chain in Florida, are private corporations. IGA stores which have the appearance of a chain but are not public also fall under non-public ownership. Stores that most readers consider "franchises" may fall under either the public or non-public heading, depending on how they categorized themselves to FNS. Southland's 7-Eleven chain are classified under public corporations.

[xv] In 1993 USDA investigators found *no* instances of trafficking at publicly-owned supermarkets. Between 1995 and 1998, however, four cases of trafficking occurred in publicly-owned supermarkets. Because there are relatively few investigations of supermarkets and because the redemptions flowing through supermarkets are so large, these four cases have a large apparent impact on trafficking rates. To be consistent, we report the trafficking rates exactly as computed in the first trafficking report. However, an examination of the four cases indicates that the procedures used in the earlier report significantly overstate the amount of redemptions trafficked in supermarkets. Relevant considerations include the following:

- *Only a very small number of supermarket cases detect trafficking in any one year*. Combining the data from the earlier report with this update, we found the following cases of trafficking in publicly-owned supermarkets: 0 in 1993, 0 in 1994, 1 in 1995, 2 in 1996, 0 in 1997, 1 in 1998.

- *Two of the four cases appear to involve the actions of a single clerk*. In one of those cases, the clerk was not even at the cash register when the transaction took place. Two of the four cases, however, involved a lower-level manager at the store.

- *In three of the four cases, redemptions at the supermarket were in a pattern of significant decline; two of the three were being closed*. It is possible that upper management gave decreased attention to employee actions in such an atypical environment. (This speculation will be evaluated as additional supermarket trafficking cases emerge over the next several years.)

- *The percentage of redemptions attributed to trafficking in these four stores by the investigators was substantially lower than the percentage we use in our calculations*. In the first report when trafficking was found at a supermarket or large grocery we attributed 40 percent of the total redemptions in the store to trafficking. In these four instances of trafficking, investigators estimated that 10 percent or less of total redemptions were trafficked.

- *In light of the above, the true rate of redemptions trafficked in supermarkets is likely to be substantially below the 3 percent figure in Table 3*.

[xvi] The increase in store violation rates outside of high poverty and highly urban areas may have occurred for several reasons. For example, the results are possible if the decline in authorized retailers differed by area. Alternatively, the results may reflect the expansion of EBT, either if the EBT switch-over forces violators into nearby non-EBT areas (and those areas are less than 90 percent urban and/or the population in poverty is under 21%) or if rural or higher-income States are implementing EBT at a slower rate. It is also unclear at this stage whether the increase is occurring among all non-urban stores or only those located along highways through rural areas. FNS is developing a new trafficking measure to better reflect the impact of Electronic Benefit Transfer. These – and other – potential explanations will be analyzed as part of that effort.

[xvii] The store owner would need to have possession of multiple EBT cards and make multiple trips to

supermarkets (a small-store owner using more than one card to pay for a large purchase transaction would involve the supermarket in a violation that is readily detectable through the ALERT system; supermarkets are unlikely to accept that risk). Not only would the store owner need to have several cards and use them at several places (or on different days), for the practice to be worth the risk of getting caught the balances left on the cards would need to be large (which is not usually the case).

[xviii] An additional *potential* consideration is the quality of the investigation. Even when retailers are willing to traffic with strangers, investigators with greater experience and adequate time and resources to establish a case are likely to catch more trafficking than investigators with less experience, time and resources. We believe the overall quality of investigations in our sample is high for two reasons. First, FNS investigative procedures provide adequate time and resources to establish a case. Second, in the earlier report we only used cases from 1991 and later, to ensure that investigators had at least two years of experience in establishing trafficking cases (or were hired with the understanding that trafficking cases were highest priority). In this report, most investigators have at least six years of experience in establishing trafficking cases, which strengthens our confidence in these estimates.

[xix] On rare occasions phantom stores – i.e., fronts that take coupons but do not have a food business – are found. This phenomenon is likely to decrease in the future for two reasons: (1) FNS has expanded its staff resources to visit more stores in person; (2) EBT requires a visit from the EBT vendor to install terminals and the vendor will not install a terminal if they have questions about the legitimacy of the business.

[xx] See endnote 15.