All Food Stamp Benefits To Be Issued Electronically

Victor Oliveira and J. William Levedahl
(202) 694-5434 (202) 694-5431

The Food Stamp Program is the Nation's largest domestic food-assistance program, serving about 1 in 11 Americans each month in 1997. In the past, nearly all food stamp participants received their monthly benefits as paper coupons to redeem for food at authorized retail foodstores (see box on the Food Stamp Program). However, the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 requires that by October 1, 2002, all States deliver food stamp benefits through an electronic benefits transfer (EBT) system. About 40 percent of all food stamp benefits are now delivered through EBT, already operating in 30 States.

EBT Eliminates Paper Food Stamp Coupons

EBT is a computer-based electronic system that allows recipients to authorize the transfer of their Government benefits to a retailer's account to pay for products received. Benefits are delivered through retail point-of-sale (POS) terminals at check-out counters in foodstores. No money or food coupons are exchanged. An EBT system can use either on-line or off-line technology.

The on-line EBT system uses the same electronic funds transfer technology that many grocery stores use for their debit card payment system. Information about the recipient's account is stored in a central computer. Recipients are issued plastic magnetic-stripe electronic benefit cards similar to a bank card, and a secret personal identification number (PIN) is selected by the client or is assigned. Benefits are electronically credited to the recipients' account each month. To buy groceries, recipients take the food items to a check-out lane equipped with an electronic reader. To access a food stamp account at the central computer, the recipient's card is run through the reader, the cashier keys in the purchase amount, and the recipient confirms the transaction and enters the PIN on a keypad. After the PIN is verified electronically, the recipient's account is debited by the amount of the purchase, and the retailer's account is credited. If the PIN is incorrect or the benefit amount in the recipient's account is insufficient to cover the amount of the intended purchase, then the purchase request is denied.

In an off-line or "smart card" system, information about the recipient's account resides on a microchip embedded in the electronic benefit card rather than in a central computer. The store terminal and benefit card interact to authorize the purchase without contacting a central computer, thereby eliminating the need for on-line authorization at the time of purchase. As groceries are purchased, the card's balance is updated to reflect the level of remaining benefits. When new benefits are authorized each month, the recipient takes his or her card to the POS terminal located in retail foodstores where the amount is added to the card. (The new benefit is automatically downloaded when the client uses the POS terminal at the checkout.) Transaction data accumulate in the POS terminal until sent in a batch message to a central computer, at which time the retail foodstore's account at a designated bank is credited.

On-line EBT food stamp projects are currently operating on a statewide basis in 16 States (Alabama, Colorado, Connecticut, Idaho, Illinois, Kansas, Louisiana, Maryland, Massachusetts, New Mexico, North Dakota, South Dakota, Oklahoma, South Carolina, Texas, and Utah) and in parts of 12 other States (Alaska, Arkansas, California, Florida, Georgia, Hawaii, Iowa, Minnesota, Missouri, New Jersey, Oregon, and Pennsylvania). Off-line EBT systems are operating in parts of Ohio and Wyoming. The other 20

The authors are agricultural economists with the Food and Rural Economics Division, Economic Research Service, USDA.

States and the District of Columbia have started implementing EBT, the status ranging from early planning through system development.

EBT Makes Food Stamp Trafficking More Difficult

USDA is committed to improving the integrity of all its food-assistance programs. However, because of the size and importance of the Food Stamp Program, there is special emphasis on reducing illegal "trafficking" in food stamps. Food stamp trafficking occurs when recipients exchange their benefits for nonfood items or sell them for cash. It is more difficult to traffic in food stamp benefits using an EBT system than a coupon-based system. For example, the only way for recipients to illegally sell or exchange their electronic food stamp benefits to other nonretailers is if they relinquish their both EBT card and PIN. The buyer must trust the seller not to report the EBT card as lost or stolen before the buyer can access the benefits. If the card is reported lost or stolen, a hold is placed on the benefit account.

EBT technology also discourages trafficking between a recipient and a retailer. Unlike the coupon-based system, EBT systems maintain a record of all transactions by individual recipients at each retail establishment. Unusual or suspicious transaction patterns can be identified and investigated without costly field work. If a retailer is found to be trafficking in food stamps, it is easy to identify the food stamp recipients who frequent these stores. This "electronic audit trail" is a tool for successful prosecution and is expected to serve as a deterrent to potential traffickers.

The Food Stamp Program

The Food Stamp Program is administered by USDA's Food and Nutrition Service in partnership with the States. The Federal Government pays the full cost of the food stamp benefits, as well as the cost of printing and distributing the stamps to the States and of destroying the stamps after they are used. The Federal Government also pays approximately half the cost of the States' administration of the program, which includes certifying eligible households, issuing benefits to them, and conducting employment and training activities. In fiscal 1996, Federal costs for the program totaled $24.3 billion, of which $22.4 billion (92 percent) went to benefits.

To participate in the program, households must meet eligibility requirements based on income, asset, and employment-related factors. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 ended eligibility for most noncitizens and placed time limits on benefits for able-bodied, childless adults. Benefit allotments are based on household size and income. Benefits are adjusted annually to reflect changes in the cost of the Thrifty Food Plan, a market basket of suggested amounts of foods that make up a nutritious diet and can be purchased at a relatively low cost. The monthly food stamp benefits averaged $73.21 per person, or about $177 per household, in fiscal 1996.

Food Stamp Program benefits have traditionally been delivered through paper coupons that can be redeemed for food at authorized retail foodstores. Food stamps, in booklet form with coupons in denominations of $1, $5, and $10, are distributed to recipients at State welfare offices, other issuance agents such as banks, or directly by mail. Retailers are required to give "change" in cash for food stamp purchases when change of less than $1 is due. After recipients exchange the coupons for food at authorized retail foodstores, the retailers redeem the coupons at a participating financial institution for cash credit. The banks process the coupons and forward them to a Federal Reserve Bank. The Federal Reserve, in turn, checks the coupons for counterfeits, credits the account of the sending bank, destroys the coupons, and is then reimbursed by the U.S. Treasury.

Food stamps can be used to buy any food or food product for human consumption, and seeds and plants to produce food in home gardens. Food stamps cannot be used to buy alcoholic beverages or tobacco, lunch counter items or foods to be eaten in the store, vitamins or medicines, pet foods, or any nonfood items. These restrictions do not change under the EBT

Major Stakeholders Prefer Electronic Benefits Over Paper

USDA's Food and Nutrition Service (FNS) has funded a number of demonstration projects examining EBT's impacts on recipients, retailers, and financial institutions. The first project, examining an on-line EBT system for issuing food stamp benefits only, was conducted in Reading, PA, in 1984. Two other on-line demonstrations begun in 1991—in Ramsey County, MN, and Albuquerque, NM—integrated an EBT Food Stamp Program with other cash assistance programs. A food-stamp-only project using an off-line EBT system in Dayton, OH, became operational in 1992. Maryland began an on-line EBT project in Baltimore in 1989, and in 1993 became the first to operate EBT statewide. Their on-line EBT system combined the Food Stamp Program and several other welfare programs into a single electronic benefits delivery program.

FNS-sponsored studies show that in the EBT demonstration projects, the program's major stakeholders—recipients, retailers, and financial institutions—strongly preferred EBT over the coupon-based system. These projects also found that the electronic system lowered their costs.

Electronic food stamps lower the recipients' cost to participate in the program and provide greater benefit security. With the coupon-based system, most food stamp recipients have to make a monthly trip to pick up their coupons at a local issuance office, or receive their coupons through the mail. Since EBT benefits are distributed electronically, recipients do not have to incur the cost of a separate trip to the local issuance office or worry about coupons being stolen from the mail.

Since paper coupons are easily used by any holder (no identification is required), they are vulnerable to theft. Benefits are not replaced if lost or stolen. On the other hand, the use of electronic benefits by unauthorized people is more difficult than in a paper system, as use requires both the EBT card and the PIN. If a card is missing or stolen, recipients can call a 24-hour phone service to put a hold on their benefit account.

Retailers gain from EBT because the cost of handling coupons (counting, stamping, and bundling for deposit) is eliminated. According to FNS studies, the estimated savings by retailers measured in the demonstration projects varied widely, from under 1 percent in Maryland to between 20 and 38 percent in the four other projects.

Of the three stakeholders in the FNS analysis, financial institutions realized the greatest cost savings. EBT eliminates their handling, sorting, and transportation costs associated with paper coupons. Local banks in the demonstration projects reported savings of 90 percent or more, while Federal Reserve Banks reported smaller savings.

The Cost of EBT to the Government Less Definitive

While the electronic benefits transfer system reduced costs for recipients, retailers, and financial institutions, EBT's cost savings to the Government is less clear. EBT eliminates or reduces some operating costs associated with Food Stamp Program administration, such as purchasing paper, printing, storing, transporting, and destroying redeemed paper coupons. However, the implementation of an EBT system incurs some start-up costs, notably installation of POS terminals and computer lines in some or all of a store's check-out lanes, as well as the costs of training recipients and retail store personnel in using the EBT system.

In 1994, the U.S. General Accounting Office reviewed and summarized the evaluation reports from the five demonstration projects, finding considerable variation in Federal and State costs of providing food stamps electronically. Operating costs for three of the project areas were less expensive than the paper coupon system to Federal and State governments. However, when start-up costs were included, only two of the project areas were less expensive to Federal and State governments.

The demonstration projects were limited in scope, so results should not be generalized into costs applicable to other States. For example, as of April 1992, States were required to demonstrate that the EBT system they institute does not cost more to operate in any 1 year than the paper-based coupon system it replaced. Otherwise, the State must pay the costs in excess of the paper coupon system. The demonstration projects were not subject to this cost-neutrality policy.

The results of the Maryland project provide a better reflection of what can be expected when EBT is implemented statewide, since it had the only statewide project and it was the only project to include both urban and rural areas. In Maryland, the operating costs of the Food Stamp Program with EBT technology fell approximately 17 percent. However, when the operating costs of the other (cash) welfare programs were included, the overall cost of operating the multiprogram EBT system was slightly lower than the previous coupon/cash-based system. This outcome is due partly to Maryland allowing recipients of cash welfare benefits unlimited free access to their EBT account through the commercial on-line bank automated teller machine (ATM) system in order to ensure reasonable benefit access. The cost of the cash benefits programs would have been significantly lower if the number of free ATM withdrawals had been restricted (during the demonstration period, households averaged 2.36 ATM withdrawals per month).

The experience in Maryland seems to imply that implementing EBT for the Food Stamp Program alone would yield greater cost savings than the multiprogram EBT. However, some of the costs of implementing EBT in Maryland were shared between the Food Stamp Program and the cash-assistance programs.

Effect of EBT on Recipient Behavior Uncertain

The primary mission of the Food Stamp Program is to enable low-income households to obtain a better diet by increasing their purchasing power for food. Therefore, a fundamental issue regarding an EBT system for food stamps is whether it affects the number of low-income households participating in the

Food Stamp Program or changes their overall spending on food.

There is a commonly held perception that EBT will reduce the stigma or embarrassment of being perceived as a welfare recipient associated with the use of food stamps. Although it can be associated with any welfare program, stigma is easily manifested with food stamps because the paper coupons are readily observed by other shoppers. EBT can eliminate the stigma of paper coupons by making it appear that recipients are purchasing food with a debit or credit card.

Reducing the stigma for recipients (as well as participation costs) is important because it may get more eligible nonparticipants to participate. Currently, about 30 percent of those eligible, or about 10 million people, do not participate in the Food Stamp Program. Implementation of EBT, therefore, has the potential to increase the number of food stamp recipients. The evidence to date, however, does not indicate that EBT increases Food Stamp Program enrollment, recognizing that evidence of the impact of EBT alone is hard to distinguish from other factors that also affect enrollment, such as the level of general economic activity or the unemployment rate.

One of the important features of the coupon-based Food Stamp Program has been its ability to target food expenditures, thereby increasing recipients' purchasing power for food. Food stamp benefits, whether delivered as coupons or through an EBT system, must be spent on authorized food items. Any difference between net food expenditures from an additional dollar of food stamp benefits compared with that from an additional dollar of ordinary income provides a measure of how well food stamps target food expenditures compared to income.

A dollar of food stamp benefits will not typically increase net food expenditures by a full dollar. This happens because recipients spend the dollar's worth of food stamps on food, but at the same time reduce their ordinary income allocated to food. The net increase in food spending is positive, but somewhat less than a dollar.

Numerous studies have been undertaken to measure how much additional food expenditures can be expected from additional food stamp benefits. One interesting and important finding is that a dollar's worth of food stamp coupons will increase net food expenditures more than would a dollar of cash income. An FNS-sponsored review that summarized studies of the effect of food stamps on food expenditures concluded that an additional dollar of food stamp benefits increases the recipient's net food expenditure by between 17 and 47 cents. This compares with a corresponding net increase in food expenditures of between 5 to 10 cents from an additional dollar of ordinary income.

The question becomes whether the targeting of food expenditures by the Food Stamp Program will differ under an electronic delivery system. Two hypotheses illustrate how EBT might affect food expenditures differently. The first hypothesis suggests that EBT alters this role by reducing the stigma associated with the use of food stamp benefits. In this hypothesis, a reduction in stigma means that EBT food stamp benefits will be perceived by recipients to be more like cash income. Each dollar of benefits would, therefore, offset more cash food expenditures and result in a smaller net increase in food expenditures. In this case, EBT would diminish the ability of the Food Stamp Program to target food expenditures compared to income.

In the other hypothesis, EBT alters the role between food expenditures and food stamp benefits in a different direction by eliminating cash change to recipients. Under the paper coupon system, up to 99 cents in change may be legally given to food stamp recipients on a given shopping occasion. EBT eliminates cash change by deducting the exact amount of the purchase from the recipient's account, thus erasing the possibility that recipients will use the change for nonfood purchases. In addition, EBT is likely to make the illegal diversion of food stamp benefits through trafficking more difficult. By preventing the diversion of food stamp benefits for cash, EBT would increase the net expenditure on food out of food stamp benefits, and thus increase the ability of the Food Stamp Program to target food expenditures compared to income.

There are not much data available to test these hypotheses and measure whether EBT has either increased, decreased, or had no effect on net food expenditures from food stamp benefits. One source of data that can be used for this purpose is from an FNS-sponsored study that evaluated the 1993 statewide implementation of EBT in Maryland. This evaluation recorded information on recipient food expenditures before and after EBT's implementation. The data indicated that recipients' reported food expenditures decreased following EBT's implementation and that the number of trips to grocery stores increased.

Questions relating to EBT's impact on recipient spending behavior remain to be addressed. More research is needed to identify whether EBT actually changes recipients' overall expenditures on food and if so, the exact cause or combination of causes. For example, is the reduction in food expenditures found in Maryland soon after the implementation of EBT the result of less food being purchased, a lower price for the food bought, or some combination of both? Has the additional experience by Maryland food stamp recipients with EBT since its implementation in 1993 resulted in any further effect on their food expenditures? In light of the experience in Maryland, it would also be useful to evaluate the impact of EBT in other States currently implementing this system to determine whether the reduction measured statewide is a general feature of EBT or something specific to Maryland.

Welfare Reform Affects EBT

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 contained several provisions regarding food stamp issuance through EBT. For example, the Act eliminates the requirement that States must demonstrate that the EBT systems do not cost more to operate in any 1 year than the coupon-based systems they replace. (However, States must still demonstrate cost-neutrality over the life of the project.) It also gives States the option to reduce clients' food stamp allotment to pay the cost of replacing a lost EBT card.

The Act requires all States to issue food stamp benefits electronically (using either on-line or off-line systems) by 2002, unless USDA grants them a waiver due to unusual barriers in implementing EBT. The Act does not specify, however, how States are to implement EBT, but rather allows States to implement an appropriate system subject to broad Federal standards. As a result, EBT systems may vary across States. For example, while most States are implementing on-line EBT systems, at least two States—Ohio and Wyoming—are operating off-line systems. An EBT card is also not required to be operable from State to State (under the paper coupon system, food stamps could be redeemed at any authorized retail store in the country), although current regulations require that States must incorporate into their system those border stores that are necessary for their clients to access their food stamp benefits.

States also have the option to use EBT to deliver multiprogram benefits, such as Temporary Assistance for Needy Families (TANF) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) in addition to food stamps.

References

Abt Associates. *The Evaluation of the Expanded EBT Demonstration in Maryland Volume 3: System Impacts on Demonstration Stakeholders.* Sponsored by USDA's Food and Nutrition Service. May 1994.

Fraker, T. *The Effects of Food Stamps on Food Consumption: A Review of the Literature.* USDA, Food and Nutrition Service. Oct. 1990.

Levedahl, J.W. "The Effect of an Electronic Benefit Transfer (EBT) System on Food Expenditure of Food Stamp Recipients," Paper presented at the Western Economic Association annual meetings, Seattle, WA, July 9-13, 1997.

U.S. Department of Agriculture, Food and Nutrition Service, Office of Analysis and Evaluation. *Electronic Benefit Transfer in the Food Stamp Program: The First Decade.* March 1992.

U.S. General Accounting Office. *Food Assistance: Potential Impacts of Alternative Systems for Delivering Food Stamp Benefits*, GAO / RCED-95-13. Dec. 1994. ■