Electronic Benefits Transfer for Social Service Delivery

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SUMMARY

Electronic benefits transfer (EBT) is a feasible alternative to paper-based systems for delivering government benefits and services. The Federal Government can lead the way in implementing a nationwide EBT system. Congress and the President need to act quickly on EBT, however, if opportunities for integrating services and capturing economies of scale are to be realized; otherwise Federal agencies and States will continue to move in their own directions creating potentially incompatible and uncoordinated EBT systems.

EBT tests and evaluations indicate that it is proven, reliable, easy to use, and decreasing in cost. Recipients, retailers, financial institutions, and local program administrators who have tried EBT prefer it to paper checks or coupons. It can yield significant cost savings to retailers, recipients, financial institutions, and government agencies. Recipients using EBT experience an added sense of dignity and security. EBT can help to integrate the delivery of several social services benefit payments and simplify the process of issuing and redeeming benefits. It also reduces fraud and abuse, such as diversion of benefits for unauthorized or illegal purchases (although new forms of electronic fraud may arise). EBT is most likely to be cost effective if it includes multiple social service programs and uses a standardized commercial infrastructure.

Despite these optimistic findings, sufficient information is not available to assure cost-effective EBT or to make technical decisions on nationwide implementation—such as a national roll-out of EBT for food stamps using a magnetic stripe card. Federally supported pilot tests have assessed the use of magnetic stripe cards fairly thoroughly, but have given only limited attention to smart

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cards and have entirely overlooked hybrid cards (that combine features of both magnetic stripe and smart cards).

The next logical step toward nationwide EBT deployment is a scaled-up, multiple-program, and regionally based EBT feasibility test. If properly designed and evaluated, the test would determine the total cost to the Federal Government, States, and the private sector of developing, implementing, and operating a national EBT system. In order to determine the optimal design of a national system, the test should include on-line and off-line approaches, as well as magnetic stripe card, smart card, and hybrid card technologies. The test should explore different levels of cooperation between Federal/State and public/private sectors, and develop EBT cost-sharing and standardized EBT operating rules and procedures. The test also should identify the most effective mechanisms for Federal/State leadership and interagency coordination on EBT.

Various Federal laws and regulations will need to be reviewed and possibly revised to facilitate a transition to EBT. These include the Food, Agriculture, Conservation, and Trade Act of 1990; the Privacy Act of 1974; the Computer Security Act of 1987; Federal financial laws; banking legislation and regulations; and the enabling laws and regulations of each government program participating in EBT.

The transition to a national EBT system will be difficult and complex, but it is now possible. Strong Federal leadership and coordination, combined with meaningful State Government and private sector participation, will help to assure success. In the end, EBT offers the potential to improve the quality, integrity, and cost effectiveness of many Federal and State social service benefit programs.

THE POTENTIAL OF ELECTRONIC BENEFITS TRANSFER

EBT Scenarios

The following two fictional scenarios illustrate how policy decisions being made today will affect the development and usefulness of EBT. The first scenario assumes that the Federal Government establishes a strategic long-term plan for a national EBT system. Federal and State agencies work cooperatively with the private sector to develop an integrated national EBT system that serves multiple programs and accommodates both on-line and off-line applications. The second scenario assumes that Federal and State agencies develop their own EBT systems with little or no coordination or policy guidance from the Federal Government.

One-Card EBT

Mary Citizen is a 37-year-old, single mother of two who recently was laid off from a computer assembly plant in southern New Hampshire. She is on her way to Lowell, Massachusetts, where she attends a federally sponsored job-training program. Upon arrival, Mary presents her Federal Social Service (FSS) card to a job counselor, who inserts the card into a computer and debits Mary's job-training benefits account.

On the way home, Mary stops at a supermarket 10 miles south of the New Hampshire border to purchase groceries. Inside, she suddenly remembers that she has not obtained her benefit allowance from the Women, Infants, and Children's Program. Instead of driving all the way to the WIC clinic, Mary simply inserts her FSS card into a reader at the customer-service counter where her benefits are automatically added to the card. She purchases some food items and infant formula.

At the checkout counter, Mary inserts her FSS card into a point-of-sale terminal that accepts smart cards and magnetic stripe cards for both commercial and government programs. Once all the items are scanned, the card-reader automatically deducts the appropriate amounts from her WIC and food stamp accounts.

Back in New Hampshire, Mary realizes that she needs cash to pay the babysitter. Stopping at her local ATM machine, she inserts her FSS card and obtains cash from her Aid to Families with De-

pendent Children account. Mary has conducted transactions in two States, and accessed several different benefit programs, with only one card that can be used in any ATM or POS device nationwide.

Multiple-Card EBT

Mark Public is 67 years old, retired, and living in Jacksonville, Florida. He is partially disabled as a result of a back injury sustained during his career as a Captain in the U.S. Navy. Mark receives physical therapy once a week on the naval base. He must show proof of identity before entering the naval compound. Today, Mark is in a hurry. At the base gate, he pulls out his wallet and realizes that he left his other wallet at home—the second one he must now carry to accommodate the increasing number of identification and benefit cards. Mark has to drive all the way home to get his cards.

Back on base, at the physical therapist's office, Mark must present his Military Benefits Card. Here he learns that his benefits for the year have been consumed, and he must drive to the other side of the base get additional benefits added to the card before he can get his therapy.

Later in the day, Mark decides to visit his daughter and grandchildren who live in a small town in Georgia, just over the Florida State line. He discovers that he's short of cash needed to treat his grandchildren to a movie, so he stops at a local ATM in Georgia. Here Mark needs to use two cards: one to withdraw funds from his Social Security account and another to access his Disability Income account. Mark discovers, to his dismay, that the Georgia system is incompatible with the Florida system, and that he cannot access his benefits. Mark has to borrow cash from his daughter.

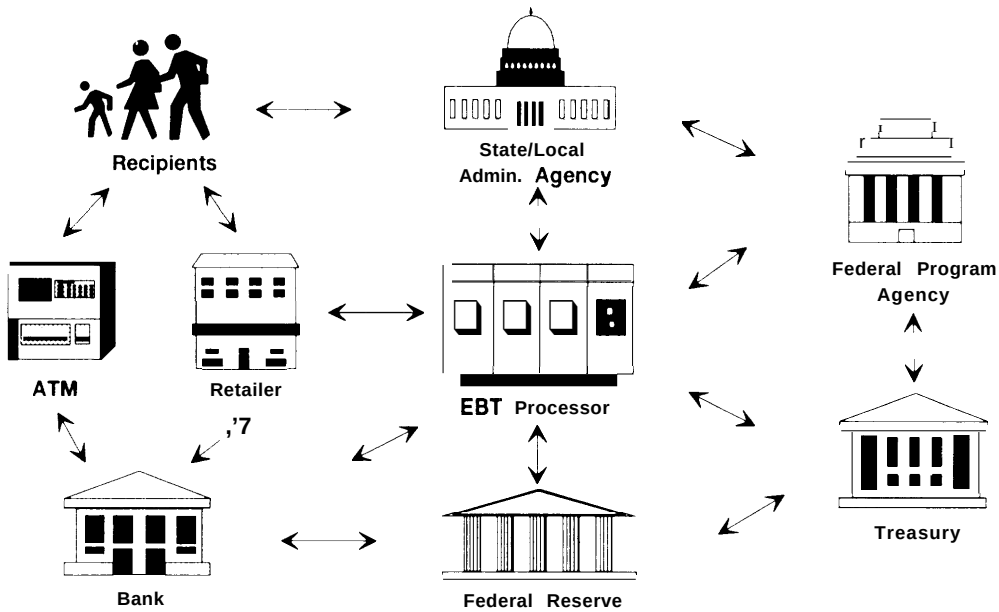
On the way home, Mark stops at his local pharmacy to refill a prescription. He rummages again through his wallet full of benefit cards and finds the Medicare Card that he needs to obtain and pay for medical and pharmaceutical services. However, Mark forgets his Medicare Personal Identification Number (PIN) and tells the clerk that "having to carry so many different cards with different PINs makes keeping track of your PINs very confusing." He is unable to have his prescription filled. Tired and frustrated, Mark wonders why the government has made it so difficult for him to obtain the services to which he is entitled.

What Is Electronic Benefits Transfer?

Electronic Benefits Transfer (EBT) uses automated financial transaction processing and card access technologies to electronically deliver Federal and State benefits to recipients. Recipients can access their benefits by using a card to transact with Automated Teller Machines (ATMs) operated by banks and Point of Sale (POS) terminals at retail locations. EBT systems issue and redeem benefits by using electronic networks to transfer benefits from a public assistance account to a retailer's account (see figure 4-1). An EBT system can be designed to accept magnetic stripe cards and/or "smart cards"--a card the size of a credit card with an embedded integrated circuit that contains memory and performs processing functions (see ch. 2 for discussion of EBT technologies). EBT eliminates the use of paper coupons and checks, together with the distribution, processing, collecting, sorting, and much of the accounting work. EBT is piggybacking, to the extent possible, on the existing commercial infrastructure for banking and credit-card servicing. EBT is intended to streamline the process by which government benefits are issued, spent, and redeemed. EBT systems eventually will include eligibility determination and certification, as well as benefits transfer.

The U.S. Department of Agriculture's (USDA's) Food and Nutrition Service (FNS), the U.S. Treasury's Financial Management Service (FMS), and other agencies are exploring the feasibility of a regional or nation wide EBT system for delivering food stamp and other benefits. FNS is sponsoring several pilot and operational tests of EBT for food stamps and the Special Supplemental Food Program for Women, Infants, and Chil-

Figure 4-1—Participants in Electronic Benefits Transfer (EBT)



KEY: ATM=Automated Teller Machine

SOURCE: Phoenix Planning & Evaluation, Ltd., "Multi-Program Cards for the Delivery of Social Services," contractor report prepared for the Office of Technology Assessment, Jan. 19, 1993.

dren (WIC).[1] Some current EBT projects provide benefits for multiple programs. Today, 37 of the 50 States are involved in or planning an EBT project (see table 4-1).

The opportunity to use card technology, computers, and telecommunications for EBT is here. Numerous Federal and State Government programs are suitable for EBT: food stamps; WIC; Aid to Families with Dependent Children (AFDC); Supplemental Security Income (SSI); Medicare/Medicaid; child support payments; General Assistance; job training assistance; educational grants or loans; and others. Pilot tests and evaluations indicate that EBT: 1) is well received and actually preferred by recipients, retailers, and providers at all levels; 2) speeds up the settlement of accounts for participating financial institutions and retailers (and can yield significant monetary savings to large-volume retailers);[2] 3) holds promise for reducing the levels of waste, fraud, and abuse associated with the coupon-based system (EBT, however, is not a panacea for the

[1] For evaluations of completed pilot projects, see John A Kirlin, Christopher Logan, Mark Menne, Elizabeth Davis, Alicia Distler, and Stephanie Andrews, "The Impacts of State-Initiated EBT Demonstrations on the Food Stamp Program," Abt Associates, Cambridge, MA, June 1993; and Michele Ciurea, Christopher Logan, Mark Menne, and John Kirlin, "The State-Initiated Demonstrations: Their Design, Development, and Implementation," Abt Associates, Cambridge, MA, June 1993. Also see National Performance Review Accompanying Report, *Reengineering Through Information Technology* (Washington, DC: U.S. Government Printing Office, September 1993).

[2] For a complete discussion of the impact of commercial POS systems on food retailers, see Phoenix Planning & Evaluation, Ltd., "The Business Case for Retail POS," contractor report prepared for the Electronic Funds Transfer Association, December 1991. Also see Phoenix Planning & Evaluation, Ltd., "Report on the Development of EBT Financial Infrastructure Models," contractor report prepared for the U.S. Department of Agriculture, December 1992. Speeding up settlements, however, would reduce the Federal Government's float. According to FNS, "float" is a measure of earning power gained or lost through the ability of funds to earn interest in a bank account. See 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, p.13.

Box 4-A—Food Stamps Today: A Paper-Based System

The Food Stamp Program (FSP), administered by the U.S. Department of Agriculture's Food and Nutrition Service (FNS) in cooperation with the States, spends roughly $25 billion annually, and serves about 11 million households (perhaps 27 million individuals). FSP prints more than 375 million food stamp booklets per year, including 2.5 billion paper coupons. Participating retailers accept these coupons in lieu of cash for the purchase of groceries. Retailers deposit the coupons at their local banks for credit to retailer accounts.

The use of paper coupons and other paper documents makes issuance and redemption of food stamp benefits a cumbersome process for all involved. A typical food stamp transaction using paper coupons includes the following steps:

. coupons are printed, stored, and shipped under tight (cash equivalent) security;
. recipients use the coupons to purchase eligible food items;
. cashiers determine whether the items meet program criteria;
• after accepting the coupons for purchased food, the retailers store, count, and endorse the coupons;
. retailers then fill out redemption certificates and deposit them and the coupons at their financial institutions;
• the financial institution then counts the coupons, verifies the totals against the amounts listed on the redemption certificates, fills out Food Coupon Deposit Documents, credits the merchant, and submits the coupons and paperwork to the Federal Reserve Bank;
• the Federal Reserve Bank, in turn, confirms the totals, checks for counterfeit coupons, destroys the coupons, credits the sending institution's account, and debits the US. Treasury account; and
. FNS monitors and reconciles the flow of paper and benefits through numerous reports provided by participating retailers, State agencies, and the Federal Reserve Bank.

FSP is expensive and difficult to administer, and generates an immense volume of paperwork. The paper-based system requires complex procedures intended to prevent coupon losses and to track and reconcile the flow of food stamp benefits through the system. Waste, fraud, overpayments, and participant misuse are considered to be major problems in FSP. Food stamp fraud and overpayments are estimated to be more than $1 billion per year. Improving the integrity of FSP was one of the major motivations in early exploration of electronic benefits transfer (EBT) for food stamp delivery.

The present system for authorizing, issuing, and redeeming food stamps imposes other costs on program recipients, retailers, and financial institutions. Recipients frequently must make a special trip each month to obtain their coupons. If a recipient loses his or her coupons after issuance, the benefits are not replaced. Retailers and financial institutions need to use special procedures to handle and process the coupons as an alternative form of currency.

SOURCE: Office of Technology Assessment, 1993; and the Food and Nutrition Service, U.S. Department of Agriculture.

"elimination" of fraud and abuse);[3] and 4) provides services to recipients in a more convenient and cost-effective manner.

See box 4-A for an example of paper-based benefit transfer of food stamps and box 4-B for a description of an EBT pilot project to deliver WIC benefits.

Electronic service delivery using EBT may ultimately yield significant cost savings in program administration by streamlining the enrollment and

[3] See ch. 7 and U.S. Congress, Office of Technology Assessment, *Electronic Delivery of Public Assistance Benefits: Technology Options and Policy* Issues, OTA-BP-CIT-47 (Washington, DC: U.S. Government Printing Office, April 1988). Electronic identification methods, such as computerized fingerprint identification combined with card technology, could provide enhanced security. See, for example, U.S. Congress, Office of Technology Assessment *The FBI Fingerprint Identification Automation Program: Issues and Options*, OTA-BP-TCT-84 (Washington, DC: U.S. Government Printing Office, November 199 I).

Table 4-1—EBT Project Status for the Food Stamp Program by State

State	EBT Project Status
Alabama	Preparing a Planning APD to seek approval to begin planning.
Arkansas	Passed legislation (1/93) mandating a pilot system.
California	San Bernardino Co.--FNS and ACF provided comments on Planning APD and RFP. County may withdraw proposal because of FSP regulation on cost neutrality.
Colorado	Internal State exploration of EBT.
Delaware	Preparing concept paper incorporating a proposal to pilot off-line EBT for FSP, WIC, and other programs.
Florida	FNS provided comments on Planning APD for joint FSP/AFDC system. State response pending.
Georgia	Submitted Planning APD for an integrated FSP/AFDC project in two counties. Legislature passed resolution in support of EBT.
Hawaii	Internal State exploration of EBT.
Illinois	Planning APD contingently approved by FNS and ACF. Planning a pilot project in a rural site and an urban site.
Iowa	Operating a voluntary EBT system in Linn County issuing AFDC benefits. Plan approved to add *4,100* FSP households.
Kansas	Given conditional approval of Planning APD to begin activities for a multi-benefit EBT system for FSP, AFDC, and Medicaid benefits.
Maine	Received approval in 1992 for a tri-state EBT system with New Hampshire and Vermont.
Maryland	EBT system now statewide for FSP, AFDC, GA, and CSE. Will serve over 138,000 FSP households and include about 3,400 food retailers.
Massachusetts	Expected to submit Planning APD for a project in the near future.
Michigan	Contingent approval from ACF in 1992 to develop a multi-benefit EBT system for FSP, AFDC Medicaid, WIC, and other assistance programs.
Minnesota	Ramsey County has on-line EBT for FSP and assistance programs. Looking into expanding to neighboring county.
Mississippi	Legislated on-line and off-line EBT pilot projects. Submitted Planning APD to FNS to begin an FSP pilot project.
Missouri	Submitted a revised Planning APD for an EBT system for FSP, AFDC, WIC, and Medicaid.

disbursement processes. The projected startup costs could be an obstacle to a nationwide EBT system. But the decreasing cost of technology, combined with cost-sharing strategies among government agencies and the private sector and cost savings from administrative streamlining, could make a national EBT system cost effective. EBT offers, in addition, the potential to improve the quality and integrity of many Federal and State benefit programs.

How EBT Works

EBT could be implemented as an on-line, off-line, or hybrid system. In an on-line EBT system, the recipient is issued a plastic magnetic stripe EBT access card similar to a retail debit card. The recipient uses the card to access cash benefits at an ATM, and purchases items paid for electronically at a POS terminal. The recipient inserts the card into or swipes it through the POS terminal and keys in his or her Personal Identification Number (PIN). The amount of the benefits to be drawn is keyed into the terminal, and an electronic message is sent to an EBT processor. The EBT processor verifies that sufficient funds exist in the account and returns an on-line authorization message to the inquirer.

The authorization data travel from the POS system to the central database or EBT processor and back over the public switched network. Once

State	EBT Project Status
New Hampshire	Received approval in 1992 for a tri-state EBT system with Vermont and Maine.
New Jersey	Demonstration project under way, Proposed a pilot site to serve FSP and AFDC cases in three counties.
New Mexico	Implemented EBT in 1990 in Bernalillo County for FSP and AFDC. Submitted proposal to FNS to expand statewide
New York	Internal State exploration of EBT
North Carolina	Conducting early planning activities.
North Dakota/ South Dakota	Jointly submitted a Planning APD for a two-State EBT project for FSP States plan to release an RFP by December 1993.
Ohio	Off-line FSP pilot project under way in the Day-ton area. Legislation passed by the State and funding authorized for a statewide multiple-benefit EBT program.
Oklahoma	Submitted a Planning APD to develop and operate an EBT system for FSP. Plans to add AFDC and child support payments later.
Oregon	EBT task force formed Planning APD submitted and approved, contingent on satisfactory response to a number of concerns.
Pennsylvania	Reading now serving *8,000* FSP households. Other counties and AFDC will be added. PA Department of Public Welfare developing APD proposing procurement of a new multi-benefit EBT system.
South Carolina	Plan approved for large on-line system for FSP. Will eventually serve approximately 120.000 FSP households
Tennessee	Internal State exploration of EBT.
Texas	Submitted a preliminary Planning APD to FNS for a multi-benefit EBT system
Utah	Submitted a Planning APD for FNS approval.
Vermont	Received approval in 1992 for a tri-state EBT system with Maine and New Hampshire.
Virginia	Internal State exploration of EBT.
Wisconsin	Internal State exploration of EBT
Wyoming	Off-line operations for WIC begin in Casper area 5/91. Will expand for WIC and add other programs, including FSP

KEY ACF=Administration for Children and Families, AFDC=Aid to Famines With Dependent Children, APD=Advanced Planning Document, CSE=Child Support Enforcement, EBT=Electronic Benefits Transfer, FNS=Food and Nutrition Service, FSP=Food Stamp Program, GA= General Assistance, RFP=Request for Proposals; WIC=Special Supplemental Food Program for Women Infants and Children

SOURCE Off Ice of Technology Assessment, 1993, based on Information provided by the Food and Nutrition Service

the purchase is authorized, the purchase amount is debited from the recipient's account and credited to the retailer's system account. At the end of the day, a financial settlement takes place. Funds are then transferred electronically from the U.S. Treasury's bank account to retailers' depository accounts via the Automated Clearing House (ACH). When benefits are issued and redeemed through an EBT system, the need to print, store, issue, and redeem paper records or coupons is eliminated. Also, the transaction is for an exact amount, eliminating the need for cash change and minimizing the diversion of program benefits.

The United States already has a commercial infrastructure in place for supporting on-line transactions. And retailers are investing in on-line POS terminals for commercial debit/credit transactions. These systems, with minor modifications, also can accommodate EBT transactions.

In an off-line or smart card system, the recipient's account balance is maintained on the card itself. The card has an integrated circuit with a microprocessor that stores the information necessary for verification, uploading benefits, monitoring benefits remaining on an account, and deducting the purchase amount from the card itself.[4]

A typical off-line transaction at a retail store works as follows. The recipient inserts the card into a POS device that is customized for smart card

[4]For an in-depth discussion of smart card technology and applications, see Jerome Svigals, *Smart Cards: The New Bank Cards (New* York, NY: Macmillan Publishing Co., 1987).

applications (smart cards, unlike magnetic stripe cards, cannot be used with the existing base of on-line POS terminals).[5] The recipient enters a PIN. The amount of the purchase is keyed into the terminal. If sufficient funds remain on the card to cover the purchase, the transaction is processed and the purchase amount is deducted from the balance carried on the card. The off-line transaction requires no immediate telecommunications link to a host computer for verifying the account and checking the balance. The completed transactions are captured on smart card-compatible POS terminals and transmitted in batches to the host computer of the EBT processor or government agency. A backup copy of each recipient's account is maintained and updated at the host computer. A telecommunications link is only needed for a periodic, scheduled call between the retailer and the host computer database, which electronically gathers the transactions and transfers the total transaction amount directly to the retailer's bank account through the ACH.

Drawbacks to using smart cards for EBT include the:

1. high cost of the smart cards-the cost will drop with time and when purchased in bulk, but is still considerably higher than magnetic stripe cards;[6]
2. lack of compatibility between off-line technology and the existing commercial infrastructure, and the resultant need to retrofit ATM and POS terminals to accept smart cards;
3. lack of uniform technical standards for programming card-based computer chips (the memory and processor within the smart card);[7] and
4. continued, although reduced, need for some form of on-line communication with the EBT processor.

A Dayton, Ohio pilot project is testing the feasibility of using an off-line EBT system for food stamp delivery. The project started in 1992 and is being evaluated, with results expected in late 1993.[8] A Wyoming pilot project tested off-line EBT for WIC delivery (see box 4-B); this project is being expanded to include food stamps.

A hybrid EBT system would use POS terminals that accept both smart cards and magnetic stripe cards, and would use smart cards that have a magnetic stripe on the back. A hybrid system would, for example, allow food stamp and WIC applications to be processed off-line and the cash programs (e.g., AFDC) to be provided on-line.

Hybrid POS terminals that accept magnetic stripe and smart cards are already on the market. Hybrid terminal manufacturers expect the cost of hybrid terminals to be in the $500 range when purchased in batches of 10,000 units. Existing on-line POS terminals can be retrofitted (also at $500 each); however, it maybe prudent to replace older POS magnetic stripe terminals with new hybrid terminals. ATMs can be retrofitted to handle both smart and magnetic stripe cards at a cost of $2,500 per terminal. The entire ATM infrastructure in the United States could be retrofitted at a cost of roughly $225 million (90,000 ATM terminals at $2,500 each).

ALTERNATIVES FOR IMPLEMENTING A NATIONAL EBT SYSTEM

Technical and Administrative Issues

Decisions on EBT system design and development will affect the integration of EBT with the

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[5] POS terminals can be retrofitted to accept smart cards. See later discussion.

[6] Industry sources note that the cost of smart cards has been dropping at a rate of 15 percent per year. The cost of purchasing a smart card with three kilobits of memory (sufficient to handle food stamps and WIC applications) is in the range of $3.50 to $6 per card in large batches of several million cards. Prices will drop further as the technology continues to evolve and when two proprietary patents expire in 1995-%.

[7] Government/private sector committees are working to develop appropriate standards.

[8] The Ohio State Legislature (with the support of the Governor) passed legislation that authorizes funding for expanding the EBT pilot in selected major metropolitan areas by July 1995. The State of Ohio is awaiting approval from USDA.

Box 4-B-The Case of WyoCard: A Smart Card Success

Early in 1990, the State of Wyoming began to consider using EBT to deliver WIC, AFDC, food stamp, and Medicaid benefits. The State subsequently designed and developed a pilot program to test EBT--initially for the delivery of WIC benefits.

WIC is a grant program administered by the USDA Food and Nutrition Service. Its goal is to provide supplemental food and nutritional education to: 1) low-income pregnant, postpartum, and breast-feeding women; 2) infants; and 3) young children up to 5 years of age who are considered to be at nutritional risk. WIC is a cost-effective Federal program. For every dollar spent on prenatal WIC, the estimated cost savings to Medicaid is roughly $3 to $4 for every newborn child in just the first 60 days.[a]

In the WIC test, the WyoCard--a smart card-was used as a substitute for paper vouchers. WyoCard users visited a nutrition counseling center every 2 months, per usual procedures. But instead of receiving paper checks with dollar amounts and approved food items printed on the checks, the dollar and product information was electronically encoded on the smart card. WIC recipients could then use the cards in lieu of checks when shopping at participating food retailers.

Wyoming's WyoCard pilot began operations in May 1991 in Natrona County (Casper area). WyoCard used off-line smart card technology, in part because of the sparsely populated and large geographic area and high telecommunications costs.

An OTA site visit and an independent evaluation of the Wyoming WIC pilot test found that:

1. W IC clients using the WyoCard reported that the card provides greater flexibility in shopping and is more convenient.
2. Clients believe that the WyoCard gives them a stronger sense of dignity.
3. Clients feel that their benefits are protected in the case of loss or theft.
4. Clients find that the card is more durable and easier to carry than coupons.
5. Participating retailers feel that substantial cost savings could be achieved using the WyoCard by reducing banking fees associated with coupons and account settlements.
6. Retailers found that the WyoCard frees cashiers from the responsibility of having to remember what items are WIC-eligible and what items are not.
7. Retailers think that, with some modification to the scanning mechanism, they can provide faster transactions for WIC clients and for the general public as well.
8. WIC staff responsible for the WyoCard program view the card as enhancing the counseling, enrollment, and benefit issuance aspects of the WIC program.
9. WIC staff expect that the WyoCard will result in a reduction in waste, fraud, and abuse that is typical in the paper coupon system.

The widely recognized success of the WyoCard pilot has led to other initiatives. Wyoming-with the support of the retailing, banking, and telecommunications industries-is expanding on the WyoCard initiative to include other social programs, like food stamps, on WyoCard. WyoCard is serving as a possible prototype for a regional EBT system and, potentially, a smart card "health passport."

[a]Based on USDA contractor estimates. See the Library of Congress, Congressional Research Service, "Special Supplemental Food Program for Women, Infants, and Children (WIC): A Fact Sheet," CRS Report 93-279 EPW, Mar. 4.1993.

KEY: AFDC=Aid to Families With Dependent Children; EBT=electronic benefits transfer; USDA=U.S. Department of Agriculture; WIC=Special Supplemental Food Program for Women, infants, and Children.

SOURCE: Office of Technology Assessment, 1993; and Aian D. Moore, "Final Evaluation Report, The Electronic Benefits Transfer Smartcard Pilot Demonstration in Casper, Wyoming," December 1991.

existing commercial ATM/POS networks. Startup and operating costs can be reduced by using the existing on-line commercial infrastructure (i.e., networks, terminals, and processing protocols) as much as possible. EBT telecommunications costs will be higher with on-line systems, but the government may be able to negotiate a discounted bulk rate from EBT processors and telecommunications vendors. Retailers and banks will be more supportive of EBT if it uses a standardized infrastructure.[9] Retailers may be more inclined to pay for advanced POS technology (e.g., hybrid terminals) towards the end of the life cycle of the presently installed base of POS equipment (the life cycle for POS terminals is between 5 to 7 years).

The integration of EBT with commercial POS and ATM networks is, thus, an important goal. An integrated system offers lower system development and implementation costs, lower system operating costs through processing efficiencies, the potential for providing better service to program recipients, and greater marketability of the system with in the retail sector. In order to facilitate system integration, an EBT system would have to adopt design standards that are compatible with standards established in the private sector. This argues in favor of on-line magnetic stripe card-based EBT, or retrofitting the existing ATM/POS infrastructure to permit use of hybrid cards, at least until such time as commercial networks provide reasonable support for separate off-line smart card systems.

Four basic alternatives for implementing a national/regional EBT system include:[10]

1. State-Initiated Model,
2. State-Initiated Model With Federal Operating Rules,
3. Federal/State Partnerships, and
4. Federally Initiated Model.

State-Initiated Model

The States would initiate EBT implementation, with the Federal role limited to policy guidance on such matters as: a) the exchange of information and services across State lines; b) use of the system to access multiple-benefit programs through a single card; and c) allocation of funds and fees by program and State. In this model, all of the responsibility for designing, developing, and implementing EBT systems would rest with the States.

State-initiated Model With Federal Operating Rules

The Federal Government would promulgate operating rules for the participating States. These rules could address: a) interstate processing and interchange; b) retailer/ATM liabilities and rights; c) pricing structures (not exact prices); d) methodologies for allocating funding and fees; e) recipient rights and responsibilities; and f) settlement procedures.

Federal/State Partnerships

The States would join with the Federal Government to create multiagency, multiprogram, and multi-State partnerships for selecting and implementing a national EBT system. The national system would service Federal direct benefit programs and State-administered benefit programs in each participating State. The operating rules and procedures (e.g., account settlement and allocation methodologies) could be negotiated and established by the partnerships. This approach likely would lead to regionally based EBT systems.

Federally initiated Model

Here the Federal Government (in consultation with the States) would select a limited number of

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[9] A 1992 USDA study concluded that EBT system costs would be much higher if EBT does not use commercial ATM/POS networks, and that retailers would probably resist a new food stamp system that could not use the existing POS system. See U.S. Department of Agriculture, Food and Nutrition Service, op. cit., footnote 2.

[10] The conceptual framework for this discussion is breed in part on Phoenix Planning & Evaluation, Ltd., "Multi-Program Cards for the Delivery of Social Services," contractor report prepared for the Office of Technology Assessment, December 1992, p. 48. See also John A. Kirlin, Charles R. King, Elizabeth E. Davis, Christopher Jones, and Gary P. Silverstein, "The Feasibility y of a Nationwide EBT System for the Food Stamp Program," Abt Associates Inc., April 1990.

EBT processors from across the country in a competitive procurement. These processors would have the technical and financial capabilities to operate a large-scale EBT system, servicing both federally and State-administered benefit programs for participating States. States could elect to become members of this federally initiated EBT network.

The federally initiated model or Federal/State partnerships hold the most promise for reducing administrative expenses incurred by States in EBT development and implementation. They eliminate the need for States to develop their own unique systems and allow for a greater degree of standardization of the EBT infrastructure—an important element in achieving a cost-effective operation.[11]

In all four alternatives, the EBT system ideally should be designed to incorporate cash assistance programs (e.g., AFDC), as well as cash equivalent programs (e.g., food stamps and WIC), third-party payer programs (e.g., Medicare/Medicaid), and eligibility determination. All the alternatives will require extensive cooperation between State and Federal agencies. The Federal Government, State agencies, and commercial vendors could become partners in EBT, similar to the involvement of financial institutions, network operators, and retailers in Electronic Funds Transfer (EFT).

If current policy continues, States would have the right to decide whether or not to participate in an EBT system. Policy makers ultimately may, however, have to decide whether EBT participation should be mandatory, not voluntary, in order to make EBT cost effective and to realize other goals (e.g., reduction of fraud).

Cost Issues

Cost effectiveness is not assured with EBT. It depends on what costs and benefits are included and/or what development and implementation strategies are pursued. Cost effectiveness is crucial if EBT is to be a viable alternative to paper for delivery of benefits.

Despite numerous EBT feasibility studies and evaluations conducted to date, many important cost-related questions remain unanswered due to a lack of authoritative data and other uncertainties (e.g., what cost-sharing arrangements will be in place, if any) that affect cost projections. The issue of "who pays" is a complex policy question. New opportunities for cost-sharing and partnering between the Federal and State Governments and the private sector can help offset and defray some of the startup costs associated with EBT. The Federal and State Governments can leverage the rapid growth of commercial POS terminals in retail locations. POS systems used for commercial debit/credit transactions, as well as for EBT, tend to yield higher profit margins and a competitive advantage for retailers.

Most prior cost analyses have assumed that all costs associated with EBT system design, development, installation, and implementation would be borne by the Federal and State Governments. This need not be the case. Federal/State Governments could use, to the maximum extent possible, the private sector's POS/ATM infrastructure and provide supplemental equipment and EBT access only for geographic areas and recipients not otherwise served. Federal and State Governments could duplicate the model used by the State of Maryland to establish a statewide, multiple-program EBT system that combines a contractual and partnership relationship with the private sector (see box 4-C).

EBT costs include: 1) system design and development costs, 2) system implementation costs, and 3) operating costs.

System Design and Development Costs

In a State-initiated alternative, the State would be responsible for preparing planning documents and submitting them to each of the relevant Fed-

[11] Standardization allows EBT recipients in one State to shop at stores in another State. It also promotes integration of multiple-State EBT systems with commercial interstate POS systems and ATM networks.

Box 4-C-The Case of Maryland: Statewide Electronic Benefits Transfer (EBT)

The original Maryland EBT pilot test began in November 1989 in Baltimore. Today, Maryland has the first statewide, operational EBT system in the Nation. The Maryland EBT system, using a magnetic stripe 'Independence Card," provides electronic delivery of food stamps, Aid to Families with Dependent Children (AFDC), General Assistance, and Child Support payments. The State of Maryland incurred no startup cost in implementing the statewide EBT system, other than the expense of administering the procurement process. The State contracted on a competitive basis with a private vendor that is responsible for purchasing and installing terminals in all authorized retail outlets, purchasing and issuing cards, establishing and running a 24-hour customer service center, providing network and financial transaction services, and maintaining and updating client accounts. implementation and operating costs are included in the contract price--currently $3.13 per month/per case for providing food stamp benefits electronically, and $1.00 per case/per month for AFDC.

SOURCE: Office of Technology Assessment, 1993.

eral program agencies for approval. This process usually takes many months and typically costs from $200,000 to $400,000 per State on average.

To reduce costs, the Federal Government could design an EBT prototype(s) and procure the services of several EBT vendors (i.e., the federally initiated model). The vendors would then offer "core" EBT systems to States that, in turn, could purchase EBT services at, hopefully, competitive prices. This might reduce the cost of system design by 50 percent or more at both the State and Federal levels.[13]

States still could require some modifications to the "core" EBT systems to meet unique State needs. Even so, the approach could significantly reduce the vendor's costs of bidding for each State's business. Streamlining the process would not only cut direct procurement costs for vendors, States, and the Federal Government, but also could provide added impetus for vendors to offer discounted prices for the systems procured. The selection of system vendors and processors should, of course, be conducted through competitive bidding, with an emphasis on standardized and flexible EBT systems.

System implementation Costs

POS-terminal installation (including equipment and site preparation) is the largest single expense item. At $300 per terminal installation, plus $500 for the terminal itself, cost estimates range from $120 million for 150,000 terminals to $480 million for 600,000 terminals. These estimates assume that EBT system vendors will be able to modify existing POS software rather than develop new software. The estimates assume that PINs are assigned by the vendors, which is less expensive, rather than selected by the recipients.

As of June 1991,70,000 commercial POS systems were deployed in stores nationally.[14] Today, roughly 93,000 POS terminals are deployed, with about 41,000 in food stores and supermarkets.[15] Earlier EBT cost projections for food assistance programs assumed that terminals would be deployed in all checkout lanes of all participating stores, thereby requiring about 600,000 terminals. Recent estimates suggest that far fewer additional

12 Kirlin et al., op. cit., footnote 10. The cost for all 50 States would total $10 million to $20 million.
13 Phoenix Planning & Evaluation, Ltd., "Multi-Program Cards for the Delivery of Social Services," op. cit., footnote 10, p. 38.
14 U.S. Department of Agriculture, Food and Nutrition Service, Op. Cit., footnote 2, p. 2.
15 Paul F. Coenen, President, Electronic Strategy Association, personal communication, May 1993.

terminals may be needed, Reference Point Foundation concluded that FNS can still meet food stamp regulation requirements and provide EBT service nationwide with a deployment of about 300,000 POS terminals-a reduction of 300,000 terminals.[16] FNS officials now believe that even these numbers are outdated since commercial POS terminal deployment is growing rapidly.

Each 10 percent reduction in additional terminals would reduce implementation costs by another $24 million. Also, EBT vendors may be willing to assume a share of implementation costs, since vendors can amortize the purchase of POS terminals over several years and treat this as a monthly operating expense. For estimating purposes, OTA assumed that 150,000 additional terminals would be needed to meet the 300,000 level (90,000 existing terminals plus 60,000 expected through further private sector deployment, plus 150,000 additional terminals).

Another major cost element is the purchase of cards for eligible and participating recipients. The number of cards will depend on the number of programs included and the number of recipients per card. For estimating purposes, OTA assumed a multi program EBT card that covers food stamps, WIC, AFDC, general assistance, and SSI. These programs serve roughly 55 million persons,[17] but many participate in more than one benefit program. Adjusting for overlap (see table 4-2), about 45 million different persons receive food stamps, WIC, AFDC/general assistance, and/or SSI benefits. OTA assumed that cards would be issued only to adults, not children; thus OTA estimated the number of cards to be issued at 30 million (this allows some margin for replacement cards and growth in the number of recipients).

The card cost, therefore, would be about $15 million for magnetic stripe cards (assuming a cost of $0,50 per card) and roughly $105 million for smart or hybrid cards (assuming a cost of $3.50 per card). Use of hybrid or smart cards also would necessitate conversion or retrofitting of the existing POS and ATM infrastructure, at a cost of $45 million for the POS terminals ($500 per unit) and $225 million for the ATMs ($2,500 per unit for complete retrofit).

Another cost element is the initial training of recipients and personnel from participating retailers and banks, estimated at about $25 million. The total estimated implementation costs for a nationwide EBT system for the selected social services (assuming 30 million cards issued) are shown in table 4-3—$ 160 mill ion for a magnetic stripe card system and $520 mill ion for a hybrid or smart card system.

Table 4-2—Estimated Overlap **in Government Benefits**

Households receiving	And also receiving	Estimated percentage of overlap
AFDC and General Assistance	Food Stamps	85
SSI	Food Stamps	44
Food Stamps	AFDC and General Assistance	50
Food Stamps	SSI	*23*

KEY AFDC=Aid to Families With Dependent Children, SSI=Supplemental Security Income

SOURCE U S Congress, House of Representatives, Committee on Ways and Means, Overview *of Entitlement* Programs *1992 Green Book,* Committee Print 102-44, May 15, 1992, p. 1611

16 Reference Point Foundation, "Innovations for Federal Service: A Study of Innovative Technologies for Federal Government Services to Older Americans and Consumers," contractor report prepared for the Office of Technology Assessment, February 1993, p. 73.

17 Assumes that 28 million persons receive food stamps, 6 million receive WIC, 16 million receive AFDC and general assistance, and 5 million receive SSI.

Table 4-3—Estimated Implementation Costs for a Nationwide EBT System

Type of EBT system	Estimated implementation costs ($ millions)
Magnetic Stripe Card System	
POS terminal deployment	$120
Magnetic stripe cards	15
Training	25
Total	$160
Hybrid or Smart Card System	
POS terminal deployment	$120
Hybrid or smart cards	105
POS conversion	45
ATM retrofit	225
Training	25
Total	$520

NOTE. Assumes 45 million participants in an EBT program that covers food stamps, WIC, AFDC, general assistance, and SSI; and 30 million cards issued See text for further discussion.

KEY AFDC=Aid to Families With Dependent Children; ATM=Automated Teller Machine; EBT=Electronic Benefits Transfer; POS=Point-of-Sale, SSI=Supplemental Security Income Program; WIC=Special Supplemental Food ProgramforWomen, infants and Children.

SOURCE. Office of Technology Assessment, 1993.

Early FNS cost projections of a joint food Stamp/AFDC EBT system using magnetic stripe cards ranged from $233 million to $291 million.[18] Today, FNS cost projections for a multiprogram (i.e., food stamps, AFDC, WIC, SSI, and other benefits) national EBT system are still within the $200 million to $300 million range. However, these projections do not factor in an aggressive Federal Government pursuit of cost sharing/cost reduction strategies, nor do they account for the continued growth of POS terminal deployment by commercial retailers irrespective of EBT.

Operating Costs

The two largest operating costs are terminal amortization and transaction fees. These costs can be negotiated into a contract with an EBT processor who will bear the up-front capitalization of purchasing and installing terminals (see box 4-C). The processor includes the costs of transactions and the necessary hardware/software investments in the monthly case fees charged to the government.

Assuming a POS terminal replacement cost of $500 per unit and that a national EBT system requires 300,000 terminals, a$150 million investment would be necessary every 5 to 7 years (the life of a typical terminal). Amortized over 5 years, the annual terminal cost would be about $30 million. These estimates are at the high end and do not account for accelerated private sector terminal deployment for commercial purposes and/or cost-sharing by participating retailers and banks. For estimating costs, OTA assumed that the government would pay one-half, or $15 million per year.

18 Kirlin et al., op. cit., footnote 10, p. vii.

Also, in a fee-based EBT system, these operating costs would be covered in the monthly case fees.

Transaction fees are incurred when a recipient uses an EBT card at an ATM or POS terminal. OTA assumed typical transaction fees of about $0.10 for an on-line debit (or credit) transaction, $0.02 for an off-line debit transaction (since no telecommunications or central computer verification are required), and $0.50 for a cash transaction. For a multiprogram EBT system with 30 million active cards, and assuming 12 transactions per recipient per month, the estimated annual transaction costs are shown in table 4-4.

The illustrative transaction costs for a magnetic stripe card EBT system are roughly $1 billion per year, *or* about $2.75 per case per month—roughly equivalent or perhaps slightly lower than the average paper-based costs for the food stamp program alone. Transaction costs could be further reduced if the Federal Government negotiates fees lower than current commercial averages or if the number of allowable "free" monthly recipient transactions-especially cash transactions-were to be reduced.

The comparable estimated costs for a hybrid card system are about $200 million less per year. This suggests that the additional up-front cost of a hybrid card system would be recovered in about 2 years' worth of savings in transaction costs. Note that card replacement costs could be a significant offset.

The comparable costs of a "no cash" system—for any type of card—would be dramatically y lower due to the elimination of cash transaction fees. The

Table 4-4—Estimated Annual Transaction **Costs for a Multi-Program EBT System**

Type of EBT system	Estimated annual transaction costs ($ millions)
Magnetic Stripe Card System	
On-line	
Debit transactions 8/month @ $0.10	$288
Cash transactions 4/month @ $0.50	720
Total	$1,008
Hybrid Card System	
On-line	
Debit transactions l/month @ $0.10	**$36**
Off-line	
Debit transactions 7/month @ $0.02	**.50**
Cash transactions 4/month @ $0.50	**720**
Total	**$8O6**
Magnetic Stripe (No Cash) System	
On-line debit transactions 12/month @ $0.10	$432
Smart or Hybrid Card (No Cash) System	
On-line debit transactions l/month @ $0.10	$36
Off-line debit transactions 1 l/month @ $0.02	80
Total	$116

NOTE: Assumes 45 million participants in an EBT program that covers food stamps, WIC, AFDC, general assistance, and SSI; and 30 million cards issued See text for further discussion

KEY AFDC=Aid to Families With Dependent Children, EBT=Electronic Benefits Transfer, SSI=Supplemental Security Income Program; WIC=Special Supplemental Food Program for Women, Infants and Children

SOURCE Office of Technology Assessment, 1993

estimated net additional annual savings would be over $500 million. A "no cash" system would necessitate widespread terminal deployment so recipients could make debit purchases at virtually all retail outlets. But most important, a "no cash" system would require recipients to adjust to a truly "cash-less, check-less" benefits program. This could be difficult.[19] The savings from a "no cash" system are so great, however, that substantial additional terminals could be deployed and a small paper-based system could be retained during a transition period and still show significant net cost advantages.

Another operating cost is training of new recipients and staff, and periodic refresher training for current recipients and staff, estimated at about $10 million per year.

Any EBT system is likely to reduce fraud and abuse. A national EBT system would, for example, reduce losses that take place through diversion of benefits when paper checks or coupons are used. Reduction in the levels of benefit diversion could offset some of the costs of a national EBT system, and, perhaps more importantly, improve the public's perception of the integrity of government programs. By eliminating cash change and reducing the opportunity for trafficking in benefits, a national EBT system might reduce levels of food stamp benefit diversion by as much as 80 percent. While this would not translate directly into savings in food stamp program costs, it would mean that more benefits are directed toward authorized food purchases. A national EBT system is likely to have some effect on net levels of food stamp benefit loss--currently about $0.09 per case month.[20] Elimination of these losses would reduce costs by more than $10 million per year, enough to, for example, offset a part of the annual amortization charge for POS-terminal deployment.

A national EBT system also could reduce overpayments to eligible recipients or payments to ineligible recipients-estimated at about 6 percent of total food stamp and AFDC benefit payments (roughly $2 billion to $3 billion per year) and about 4 percent of total SSI benefit payments (roughly $1 billion per year). The actual reduction would depend on whether and how EBT includes improved initial and continuing eligibility determinations. Even a partial reduction in overpayments would offset a significant part of the costs of EBT implementation and operations and/or some increase in the number of eligible benefit recipients.

EBT is very likely to be cost effective for participating retailers and financial institutions.[21] In order for EBT to be cost effective for the Federal Government, however, the cost of the current paper-based system would have to be reduced by an amount greater than the EBT cost—all factors considered. This could necessitate significant reductions in the current Federal/State staffing and bureaucracy that administers these benefit programs.

EBT POLICY ISSUES AND OPTIONS

A national EBT system is technically feasible and offers significant potential advantages to recipients, providers, funding agencies, and, ultimately, the U.S. taxpayers, EBT pilot projects, demonstrations, and evaluation studies lay the groundwork for making decisions on the transition to a national EBT system.

Key policy issues include: 1) selecting a program mix for EBT delivery, 2) revising Federal policies relevant to a national EBT system, 3) selecting a national EBT system alternative, 4) mandating a nationwide EBT feasibility test, and

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19 A large percentage of food stamp, WIC, and AFDC recipients do not have bank accounts, and may not have any other way to readily obtain cash,

20 John A. Kirlin, Christopher W. Logan, Mark G, Menne, Elizabeth E. Davis, and Kit R. Van Stelle, "The Impacts of the State-Operated Electronic Benefit Transfer System in Reading, Pennsylvania," Abt Associates, Cambridge, MA, February 1990, p. v.

21 EBT pilot-test results suggest that retailers can cut their costs by 25 percent or more, and banks by 95 percent or more. See Kirlin et al., op. cit., footnote 1, p. v; Ciurea et al., op. cit., footnote 1.

5) providing coordinated legislative/executive leadership on EBT.

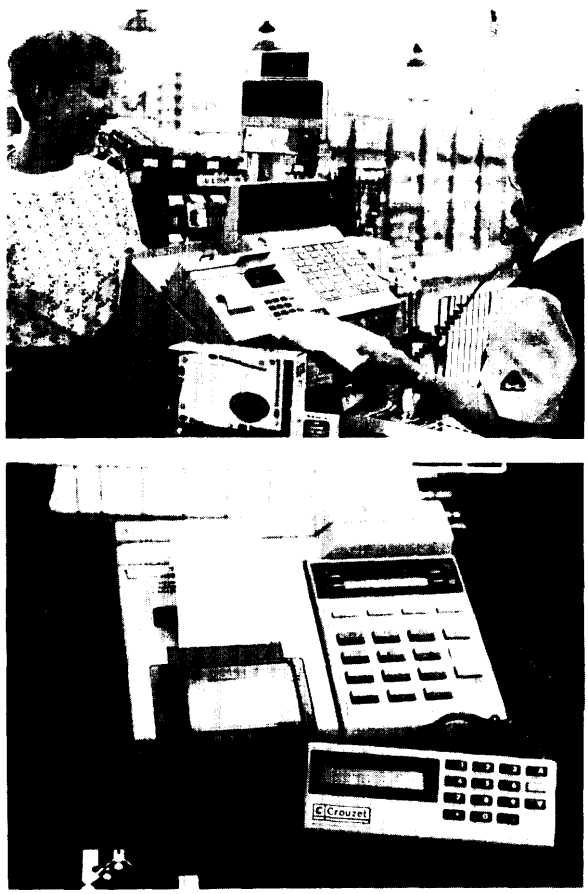
Selecting a Program Mix for EBT Delivery

EBT pilot tests and evaluation studies indicate that implementing a national EBT system for a single benefit program would not be as cost effective as a multiple-program strategy. Decisions are needed on what benefit programs should be combined for electronic delivery using the same card, terminals, and networks. Food stamps and AFDC, for example, are good candidates for combined delivery, given the significant overlap among recipients of these benefits and since both programs are State administered (see table 4-2). Pilot tests suggest that combining AFDC and food stamps on one EBT card reduces operating and delivery costs for both programs.

Selecting the optimal program mix would require negotiation between (and among) Federal and State agencies. A Federal/State partnership could be used to build a consensus on program mix and system integration. Alternatively, a lead Federal agency or an interagency "Electronic Payments Board" could act on behalf of the Federal Government in negotiations with States.

A multiple-program EBT approach is more likely to gain the support of State governments since this would spread costs over more programs, improving the cost effectiveness for each individual program. But multiple-program EBT presents challenges that would need to be addressed in the system design and in related legislation. Operating rules and regulations for a national EBT system would need to include procedures for account funding, the pooling of administrative costs, and governmentwide cost-sharing.

Once an appropriate program mix is identified, Congress could enact legislation that mandates the creation and use of a multi program Federal Social Service Card or the equivalent. Legislation and/or regulations would need to cover a variety of specific needs; for example, how to ensure that authorized retail outlets will provide benefits to recipients living in areas that are underserved by the existing ATM/POS infrastructure. A multiple-program EBT system may require some reorganization of Federal agencies responsible for administering social services, or the designation of an authorized Federal official or lead Federal agency with governmentwide jurisdiction over EBT. Multiple-program EBT can help Federal agencies rethink how they are delivering services.



PHOTOS: FRED B. WOOD

Top: The WyoCard project uses a smart card-a debit card with a computer chip-for issuing and redeeming Supplemental Program for Women, Infants, and Children (WIC) benefits. Recipients use the smart card instead of paper coupons when purchasing pre-approved food at participating grocery stores in Casper, Wyoming.

Bottom: *The WyoCard and a typical card scanner, printer, and display terminal--similar in appearance to those used for standard credit and debit cards.*

Revising Federal Policies Relevant to a National EBT System

In order to accelerate the development and implementation of a nationwide EBT system, Congress and the President could start now to identify policies and regulations that may need revision. Ideally, a package of needed policy changes would be ready for consideration at the time further pre-operational feasibility studies are complete. First, program-specific rules and regulations should be evaluated and revised to streamline the delivery process.[22] Second, Federal laws that protect the privacy and security of information about participants should be reviewed and revised as needed. Third, Federal and State banking laws should be re-examined in the context of EBT. A national EBT system must operate within the existing or revised Federal and State banking and financial policy framework.

To facilitate a national EBT system, Federal policy makers could:

1. Revise the Food, Agriculture, Conservation, and Trade Act of 1990[23]—The Act states that EBT is an acceptable operational alternative to paper-based food stamp coupons, and authorizes the Secretary of Agriculture to conduct demonstration projects, such as EBT pilot tests. The Food Act and the Omnibus Budget and Reconciliation Act require that food retailers incur no cost when purchasing and installing an EBT system for food stamp delivery.[24] This language serves as a disincentive for private sector participation in EBT. The language could be revised to permit or require private sector cost-sharing for EBT, or perhaps the provision could be deleted entirely. The Federal Government could be defined as a POS terminal-deployer of last resort rather than first resort.[25] The Food Act also mandates that the EBT system be cost neutral for the FSP and State agencies. This provision could be modified to permit or require Federal and State agency cost-sharing.
2. Develop interagency EBT regulations—The Secretaries of the Federal departments participating in EBT would need to develop a single set of regulations on technical standards, cost effectiveness, financial accountability y, recipient protection, and system operations and performance, among other topics. This task could be assigned to an Electronic Payments Board, or some other interagency entity with high-level representation from participating Federal agencies.[26]
3. Review the applicability of the Privacy Act of 1974[27] to EBT—the Office of Management and Budget (OMB), participating Federal agencies, and EBT system developers and processors would need to review the Privacy Act, and identify revisions needed to ensure the confidentiality of personal information in EBT systems.
4. Review the applicability of the Computer Security Act of 1987[28] to EBT--OMB, the National Institute of Standards and Technology, participating agencies, and EBT providers likewise would need to review the Computer Security Act, and identify revisions to help assure the integrity and security of a national EBT system.

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22 U.S. Department of Agriculture, Food and Nutrition Service, op. cit., footnote 1, p. 23. According to FNS, "streamlined procedures are needed for large-scale implementation,"

23 The Food, Agriculture, Conservation, and Trade Act of 1990, Public Law 101-624, Title XVII—Food Stamp and Related provisions (cited as the Mickey Leland Memorial Domestic Hunger Relief Act, sec. 1729).

24 The Omnibus Budget and Reconciliation Act, Public Law 97-253.

25 One possible exception is for small retail stores that cannot justify investing in an EBT system.

26 In April 1992, the USDA issued a set of requirements to be met by States wishing to participate in EBT for the FSP.

27 The Privacy Act of 1974, Public Law 93.579. Also see ch. 7 and Office of Technology Assessment, *Electronic Delivery of Public Assistance Benefits*, op. cit., footnote 3.

28 The Computer Security Act of 1987, Public Law 100-235. Also see ch. 7.

5. Revise Federal and State banking laws—OMB, the Department of the Treasury, and Federal and State bank regulators would need to review the banking laws for possible revisions. The Federal Reserve Board, for example, is reviewing and likely will extend Regulation E (which establishes debit card and EFT liabilities, and grievance procedures when a card is misused, lost, or stolen) to cover EBT as well.[29]
6. Review the applicability of the Cash Management Improvement Act of 1990[30] to EBT—OMB and the Department of the Treasury would need to review the act when considering EBT operating rules and procedures that affect the transfer of Federal payments and the "float" of Federal program funds.

Selecting a National EBT System Alternative

A basic issue is whether Federal agencies should take the lead in designing an EBT system, presumably still working with the States, or should essentially leave system design up to individual States. A federally initiated system may prove to be the most advantageous approach for two reasons. First, most States are pressed for financial resources, and a Federal lead on EBT design should reduce EBT planning and design costs for the States individually and the Nation as a whole. A Federal design approach offers cost savings to States and to EBT system developers by reducing the paperwork and labor involved in preparing and submitting multiple planning, design, and procurement documents to the numerous Federal and State agencies. Second, a federal] y initiated design presumably would place a premium on a standardized and interoperable system that maximizes opportunities for economies of scale and scope in EBT procurement and service delivery. A key to success, though, would be meaningful State participation in the Federal design process.

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Tulare Touch is a touchscreen kiosk used for processing applications for general assistance in Tulare County, California. EBT systems eventually will include the use of kiosks for eligibility determination.

EBT pilot programs at present are using multiple, decentralized designs. This is entirely appropriate at the pilot test and demonstration stage. But if continued into the pre-operational and operational stages, the effect of a multiple, decentralized design strategy would be to create several separate and segregated EBT systems. If the U.S. Government decided to implement a nationwide multi program EBT system, then a decentralized approach with Federal design standards would be better suited. This approach would:

1. encourage EBT system developers to standardize their equipment and networks,
2. accommodate those States that prefer regional EBT systems,
3. build on the commercial infrastructure for POS and ATM transactions, and

[29]The Bored of Governors of the Federal Reserve System is expected [o release (heir position on Regulation E in October 1993.
[30]The Cash Management Improvement Act of 1990, Public Law 101-453.

4. still provide the necessary economies of scale to make EBT cost effective.

A Federal/State partnership could be formalized to design, develop, and implement a "virtual" national EBT system that builds on State and regional EBT systems and the commercial POS/ATM infrastructure—all operating within Federal design and operating parameters developed with Federal, State, and private sector participation.

Mandating a Nationwide EBT Feasibility Test

To more fully evaluate specific EBT system alternatives, a multiple- program, scaled-up, regionally based, and nationally coordinated feasibility test should be designed and implemented. The test should be designed to take advantage of existing pilot tests and programs, and to test all three viable technological options (i.e., on-line, off-line, and hybrid) for multiple-program delivery.[31] The test should use a well-defined evaluation framework.

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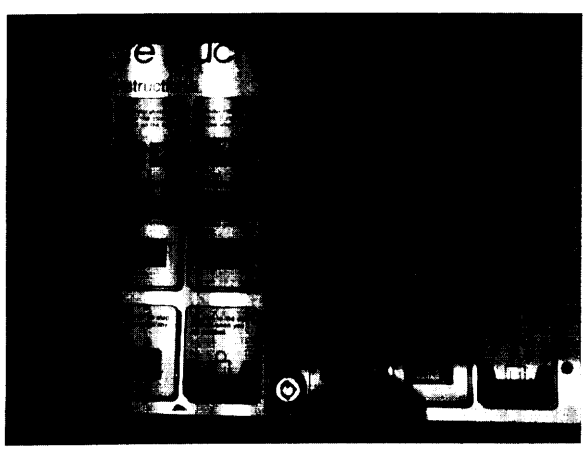

Tulare Touch is available in English or Spanish. Instructions are straightforward; on-site training and assistance are provided as needed.

Congress could conduct oversight and direct OMB, the Department of the Treasury, and relevant agencies to develop plans for such a test. At present, there are no Federal plans to conduct a feasibility test of a hybrid system. Congress could, if necessary, reprogram the funding of the Department of Health and Human Services and FNS to ensure that both agencies include hybrid technology in further EBT testing. A well-designed test would provide results that could be available within 12 to 18 months. A feasibility test should address:

1. the advantages and disadvantages of a centralized v. decentralized, on-line v. off-line, standardized (conforming to a predetermined design and operating rules) v. free-form EBT system;
2. the organizational changes that would be required at the Federal, State, and local levels in order to develop and operate a nationwide EBT system, including the optimal program and agency mix;
3. the cost of developing and operating a nationwide EBT system and possible cost-sharing strategies;
4. the degree to which a nationwide EBT system could be integrated with existing commercial POS/ATM networks;
5. the likely impact of a nationwide EBT system on recipients and providers;
6. the likely impact of a nationwide EBT system on the banking, retail, and financial industries; and
7. legislative and regulatory issues that must be addressed to implement a nationwide EBT system.

A multiprogram national EBT feasibility test should include an evaluation plan that covers: 1) technical performance, 2) operational performance, 3) quantitative benefits and costs of a nation-

[31] The FNS-sponsored Maryland project is noteworthy in that statewide roll-out of EBT was completed in April 1993. According to FNS, the total number of FSP households receiving their benefits electronically will increase from about 60,000 to 200,000 statewide. The Maryland project is also notable because it combines food stamps, AFDC, a part of Child Support Enforcement, and General Assistance into a single delivery system.

wide EBT system, and 4) qualitative benefits and costs of a nationwide EBT system.

Providing Coordinated Legislative/ Executive Leadership on EBT

Leadership from Congress and the President is key to EBT success. Leadership actions could include:

1. holding coordinated congressional oversight hearings on EBT (e.g., by the Senate Committee on Governmental Affairs, Senate and House Committees on Banking, Senate and House Committees on Agriculture, House Committee on Government Operations) to develop a consolidated Federal position on EBT;
2. establishing a Federal/State Benefits Payment or Electronic Payment Board and/or Interagency Policy Committee to develop strategies for, and seek consensus on, designing and operating a national EBT system.
3. designating and empowering a lead executive agency or agencies with sufficient stature and authority to direct interagency EBT efforts and enforce decisions (e.g., the Office of the Vice President, the Financial Management Service in the Department of the Treasury, and/or the Office of Federal Financial Management or the Office of Information and Regulatory Affairs in OMB);
4. designating and empowering a Federal interagency committee on EBT (e.g., drawing from the Departments of Agriculture, Health and Human Services, Education, Labor, and the Treasury, among others);[32]
5. encouraging States to participate and provide leadership through organizations that represent State governments, such as the National Conference of State Legislatures and the National Governors Association;
6. encouraging nonprofit consumer advocacy groups to organize a "National EBT Committee" to assure that the rights and needs of recipients are accounted for; and
7. encouraging private sector EBT vendors to participate in the development of strategies for EBT cost-sharing between the public and private sectors.[33]

In the final analysis, a nationwide EBT system will depend, in large part, on the collective involvement of Federal agencies, States, small and large retailers, recipients, banks, and EBT vendors. Including all these groups in the policy formulation process should lead to greater coordination, cooperation, and consensus.

[32] An Interagency Steering Committee on EBT, coordinated by the Department of the Treasury, has commissioned an assessment of the financial and infrastructure requirements for a nationwide EBT system, but (he timeframe and the outcome are uncertain.

[33] For a discussion of public/private cost-sharing strategies, see Reference Point Foundation, op. cit., footnote 16, pp. 70–71.