United States Department of Agriculture
Food and Nutrition Service

THE IMPACTS OF OFF-LINE ELECTRONIC BENEFITS TRANSFER DEMONSTRATION

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Summary

For more than a decade, the Food and Nutrition Service (FNS) has been investigating electronic benefit transfer (EBT) as a mechanism to enhance the delivery of food stamp benefits. Previous efforts have emphasized on-line technology. Recognizing that smart cards might be a feasible alternative, FNS contracted, in 1990, with the National Processing Company (NPC), the State of Ohio and Montgomery County to design, develop, implement and operate an off-line EBT system. In contrast to on-line systems, an off-line system maintains the primary account on an integrated circuit (IC) or smart card. Each transaction is authorized and the card balance adjusted without communicating with a central computer.

The objectives of the demonstration were to determine the technological feasibility of off-line EBT; whether it would be accepted by stakeholder groups; and whether it would be cost-effective. The evaluation is organized in three volumes. The first volume examines administrative costs of designing, developing, implementing and operating the pilot and makes projections for operational costs for other design and implementation scenarios. Stakeholder impacts are presented in volume II. Volume III addresses technical aspects of the demonstration.

Findings - Volume I: Impacts on Administrative Costs

Off-line EBT administrative costs in the Dayton pilot area were more than 2.5 times larger than coupon costs and more than twice as large as the average costs in the Ramsey County and New Mexico on-line systems. The per-case-month operating cost for issuing benefits electronically in the Dayton off-line system was $8.21 during the evaluation period (August-December 1992). This compares to per-case-month costs of $4.39 in the Ramsey County and $3.07 in the New Mexico on-line systems. The higher costs of the Dayton system are not surprising given the small scale of the pilot.

The costs to design, develop, and implement the off-line EBT system were $3.4 million. This amount compares to design, development and implementation costs for on-line systems of $1.6 million in New Mexico and $2.1 million in Ramsey County. Costs were higher, in part, due to the pioneering nature of the system.

As with on-line EBT, benefit losses and diversions were cut to one-fourth previous levels under the off-line EBT system. As a percent of benefits issued, benefit loss and diversion accounted for 2.12 percent of benefits issued as coupons as compared to .57 percent of benefits issued through the off-line EBT system. This compares to an average of .6 percent of benefits issued under the Ramsey County and New Mexico on-line systems. Off-line recipients reported by a 3-to-1 margin that it is harder to sell benefits by cash with the EBT card and 69 percent of retailers perceived food stamp fraud to be decreased under EBT.

Assuming that card replacements can be reduced, an off-line EBT system can potentially be cost effective when implemented statewide. For on-line systems costs of subsequent on-line systems were substantially less than those of the initial Reading pilot. Similarly, cost economies associated with a larger client and program base could result in per-case-month operating costs in the $2.44 to $4.09 range for a statewide, off-line EBT system integrating food stamps and the AFDC program.

Findings - Volume II: Impacts on Recipients, Retailers and Financial Institutions

Recipients, retailers and financial institutions prefer the off-line EBT system to coupons for reasons similar to those given by on-line participants. From the perspective of system stakeholders, on-line and off-line EBT systems appear to function in virtually the same way. By a 3-1 margin, recipients preferred the off-line system to coupons. This margin is somewhat less than that observed in on- line demonstrations. Retailers noted advantages of the system in reducing paperwork and handling time. As with on-line, banks uniformly reported a favorable opinion of EBT.

Costs of participation were reduced for all program participants.

Recipient costs declined when EBT was implemented from $13.39 per case month to $2.52 per case month an 81 percent decrease. Retailer costs fell 38 percent from $24.73 per $1000 redeemed to $15.21. Financial institution costs went from a $3.50 cost per $1000 redeemed under the paper system to a net profit of $0.23 per $1000 of EBT benefits redeemed.

Findings - Volume III: System Design, Development, and Implementation

The project was implemented smoothly and technical feasibility of off-line was established. A core project team from the vendor, state and local offices cooperated in the project the pre-award proposal phase through project implementation. Some difficulties might have been avoided if state level staff had been specifically assigned to the project. Overall, the team functioned effectively to identify and address the technical issues as they arose.

Problems with the retailer community were avoided. Retailers were brought into the process in the pre-award stage and two retailer groups were formed to address retailer policy issues and to provide feedback to the project team about detailed system operating procedures.

The level of card replacements exceeded expectations. Card failure rates were unacceptably high. During the operational phase, the vendor required the card supplier to provide cards from a more reliable manufacturing site. Replacement of lost and stolen cards also exceeded expectations. FNS approved a waiver that allowed the project team to implement a 10 day waiting period for households requiring multiple card replacements.

Telecommunications costs were not inconsequential. Steps were taken during the operations phase to reduce telecommunications costs by eliminating on-line access to the system for the county office and by sending partial downloads to retailers during settlement. Reducing telecommunication costs of retailer downloads will pose a challenge to statewide implementation.