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**Office of
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Authorized Food Retailer Characteristics Study

Technical Report I

Food Retailer Readiness for Electronic Benefit Transfer

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Authorized Food Retailer Characteristics Study

TECHNICAL REPORT I
FOOD RETAILER READINESS FOR ELECTRONIC BENEFIT TRANSFER

December 1995

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Introduction

Almost $500 billion each year in cash benefits and food assistance is delivered through paper-based systems using coupons, checks, and vouchers. Generally, programs administering benefits and assistance have developed their own systems to print, issue, and reconcile paper benefits. In 1993, Vice President Gore called for the replacement of these paper-based delivery systems with a single, national electronic benefits transfer (EBT) system using modern electronic banking technology.[1]

The envisioned EBT system would deliver benefits through automated teller machines (ATMs) and retail point-of-sale (POS) terminals. Labor-intensive, paper-based delivery systems would be replaced with a single, integrated electronic system.[2] The cost of benefit delivery would be decreased, management of program funds improved, and fraud and abuse reduced. It is estimated that full implementation of EBT will produce annual Federal savings of $195 million.[3]

At least 12 Federal and State benefit programs could use EBT to replace paper delivery methods. The Food Stamp Program (FSP) is one of these programs. The Food and Consumer Service (FCS) of the U.S. Department of Agriculture, which administers FSP, is committed to supporting EBT as a method for transacting food stamps at the retailer level and has begun implementing an EBT system in several areas. The goal is for national implementation by 1999.[4]

The FSP is a federally funded state administered entitlement program designed to increase the food purchasing power of low-income families. Under the current paper system, once food stamp eligibility is established, food coupons in denominations of $1, $5, and $10 are distributed to recipients at State welfare offices or by mail directly to the eligible individual or household. The method used for distribution varies among State agencies, and can vary at the local level. Recipients use the stamps to purchase eligible food from supermarkets, grocery stores, and other retailers authorized by the FCS. Retailers then redeem the stamps they collect.

In the FSP under EBT, food stamp recipients are issued a card similar to a bank debit card to purchase food. Each recipient has a unique personal identification number (PIN). Transactions are handled in the same manner as they are for debit cards. The client swipes the card, the cashier keys in the amount of purchase, and the client

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1 *From Red Tape to Results, Creating a Government That Works Better and Costs Less.* Report of the National Performance Review, September 1993.

2 *From Paper to Electronics: Creating a Benefit Delivery System That Works Better and Costs Less. An Implementation Plan for Nationwide EBT.* Report of the Federal EBT Task Force, Washington, DC, May 1994.

3 Ibid., p. 5.

4 Ibid., p. 10.

confirms the transaction and enters his or her PIN. When the transaction is authorized, the retailer's account is automatically credited and the recipient's account is automatically debited.

The EBT system should improve efficiency in the operation of the FSP, reduce recipient stigma, and decrease program fraud and abuse. Typical costs associated with the generation, inventory storage, mailing, mail loss, compliance auditing, and manual reconciliation of paper coupons should be reduced or eliminated. Because EBT transactions are similar to debit or credit card transactions, FSP recipients would not be differentiated from others in checkout lines, thereby reducing the stigma of participating in the program. Food coupons are sometimes redeemed or sold at discount for cash (i.e., trafficked), making them an "underground currency." An EBT system would reduce trafficking in food stamp benefits and, because of the enhanced investigative potential for tracking EBT transactions and identifying potential violations/violators, make the investigation of fraud and abuse more efficient.[5]

In assessing the potential use of EBT, FCS has conducted several EBT demonstrations and has evaluated this method in terms of both ease of implementation and cost savings. Overall, the evaluations have indicated that retailers across the various food retailer types prefer EBT to coupons, indicating that "EBT is faster, easier, and more efficient" than processing food stamp coupons.[6]

Current regulations require that EBT equipment be provided to retailers at no cost. In some cases, retailers already have in place the equipment needed to handle EBT transactions; in other cases, they do not. Because EBT is now established in only a few sites across the country, it is of interest to determine the extent to which retailers can adapt their current systems to EBT and their willingness to accommodate these changes. One recent study examined the electronic infrastructure of retailers in several sites.[7] The study was concerned particularly with determining the geographic availability/compatibility of electronic transaction processing equipment on a national basis and in particular for the selected study areas.

The presence of technological infrastructure is an important measure of EBT readiness. To minimize problems in the implementation of EBT systems, the Federal EBT Task Force recommended that the systems build on the current commercial infrastructure.[8] In addition, retailer cooperation is important for the successful implementation of EBT.

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5 Ibid., page A-1.

6 Olander, C. *Electronic Benefit Transfer in the Food Stamp Program: The First Decade*. New Directions in Food Stamp Policy Research, FCS/OAE USDA. June 26, 1993, pp.101–116.

7 EFT Commercial Infrastructures and Implications for EBT. FCS/OAE USDA. September, 1994.

8 *From Paper to Electronics: Creating a Benefit Delivery System That Works Better and Costs Less. An Implementation Plan for Nationwide EBT*, op.cit., p. 17.

This report is based on responses of a nationally representative sample of FSP-authorized retailers to questions related to their awareness of EBT and their willingness to implement EBT systems. It must be noted that, while the data collection does not address the full range of complex issues relating to nationwide EBT implementation, it does provide a useful baseline for assessing the readiness of the sampled retailers for EBT during the spring and summer of 1994.

During 1994, the FCS conducted a national survey of a representative sample of food retailers authorized to redeem food stamps. This survey was conducted through physical assessments of the sampled stores and interviews with managers or manager/owners. This report is based on responses from 2,354 retailers.[9] The sampling approach sought national representativeness and therefore did not seek to include or exclude sites that utilize EBT. In all, 119 retailers were in two areas that had functioning EBT systems.[10] Because these retailers have experience with EBT, their perspectives might differ from those of inexperienced retailers.[11] Because the purpose of this report is to focus on non-EBT retailers and explore their readiness for EBT, the responses of retailers in current EBT sites were not represented in most of the tabulations within this report.

As part of the survey, authorized retailers were assessed on indicators that may reflect a readiness for EBT or other electronic transaction systems, and on their perceptions of EBT and its advantages and disadvantages. The following research questions are addressed in this report:

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9 The sample consisted of 2,520 retailers selected from 40 Primary Sampling Units through a three-stage sampling design. Efforts were made to contact all stores drawn for the sample; however, 2,381 were found to be operational. In each of these stores, we attempted to conduct physical assessments of the store and the stock carried by the retailer, and to conduct interviews with the designated manager. Although physical assessment of the stores was made in all of these stores, 22 managers refused to be interviewed and an additional 5 only partly completed the questionnaire. This left 2,354 retailers who were in operation and responded to the questionnaire. Even among those who responded to the interview, there were items to which respondents refused to provide information. Therefore, the data presented throughout this report vary in the total number of respondents because not all retailers answered every question asked. [It must be noted that for stores found to be out of business, the sampling plan called for selecting a substitute retailer. In total, there were 120 of these substitute retailers. Because this substitution was based on a different probability mechanism from that used for drawing the original sample, the primary use of this "supplemental sample" is to provide additional verifying information on the base sample.]

10 Of the 119 EBT retailers responding to this survey, 61 are in Ramsey County, Minnesota; 58 are in Baltimore, Maryland. There were two retailers in Ramsey County and five retailers in Baltimore City that were not in operation during the time of the survey. About 5 percent of the retailers surveyed (119 stores) use EBT to process food stamps. With regard to store type, the data indicate that the EBT sites were more likely to be areas with a relatively more smaller stores. Thus, 6.4 percent of the small groceries and 7.3 percent of the specialty stores were in areas in which EBT was implemented. About 5 percent of the retailers surveyed (119 stores) use EBT to process food stamps. With regard to store type, the data indicate that the EBT sites were more likely to be areas with a relatively more smaller stores. Thus, 6.4 percent of the small groceries and 7.3 percent of the specialty stores were in areas in which EBT was implemented. Table A.1 in the Appendix provides details on the distribution of retailers using EBT by store type. Our speculation is that these differences can be attributed in part to the market structure of the two PSUs in which EBT was implemented. The remaining analysis focuses on the 2,235 non-EBT retailers.

11 There seemed to be some confusion among respondents about whether they participated in EBT. In the two EBT sites, there were some retailers who indicated they did not have EBT (eight respondents) while in sites in which EBT has not yet been implemented, there were respondents who thought they participated (21 respondents). These responses may reflect confusion over interpreting the questionnaire item, or confusing EBT with other electronically based payment systems. To simplify the analysis, we separated the population by those in sites known to have a functioning EBT system and those in other sites.

- How ready are different store types to adopt an electronic benefit issuance system? Specifically, how do stores differ in terms of:
  - installed automation systems (e.g., "POS" debit systems, electronic cash registers, and bar-code scanners); and
  - physical factors affecting installation (e.g., the number of checkout lanes, square footage)?
- Which geographic areas are most ready to implement EBT?

The first question involves determination of whether the retailer has EBT-compatible systems (POS equipment, ATMs, scanners, etc.) that would ease the introduction of EBT. POS equipment is used in the EBT system to debit recipients' accounts and to credit retailers' accounts. Of interest in this report is the extent to which retailers already have such equipment in place. If such equipment is not in place, familiarity with other automated systems may be meaningful. Readiness to implement an EBT system was

defined very broadly for this report and means the presence of POS systems or other systems in which the retailer communicates to other business entities and the existence of electronic cash registers, credit or debit card readers, data lines, and attachments to networks to handle credit card or debit card transactions at the point of sale.

Physical layout of the stores is another important consideration in the decision for a store to participate in EBT. POS equipment may be viewed as taking away space for impulse merchandise. Retailers may also have concerns about security, liability, customer acceptance, and other issues.

The second question concerns the extent to which certain geographical areas are more prepared than others to implement EBT. In addressing this question, distinctions will be made between urban and rural areas, and between low-income and other areas.

The discussion is divided into three major sections: (1) Factors Affecting Readiness for EBT; (2) Geographical Area(s) and Readiness to Implement EBT; and (3) Summary and Conclusions.

Factors Affecting Readiness for EBT

In addressing the first discussion item, we examined the responses of retailers relative to the following topics:

- use and awareness of EBT,
- presence of POS, debit, and electronic systems, and
- physical factors affecting EBT installation.

These issues were explored by store type. Seven store-type categories were used in this analysis.[12] They are designated as follows:

- **Supermarkets**—retailers with gross sales of more than $2 million,
- **Large Groceries**—retailers with gross sales between $500,000 and $2 million,
- **Small Groceries**—retailers with gross sales of under $500,000,
- **Convenience Stores**—retailers self-defined as convenience stores regardless of their sales,
- **Specialty Food Stores**—retailers self-defined as specialty food stores and presumably specializing in a few food lines (such as meat or dairy),
- **Gas/Grocery Stores**—retailers self-defined as gas/grocery stores and presumably having relatively substantial gasoline sales, and
- **Other Stores**—retailers that include produce stands, rolling routes, general stores, combination stores, and miscellaneous classifications.

Use and Awareness of EBT

When food store managers were asked: *"Have you heard of EBT with regard to the Food Stamp Program?"*, 28 percent of the 2,232 retailers not currently using EBT and responding to this question reported they had heard of it.[13]

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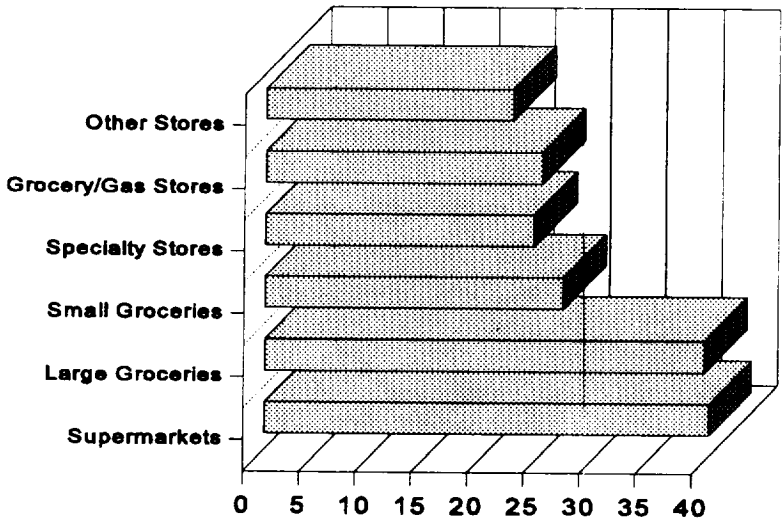
[12] Store classifications are based on self-reported information from Store Tracking and Redemption Subsystem (STARS) files. The categories reflect information provided by the retailers when they applied to FCS for authorization. We modified the groupings by reclassifying self-identified supermarkets as grocery stores when their gross sales were less than $2 million and reclassifying self-identified grocery stores as supermarkets when their gross sales exceeded $2 million. These reclassifications were made to ensure consistency with industry standards and to conform to the intent of the FSP classification system.

[13] Three of the non-EBT retailers chose not to respond to this questionnaire item.

Awareness of EBT varies according to store type (See Exhibit 1). Supermarkets and large grocery stores, which redeem a majority of food stamps, would be expected to have greater knowledge of EBT because they are more likely to be affected by the introduction of such systems. Consistent with these expectations, the data indicate that the proportions of supermarket retailer and large grocery store respondents who report having heard of the technology are larger than for other retailer categories. Thirty-nine percent of respondents in both supermarkets and large grocery stores report having heard of the technology. This compares to percentages for other retailer categories ranging from 21 percent to a little less than 27 percent.

Exhibit 1

Percentage of Retailers Who Have Heard of EBT
by Store Type
(See Table A.2)



Differences in Installed POS, Debit, and Electronic Systems

Retailers currently using point-of-sale systems may be thought of as having the essential in-store infrastructure for EBT. Respondents were asked through a series of questions whether they:

- have an in-store automated teller machine (ATM),
- accept credit cards, and
- accept debit cards.

Table 1a provides information on the concentration of systems that may indicate the presence of automated transaction processing capacity. The data in this table presents an overview of the capacity of particular store types to implement EBT by indicating the percentage of non-EBT respondents who said they had various types of automated systems installed when they were surveyed (late spring/early summer 1994). Overall, 10 percent of the respondents reported that an ATM machine was installed in their store, and about 16 percent had front-end scanners installed. A relatively large percentage of the stores, 38 percent, accept credit cards. Fourteen percent accept debit cards.

About 49 percent of the supermarkets accept credit card transactions. Close to a third have ATMs, and about 36 percent use debit card processing. In comparison, 22 percent of larger groceries accept credit card transactions, only 6 percent have ATMs, and 10 percent use a debit card system. Other types of stores demonstrate even less automated systems capacity. It must be noted, however, that convenience stores and gas/grocery stores have more debit card and credit card processing capability than most other stores.

Table 1a

Percentage of Non-EBT Retailers of Specific Store Types Using Various Types of Automated Systems (Column Percentages)

Type of Automated System	Supermarkets	Large Grocery Stores	Small Grocery Stores	Specialty Stores	Convenience Stores	Grocery/ Gas Stores	Other Stores	All Stores
ATM	33.2%	6.1%	0.7%	0.5%	10.5%	11.2%	2.7%	10.3%
Credit Card	49.3%	22.3%	6.4%	15.6%	56.1%	73.4%	23.7%	37.9%
Debit Card	35.5%	9.5%	0.7%	3.7%	15.7%	20.6%	5.0%	13.9%
Respondents	361	148	421	192	617	233	263*	2,235*

Source: Macro International Inc. *The Authorized Food Retailer Characteristics Study.* Contract No. 53-3198-3-007. USDA/Food and Consumer Service, Office of Analysis and Evaluation, 1994.

*ATM responses based on 2,234 responses. One "other" store did not respond to this item.

Table 1b provides row percentages that identify in which store types the resources above are most likely to be found. Among the authorized retailers surveyed, supermarkets account for half of the retailers who have ATMs and 41 percent of retailers who have debit card processing capability. It should be noted that they constitute only 16 percent of the retailers sampled. This indicates a concentration of electronic-based processing capacity among these large stores. There is also a concentration of debit and credit card processing capability in convenience stores and gas/grocery stores.

Table 1b

Percentage of Non-EBT Retailers Using Specific Types of Automated Systems by Store Type*
(Row Percentages)

	Supermarkets	Large Grocery Stores	Small Grocery Stores	Specialty Stores	Convenience Stores	Grocery/ Gas Stores	Other Stores	All Stores
Has ATM*	52.0%	3.9%	1.3%	0.4%	28.1%	11.3%	3.0%	100.0%
Accepts Credit Card Transactions**	21.0%	3.9%	3.2%	3.5%	40.9%	20.2%	7.3%	100.0%
Accepts Debit Card Transactions**	41.3%	4.5%	1.0%	2.2%	31.3%	15.5%	4.2%	100.0%

Source: Macro International Inc. *The Authorized Food Retailer Characteristics Study*. Contract No. 53-3198-3-007. USDA/Food and Consumer Service, Office of Analysis and Evaluation, 1994.

* Based on 2,234 responses. One "Other Store" did not respond to this item. In all, 231 of the retailers indicated they had a ATM system.

** Based on 2,235 responses, 351 retailers indicated they had scanning equipment, 847 indicated they had the ability to transact credit card transactions, and 310 had the ability to transact debit card transactions.

Physical factors affecting EBT installation

Two items related to physical factors were explored. First, we examined the number of cash registers in the store to provide a basis for judging the check-out capacity of the store. Second, we examined the selling area of the store in terms of whether or not it was adequate to allow for converting space for EBT use.

Number of registers—The number of cash registers may be related to the possible impact of EBT on a store's operations. A store that operates without a cash register would have to develop new procedures for processing transactions. Moreover, the more cash registers a store has, the greater the effect of converting to EBT. Data collectors recorded the number of cash registers available for check-out when they visited the stores. About 60 percent of the authorized retailers surveyed use one cash register. About 20 percent use two cash regis-

ters, and about 20 percent use three or more cash registers. One percent reported not using a cash register.

The data presented in Table 2 indicate that the number of cash registers is related to store type.

Table 2

Percentage Distribution of Non-EBT Retailers by Number of Cash Registers and Store Type

Number of Cash Registers	Supermarkets	Large Grocery Stores	Small Grocery Stores	Specialty Stores	Convenience Stores	Grocery/ Gas Stores	Other Stores	All Stores
No Register	0.0%	0.0%	1.0%	3.7%	0.0%	0.4%	6.7%	1.3%
1 Register	4.7%	28.4%	86.0%	87.0%	65.3%	70.4%	67.0%	59.5%
2 Registers	3.1%	39.9%	11.9%	8.3%	32.4%	28.3%	12.5%	19.5%
3 Registers	6.1%	21.6%	0.7%	0.5%	2.1%	0.9%	7.5%	4.1%
4 Registers	11.9%	9.4%	0.2%	0.5%	0.0%	0.0%	2.5%	2.9%
5+ Registers	74.2%	0.7%	0.2%	0.0%	0.2%	0.0%	3.8%	12.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Respondents	361	148	421	192	617	233	239	2,211*

Source: Macro International Inc. *The Authorized Food Retailer Characteristics Study*. Contract No. 53-3198-3-007. USDA/Food and Consumer Service, Office of Analysis and Evaluation, 1994.

* Information on the number of registers could not be gathered on 24 of the 2,335 non-EBT retailers. All missing retailers were from the "other" store category.

The absence of a cash register may indicate potential problems in adjusting to an EBT transaction system. All the supermarkets and large grocery stores have at least one cash register. Of special practical significance is the observation that about 4 percent of the specialty stores and 6 percent of the stores in the "other" category do not use a cash register. These categories include routes, rolling stores, produce stands, and small stores that concentrate on selling one or two specialty items. Retailers such as these may have special problems in implementing EBT.

Selling Space—The capacity of the retailer to reallocate space for EBT is likely to be related to the total selling space of the store. In stores that have limited space, a higher value is placed on using all available space to display and sell goods. In these stores, it is more difficult to accommodate EBT equipment. Table 3 presents the distribution of surveyed stores by size of selling area and store type. Of all retailers responding, 23 percent had less than 800 square feet of selling area in their stores. The lack of selling area was least notable among supermarkets and large groceries (with only 1 and 3 percent having 800 square feet or less of selling area) and most prevalent among specialty stores (with 62 percent having 800 square feet or less of selling space). The percentages of other store types having this limited amount of space range from 17 percent

(convenience stores) to 34 percent (small grocery stores). The results in Table 3 are not surprising. They indicate that, in terms of space, speciality stores may have the most problems allocating space for such a system.

Table 3

Percentage Distribution of Non-EBT Retailers With Specific Selling Areas by Store Type

Size of Selling Area of Store	Supermarkets	Large Grocery Stores	Small Grocery Stores	Specialty Stores	Convenience Stores	Grocery/ Gas Stores	Other Stores	All Stores
0–799 Sq. Ft.	1.4%	2.7%	33.7%	61.9%	17.4%	24.0%	29.9%	22.8%
800–1,499 Sq. Ft.	2.2%	6.1%	28.9%	19.6%	39.3%	38.6%	27.3%	26.0%
1,500–3,499 Sq. Ft.	5.0%	30.4%	29.7%	15.9%	40.0%	33.1%	23.5%	27.0%
3,500 or more Sq. Ft.	91.4%	60.8%	7.7%	2.6%	3.3%	4.3%	19.3%	24.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Respondents	359	148	418	189	610	233	238	2,195*

Source: Macro International Inc. *The Authorized Food Retailer Characteristics Study.* Contract No. 53-3198-3-007. USDA/Food and Consumer Service, Office of Analysis and Evaluation, 1994.

* Of the 2,235 non-EBT retailers, 40 did not respond to this item. Twenty-five of the missing retailers were from the "other" store category.

Geographical Area and Readiness to Implement EBT

In addition to the factors discussed above (acceptance of credit/debit cards, ATMs, registers, etc.), readiness to implement EBT should be related to the perceived advantages and disadvantages of using this technology. The data collectors asked respondents the following:

> *I would like to briefly describe EBT to you and then ask you a few questions about your reactions to it.*
>
> *EBT is a system that is currently operational in several states for paying food retailers for food stamp purchases. Each food stamp recipient carries a card similar to that used for automated teller machine (ATM) transactions. They also have a personal identification number (PIN) that they use with the card. When they shop at a food store, they give the cashier their card. The cashier runs the card through an electronic card reader, and the shopper enters their PIN into the machine. Once the transaction is approved, your account is automatically credited.*
>
> *What would (do, if EBT) you see as the advantages of EBT for you as a store manager/owner?*

Stores were classified by their Zip Code locations into three urbanization categories: "urban," "rural," or "mixed."[14] Stores also were classified by whether the Zip Code in which they were located was low-income or "higher-income." In this case, low-income Zip Codes were those in which the percentage of households under the poverty line was 25 percent or greater.

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[14] The percentage of the population classified as urban in the 1990 Census was used to distinguish among these three categories. Urban areas were those with an urban population of 90 percent or greater of total population; rural areas were those with an urban population of 10 percent or less of the total population; and mixed areas represented the remaining Zip Code areas. The urbanization categories used were selected to capture the concepts of very urban and very rural and to ensure that each of the three categories was well represented in the table. The cut-off points were selected after examining the distribution of retailers by urbanization.

Advantages of EBT

Food retail managers were asked: *"What would you see as the advantages of EBT for you?"* In all, 72 percent of respondents indicated that they saw advantages to EBT (See Table 4). Almost half, 48 percent, of respondents cited "not having to deal with coupons" as an advantage of EBT. The next most frequently mentioned advantages were "better accounting of food stamp transactions," quicker transfer of funds," and "make check-out easier/faster."

Respondents in rural areas were somewhat less likely than respondents in other areas to perceive EBT as being advantageous. Approximately 62 percent of authorized retailers in rural areas perceive an advantage to EBT in contrast to roughly 75 percent in mixed and urban areas. There was little difference between retailers in low-income versus other areas.

Low-income, rural areas are less likely to perceive an advantage when compared to retailers in other areas. About 51 percent of the retailers in low-income rural areas and about 65 percent of the retailers in other (higher-income) rural areas perceive an advantage to EBT. "Better customer relations" was cited by 18 percent of the retailers in low-income rural areas but by only 9 percent, at most, of the retailers in other areas. On the other hand, quicker transfer of funds was cited by 7 percent of the retailers in low-income rural areas and 23 percent of retailers in other rural areas.

Table 4

Percentage of Non-EBT Retailers Who Perceived Advantages of EBT by Urbanization and Income

	Urban			Mixed			Rural			Total		
	Low-Income	Other	Total	Low-Income	Other	Total	Low-Income	Other	Total	Low-Income	Other	Total
Cited an Advantage	75.5%	74.6%	74.8%	76.6	74.1%	74.5%	51.2%	65.3%	62.1%	70.2%	72.6%	72.1%
Advantages Cited												
No Coupons To Deal With	43.1%	46.7%	46.0%	59.3%	48.9%	50.7%	39.1%	47.0%	45.2%	47.3%	47.7%	47.6%
Better Accounting	33.3%	32.3%	32.5%	42.8%	26.8%	29.6%	32.7%	20.9%	23.7%	36.2%	27.9%	29.6%
Quicker Transfer Funds	27.9%	25.5%	26.1%	15.9%	23.4%	22.1%	7.3%	22.8%	19.1	19.2%	24.2%	23.1%
Easier/Faster Checkout	12.8%	16.4%	15.6%	18.6%	19.4%	19.2%	23.6%	15.2%	17.2%	17.2%	17.3%	17.3%
Better Customer Relations	7.4%	6.9%	7.0%	9.0%	6.6%	7.0%	18.2%	3.7%	7.1%	10.5%	6.1%	7.0%
Better Morale	1.0%	1.3%	1.2%	0.7%	2.3%	2.0%	0.0%	0.3%	0.2%	0.7%	1.5%	1.3%
Competitive Position	0.0%	0.4%	0.3%	0.7%	0.4%	0.5%	0.0%	0.6%	0.4%	0.2%	0.5%	0.4%
Increase Business	2.9%	3.2%	3.1%	0.7%	1.8%	1.6%	1.8%	2.5%	2.4%	2.0%	2.5%	2.4%
Other Advantages	28.4%	30.7%	30.2%	38.6%	34.5%	35.2%	8.2%	27.3%	22.8%	26.8%	31.5%	30.5%
Respondents	204	721	925	145	687	832	110	355	465	459	1,763	2,222*

Source: Macro International Inc. *The Authorized Food Retailer Characteristics Study.* Contract No. 53-3198-3-007. USDA/Food and Consumer Service, Office of Analysis and Evaluation, 1994.

* Of the 2,235 non-EBT retailers, eight did not respond to the question and five could not be matched to a location.

Disadvantages of EBT—Retailers also were asked: *"What would you see as the disadvantages of EBT for you?"* Roughly four out of every 10 of the retailers sampled did not perceive any disadvantages of EBT (See Table 5). Disadvantages were perceived to a larger extent by rural retailers than by urban retailers. Two out of every 10 retailers in low-income, rural areas reported that they perceived no disadvantages in EBT.

More than any other factor, "cost of new equipment" was cited as a disadvantage for implementing EBT. This was especially a concern for retailers in low-income rural areas, where about 69 percent of the retailers reported this concern compared to 50 percent in other rural areas. Retailers in urban areas were least likely to perceive the purchase of new equipment as an EBT disadvantage. Although the Food Stamp Program provides EBT equipment at no cost to the retailer, it seems that about one third of food store managers think that they must purchase it.

Concerns relating to technological problems and space requirements were cited by 13 and 12 percent of the retailers, respectively. About half of the retailers in low-income rural areas cited concerns relating to space.

Table 5

Percentage of Non-EBT Retailers Who Perceived Various Disadvantages of EBT by Urbanization and Income

	Urban			Mixed			Rural			Total		
	Low-income	Other	Total	Low-income	Other	Total	Low-income	Other	Total	Low-income	Other	Total
Cited No Disadvantages	42.9%	42.6%	42.7%	32.4%	42.8%	41.0%	22.9%	34.3%	31.6%	34.8%	41.0%	39.7%
Disadvantages Cited												
Cost of New Equipment	23.7%	21.7%	22.1%	46.2%	29.6%	32.5%	68.8%	49.9%	54.3%	41.6%	30.4%	32.7%
Requiring Space	7.4%	6.5%	6.7%	14.5%	9.5%	10.3%	50.5%	15.6%	23.8%	19.9	9.5%	11.6%
Employee Training	7.4%	6.1%	6.4%	9.7%	7.6%	7.9%	16.5%	9.9%	11.5%	10.3%	7.4%	8.0%
Changing Accounting	3.9%	6.8%	6.2%	11.0%	7.9%	8.4%	23.9%	7.1%	11.0%	10.9%	7.3%	8.0%
Changing Checkout	10.3%	6.5%	7.4%	4.1%	4.2%	4.2%	2.8%	4.5%	4.1%	6.6%	5.2%	5.5%
Technology Problems	14.8%	13.8%	14.0%	20.0%	13.3%	14.4%	6.4%	10.5%	9.5%	14.4%	12.9%	13.2%
Other Disadvantages	23.7%	24.2%	24.1%	24.1%	19.2%	20.1%	11.0%	13.0%	12.6%	20.8%	20.0%	20.2%
Respondents	203	721	924	145	687	832	109	353	462	457	1,761	2,218*

Source: Macro International Inc. *The Authorized Food Retailer Characteristics Study.* Contract No. 53-3198-3-007. USDA/Food and Consumer Service, Office of Analysis and Evaluation, 1994.

* Of the 2,235 non-EBT retailers, 13 respondents chose not to respond to this item and five could not be matched to a location.

Reasons and motivation for not using credit and debit cards

Retailers who do not accept credit/debit were asked: *"Why are you currently not accepting credit cards or debit cards for purchases?"* The reasons for not using these cards may be useful in interpreting retailer reluctance to use EBT. Their responses to these questions are presented in Table 6.

About one out of four retailers responded that they do not accept credit and debit cards because they do not have the equipment, and a similar proportion reported that they do not do so because their customers do not demand it. Fifteen percent reported that they do not accept credit or debit cards because it is "too much hassle," and a similar percentage, 13 percent, reported that they do not do so because it is "too expensive." Reasons related to "equipment" do not vary notably across various urbanization/income categories. However, retailers in low-income areas are more likely than retailers in other areas to give "no demand" as a reason for not using credit or debit cards. The difference between low and higher income areas increases as the area becomes less urban.

Table 6

Percentage of Non-EBT Retailers Citing Various Reasons for Not Accepting Credit and Debit Cards by Urbanization and Income

Reasons for Not Using Credit and Debit Cards	Urban			Mixed			Rural			Total		
	Low-Income	Other	Total	Low-Income	Other	Total	Low-Income	Other	Total	Low-Income	Other	Total
No Equipment	20.0%	22.1%	21.6%	36.6%	26.1%	27.9%	22.5%	29.0%	27.5%	25.8%	25.0%	25.2%
Too Much Hassle	24.4%	13.7%	16.0%	11.0%	12.2%	12.0%	10.8%	17.5%	15.9%	16.9%	13.9%	14.5%
No Demand	37.6%	23.6%	26.7%	44.8%	19.7%	24.1%	56.8%	27.6%	34.6%	44.5%	22.9%	27.4%
Too Expensive	13.2%	11.9%	12.2%	15.2%	13.6%	13.9%	8.1%	15.2%	13.5%	12.6%	13.2%	13.1%
Too Long To Get Funds	1.5%	0.6%	0.8%	0.7%	0.4%	0.5%	0.0%	0.3%	0.2%	0.9%	0.5%	0.5%
Not Thought About It	8.8%	7.9%	8.1%	7.6%	9.4%	9.1%	8.1%	11.3%	10.5%	8.2%	9.2%	9.0%
Other Reasons	17.1%	20.4%	19.7%	31.7%	21.6%	23.4%	18.0%	16.6%	17.0%	21.9%	20.1%	20.5%
Respondents	205	725	930	145	689	834	111	355	466	461	1,769	2,230*

Source: Macro International Inc. *The Authorized Food Retailer Characteristics Study*. Contract No. 53-3198-3-007. USDA/Food and Consumer Service, Office of Analysis and Evaluation, 1994.

* Of the 2,235 non-EBT retailers, five could not be matched to a location.

Motivation to adopt credit or debit cards

Motivation to adopt credit or debit cards may suggest corresponding motives for accepting EBT. "Customer demand" was given by the retailers more often than any other reason when asked: "*What would (or has) motivate(d) you to accept these payment forms?*" About four out of 10 retailers gave this answer (See Table 7). Twelve percent of retailers indicated they would be motivated to accept credit and debit cards if there were "no cost for installing equipment." Only 4 percent of retailers indicated they would be motivated to accept credit and debit cards if they were accepted by competitors. Twenty-nine percent of the respondents reported "nothing would motivate" them to accept credit and debit cards. These patterns are consistent across geographical areas, with one notable exception. In rural areas, 55 percent of the retailers in low-income areas, compared to 39 percent of the retailers in higher-income rural areas, indicated customer demand would motivate them to use credit and debit cards.

Table 7

Percentage of Non-EBT Retailers Identifying Various Reasons That Would Motivate Them to Accept Credit and Debit Cards by Urbanization and Income

Summary and Conclusions

In this section, we provide a summary measure of EBT readiness that takes into account the presence of an in-store "infrastructure" and attitudes toward accepting EBT. The respondents were classified into five categories according to the type of electronic equipment they had installed, and whether or not they perceived advantages to installing EBT. Distributions of retailers by these five categories and store type are presented in Table 8. The categories are defined as follows:

- Current users of EBT,
- Those who perceive advantages and have related automated electronic systems (e.g., ATM, debit card transaction systems) installed,
- Non-EBT retailers who have related equipment installed but who do not perceive advantages to EBT,
- Non-EBT retailers who do not have related equipment installed but who perceive advantages to EBT, and
- Non-EBT retailers who do not perceive advantages of EBT and do not currently have related automated electronic systems installed.

Table 8

Percentage Distribution of Retailers by EBT Readiness and Store Type

EBT Readiness	Supermarkets	Large Grocery Stores	Small Grocery Stores	Specialty Stores	Convenience Stores	Grocery/ Gas Stores	Other Stores	All Stores
Use EBT	4.0%	2.7%	6.4 %	7.3%	3.8%	6.1%	6.1%	5.1%
Advantage EBT, Use Electronic	77.9%	29.1%	4.7%	11.6%	46.1%	51.6%	16.9%	36.2%
No Advantage EBT, Use Electronic	6.1%	4.6%	2.5%	4.9%	11.0%	17.7%	7.5%	7.9%
Advantage EBT, No Electronic	9.6%	47.0%	52.8%	45.6%	28.0%	11.3%	39.4%	32.2%
No Advantage EBT, No Electronic	2.4%	16.6%	33.6%	30.6%	11.1%	13.3%	30.1%	18.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Respondents	375	151	449	206	638	248	279	2,346*

Source: Macro International Inc. *The Authorized Food Retailer Characteristics Study.* Contract No. 53-3198-3-007. USDA/Food and Consumer Service, Office of Analysis and Evaluation, 1994.

* Of the 2,381 EBT and non-EBT retailers, 35 could not be classified because of nonresponse.

There are several notable differences among the various types of stores in the distribution of retailers in these categories. Supermarket respondents generally show a high degree of readiness. Four percent of the supermarket retailers surveyed are current users of EBT. Seventy-eight percent of the supermarket retailers perceive advantages and have the in-store infrastructure. Only 2 percent of the supermarket retailers do not see advantages and do not have the related equipment installed.

In general, the majority of large grocery respondents indicate that they saw advantages; however, more often than not these respondents indicated that they did not have related equipment installed. Twenty-nine percent of these large grocery store retailers already have installed related electronic-based systems, and perceive advantages in the use of EBT. A little less than half, 47 percent, perceive advantages in the use of EBT, but they have not installed related electronic equipment. Seventeen percent neither see the advantages nor have related equipment.

Retailers operating small grocery stores, specialty stores, and other stores show similar response patterns. Overwhelmingly, these retailers did not have EBT-related equipment installed, and a large proportion did not see any advantage to EBT. About 53 percent of the small grocery store respondents and 46 percent of the specialty store respondents perceive advantages in the use of EBT, but they do not have related electronic equipment. Approximately one-third of these retailers neither perceive advantages nor have related electronic equipment.

Retailers operating convenience stores and gas/grocery stores also can be grouped by their responses. In general, they showed a relatively high state of readiness. Approximately half of these retailers have already installed related electronic systems and perceive advantages to the use of EBT. Only 11 percent of the convenience stores and 13 percent of the gas/grocery stores neither perceive advantages nor have related electronic equipment installed.

Retailer readiness for EBT also varied by urbanization and income level of their location (Table 9). Close to 30 percent of the urban and rural retailers (excluding EBT retailers) already have installed related electronic systems and perceive advantages in the use of EBT; almost five out of 10 of the retailers in mixed urban/rural areas do. Proportionately more of the rural retailers do not have related equipment and do not perceive advantages.

Table 9

Percentage Distribution of Retailers by EBT Readiness, Urbanization, and Income

EBT Readiness	Urban			Mixed			Rural			Total		
	Low-income	Other	Total	Low-income	Other	Total	Low-income	Other	Total	Low-income	Other	Total
Use EBT	15.0%	10.3%	11.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.3%	4.5%	5.0%
Advantage EBT, Use Electronic	11.3%	34.7%	29.3%	33.1%	49.1%	46.3%	28.2%	34.9%	33.3%	21.4%	40.1%	36.1%
No Advantage EBT, Use Electronic	3.3%	6.2%	5.6%	3.4%	9.6%	8.5%	8.2%	13.4%	12.3%	4.4%	8.9%	8.0%
Advantage EBT, No Electronic	52.9%	32.2%	37.0%	43.5%	25.0%	28.3%	23.6%	30.4%	28.8%	43.7%	29.2%	32.3%
No Advantage EBT, No Electronic	17.5%	16.6%	16.7%	20.0%	16.3%	16.9%	40.0%	21.1%	25.6%	23.2%	17.3%	18.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Respondents	240	804	1,044	145	687	832	110	355	465	495	1,846	2,341*

Source: Macro International Inc. *The Authorized Food Retailer Characteristics Study.* Contract No. 53-3198-3-007. USDA/Food and Consumer Service, Office of Analysis and Evaluation, 1994.

* Of the 2,381 EBT and non-EBT retailers, 35 could not be classified because of nonresponse, and five could no be matched to a location.

For urban and mixed areas, retailers in low-income areas are not as ready for EBT as retailers in higher-income areas. Over all three types of areas, retailers in low-income areas, compared to other areas, tend to see an advantage to EBT but do not have the required equipment for implementing EBT. In rural areas, proportionally more retailers in low-income areas see no advantage to EBT and have no electronic equipment than in higher-income areas.

Conclusions

This report provides several important findings for the implementation of EBT. First, a relatively small number of retailers had heard of EBT in the summer of 1994. Even among supermarkets and large groceries, fewer than two of five respondents had heard of EBT. For other stores, only 25 percent had heard of EBT. Most stores outside of supermarkets lack electronic infrastructure as characterized by equipment as ATMs, and debit transaction systems. The survey indicated that some small volume retailers did not have cash registers. In paticular, 4 percent of the retailers indentifying themselves as speciality stores and 7 percent of "other stores," which include routes, cooperatives, farmer's markets or produce stands, and health and natural food stores. This would tend to indicate that some stores currently serving food stamp participants may have difficulties implementing an EBT. Other stores vary considerably as the adequacy of supermarkets are the only stores of that show a high level of readiness.

As to the advantages that EBT presents, respondents tended to focus on practical concerns. The most cited advantages were benefits relative to handling coupons, better accounting, and quicker transfer of funds. The major disadvantage cited was the possible cost of equipment. In all, about three-quarters of respondents cited advantages, and more than 60 percent cited disadvantages.

Overall readiness, in terms of both the physical and electronic infrastructure for implementing EBT and retailer attitudes, is high for supermarkets, convenience stores, and gas/grocery stores. Among large grocery stores, readiness in terms of physical and electronic infrastructure is lower, but retailers are well-disposed to implement EBT. Small groceries and specialty stores do not have the physical and electronic infrastructure for implementing EBT and, although many of these retailers see advantages, a small but considerable portion sees no advantage. Thus, as expected, supermarkets are most disposed, and small groceries and specialty stores least disposed, to implement EBT. In terms of readiness by geographic area, mixed areas show the greatest readiness, and rural areas show the least readiness. Low-income rural areas indicate the lowest readiness of all categories.

In conclusion, information appears to be lacking as to what EBT is and what its benefits are among retailers in 1994. Most retailers had knowledge of EBT only through the survey instrument, and thus provided quick "gut" reactions. One reaction was concern about the costs of equipment. This reaction showed that their first concern is the effect EBT would have on their business. A broad-based information effort could educate retailers and perhaps increase EBT readiness and acceptance.

Appendix (1)

Table A.1

Percentage Distribution of Retailers by Current Use of EBT by Store Type

Currently Use EBT	Supermarkets	Large Grocery Stores	Small Grocery Stores	Specialty Stores	Convenience Stores	Grocery/ Gas Stores	Other Stores	All Stores
Yes	4.0%	2.6%	6.4%	7.2%	3.7%	6.0%	6.1%	5.1%
No	96.0%	97.4%	93.6%	92.8%	96.3%	94.0%	93.9%	94.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Responses	376	152	450	207	641	248	280	2,354*

Source: Macro International Inc. *The Authorized Food Retailer Characteristics Study*. Contract No. 53-3198-3-007. USDA/Food and Consumer Service, Office of Analysis and Evaluation, 1994.

* Of the 2,381 respondents to the survey, 27 did not respond to this item.

Table A.2

Percentage Distribution of Non-EBT Retailers Having Heard of EBT by Store Type

Heard of EBT	Supermarkets	Large Grocery Stores	Small Grocery Stores	Specialty Stores	Convenience Stores	Grocery/ Gas Stores	Other Stores	All Stores
Yes	39.6%	39.2%	26.6%	24.0%	24.7%	22.0%	20.6%	27.6%
No	60.4%	60.8%	73.4%	76.0%	75.3%	78.0%	79.4%	72.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Responses	361	148	421	192	616	232	262	2,232*

Source: Macro International Inc. *The Authorized Food Retailer Characteristics Study*. Contract No. 53-3198-3-007. USDA/Food and Consumer Service, Office of Analysis and Evaluation, 1994.

* This table includes only those surveyed retailers outside the Baltimore, Maryland, and Ramsey County, Minnesota, areas (i.e., those having EBT [see Table A.1]. In addition, three respondents did not choose to respond to this question.